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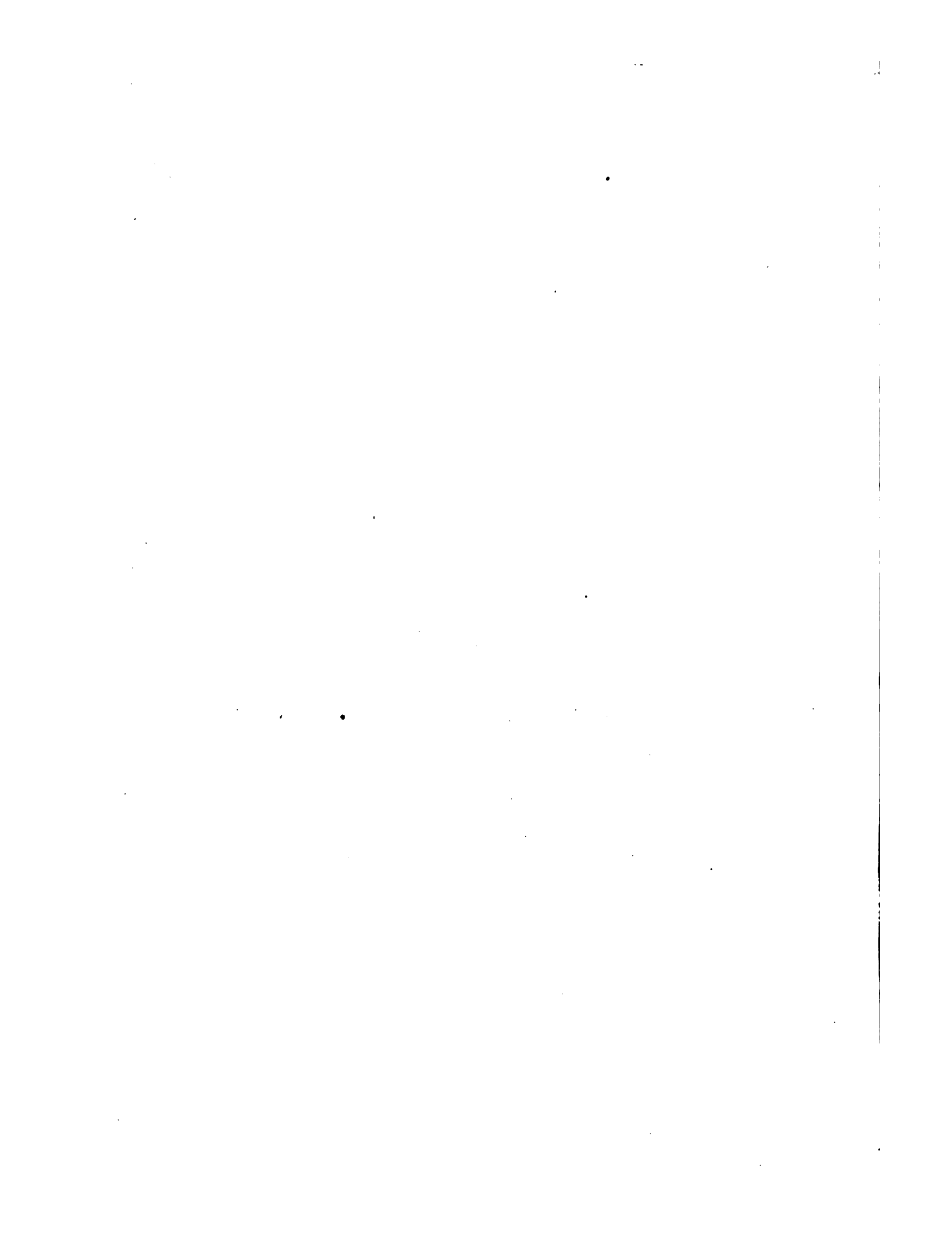


ENGLISH
CYCLOPÆDIA.









DEDICATED, BY PERMISSION, TO HER MAJESTY.

GEOGRAPHY

OR

First Division of "The English Cyclopædia,"

CONDUCTED BY

CHARLES KNIGHT.

VOLUME III.

LONDON:

BRADBURY, EVANS, & CO., 11, BOUVERIE ST., FLEET ST., E.C.

SCRIBNER, WELFORD, & CO., 654, BROADWAY, NEW YORK.

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G E O G R A P H Y.

VOLUME III.

GEORGIA.

GEORGIA, one of the most southern of the United States of North America, extends from north to south between 30° 22' and 35° N. lat., and from east to west between 80° 48' and 85° 40' W. long. Its greatest length is 322 miles, its greatest breadth 225 miles. It is bounded E. by the Atlantic; S. by Florida for 255 miles, the river St. Mary constituting the boundary-line for about 80 miles; W. by Alabama, with a boundary-line of 306 miles; N. by Tennessee and North Carolina; and N.E. by South Carolina. The Savannah River separates Georgia from South Carolina, and the Chattahoochee, a branch of the Appalachian, divides it for a considerable extent from Alabama. Its area is 58,000 square miles, or about 300 square miles more than the surface of England and Wales together. The following table shows the increase of the population, and the proportion of free coloured persons and slaves during the present century. The total population in

1800 was	162,101,	including	1019 free coloured persons,	and	59,404 slaves.
1810 "	252,433,	"	1801 "	"	105,218 "
1820 "	340,987,	"	1763 "	"	149,854 "
1830 "	516,823,	"	2486 "	"	217,531 "
1840 "	691,392,	"	2753 "	"	280,944 "
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The federal representative population in 1850 was 753,512, in which number three-fifths of the slaves are included. This entitles the state to send 8 representatives to Congress. To the Senate, like each of the other United States, Georgia sends two members.

Coast-line, Surface.—The line of coast, extending 105 miles in a straight line, runs from south-south-west to north-north-east, with a slight bend westward. Though generally uniform as to course from point to point, it is very irregularly indented, and is skirted by numerous low islands, which extend parallel to the shores. The principal of these islands from north to south are—Cabbage, Ossabaw, St. Catherine's, Sapello, St. Simons, Jekyll, and Cumberland. These islands, as well as some tracts on the adjacent shore, have a light sandy soil, well adapted for the culture of cotton. The cotton grown here is the long staple, or, as it is called from its place of growth, Sea-Island cotton, which fetches a higher price in the market than any other. The inlets and sounds which divide the islands from one another, and penetrate several miles inland, are generally navigable, but too shallow to admit vessels of more than 100 tons. Vessels of larger dimensions can enter only three harbours. The bar at the mouth of St. Mary's, at the most southern extremity of the state, has 13 feet of water on it; that at the mouth of the Altamaha, between St. Simons and Sapello, 14 feet; and the embouchure of the Savannah 17 feet of water: the last-mentioned river is navigable for large vessels to the city of Savannah.

The surface of Georgia is naturally divided into two regions, a plain and a hilly country. The boundary-line between them is indicated by the falls of the rivers which occur in the Savannah, near Augusta; in the Oconee, near Milledgeville; in the Ocmulgee, near Macon; in the Flint River, at Fort Lawrence, near Knoxville; and in the Chattahoochee, near Fort Mitchell. The plain which occupies the country south of this line extends in its western prolongation through the states of Alabama and Mississippi to the banks of the river Mississippi, and continues north-eastward through the states of South and North Carolina and Virginia to Chesapeake Bay. In Georgia it is a dead flat along the shores of the ocean, with a sandy soil, which produces no trees but the pine and palmetto. In many places it is intersected with swamps, which are however less numerous and less extensive

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The swampy tract ceases about 50 or 60 miles from the sea, except the Okefinoke Swamp, which lies farther inland. West of the swampy tract the country is dry, and the soil consists of an infertile mixture of sand and loam. Only along the bottoms of the rivers there occur level tracts from a quarter to half a mile wide, which in their natural state are covered with reeds, and have an excellent soil, well adapted to the growth of most agricultural productions, particularly rice. The higher dry grounds are mostly covered with pine.

The hilly region, which occupies nearly the northern half of the state, contains a much greater portion of arable land. The best land is along the rivers, where the soil is a deep rich black mould, with a small portion of sand. The gentle declivities of the hills also contain large tracts of cultivable land, and it is only their dry and sandy summits which do not admit of cultivation, and are covered with pine. The productiveness of the country which till lately belonged to the Cherokees, and is now commonly known as Cherokee-Georgia, is very great; it is not so well adapted for cotton as the plain part of the state, but a large part of it is well suited to the growth of corn. The most southern ridges of the Appalachian Mountains occur along the northern boundary-line of Georgia, but they do not attain a great elevation.

Hydrography, Communications.—The rivers which drain Georgia fall partly into the Gulf of Mexico and partly into the Atlantic. The former traverse either Alabama or Florida before they reach the sea. The most western is the Etowah River, a branch of the Coosa, one of the principal branches of the Alabama. The Etowah drains the Cherokee country, and runs about 80 miles within Georgia. The most important river of Georgia which falls into the Gulf of Mexico is the Appalachian, or rather its two principal branches, the Chattahoochee and Flint rivers; for it is only at the extreme south-western angle of this state that these two rivers unite and take the name of Appalachian. The Chattahoochee rises between the most southern spurs of the Appalachian range, about 34° 40' N. lat., and not very far from the sources of the Savannah. It runs in a general south-western direction through the northern part of Georgia for about 200 miles, and in approaching 33° N. lat. it begins to turn gradually to the south until it flows due south, forming for about 190 miles the boundary between Georgia on one side and Alabama and Florida on the other. It runs above 400 miles before it joins the Flint River. The Flint rises in the western districts of the hilly region between 33° and 34° N. lat., and flows in a southern direction as far as 32° N. lat., whence it gradually declines towards the west, until, south of 31° N. lat., it turns nearly due west, and joins the Chattahoochee. Its whole course is above 250 miles, and it is navigable for 75 miles. The Ocklockonnee and Suwanee, two rivers of Florida, rise in the southern districts of Georgia, and the Ogeechee in the northern.

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afterwards north, and again east, and enters the sea between Amelia and Cumberland islands, after a course of 110 miles. The Alatamaha runs through the central districts of Georgia; it is formed by the rivers Ocmulgee and Oconee, both of which rise towards the centre of the hilly region, near 34° N. lat., and run to the east of south for above 200 miles, nearly parallel to each other, at a mean distance of 40 miles. Having passed the parallel of 34° the Ocmulgee turns east, and joins the Oconee near 30° N. lat. The river thus formed, called Alatamaha, flows first east and afterwards bends to the south-east, until it empties itself in the ocean between St. Simons and Sapello islands. Its course is above 100 miles, and the whole length of the river upwards of 300 miles. Larger vessels can only ascend this river to Darien, but boats of 30 tons are navigated up the Oconee to Mill-edgeville, and an equal distance up the Ocmulgee. The Savannah, the chief river of the state, rises on the most southern declivity of the Appalachian range, and runs in all its course, including the windings, nearly 450 miles south-south-east, forming in all this distance the boundary between Georgia and South Carolina. It is navigable for large vessels to the city of Savannah, and for steamers of light draught to Augusta. There are numerous other streams of smaller size but of considerable importance as supplying ample water-power.

The only canals in the state are two short ones—the Brunswick Canal, 12 miles, running from Brunswick to the Alatamaha River; and the Savannah and Ogeechee Canal, 16 miles, which unites those rivers, but is not now used for purposes of navigation.

Besides the numerous good coach-roads which traverse the state, Georgia possesses a large number of excellent railways, the whole extent completed and in operation amounting to about 1000 miles, while charters have been obtained for about 700 miles more. The two great trunk-lines run from the ports of Savannah and Charleston inland to Chattanooga in Tennessee, where they unite and join the Tennessee system of railways. From these main trunks numerous branches diverge at various points. The following are the lines opened and at work in 1854:—Central (Savannah to Macon), 192 miles; Mill-edgeville and Gordon, 17 miles; Waynesborough and Augusta, 51 miles; Macon and Western (Macon to Atlanta), 101 miles; Georgia (Augusta to Atlanta), 171 miles, with Athens branch, 40 miles, and branch from Camak to Warrenton, 4 miles; Western and Atlantic (Atlantic to Chattanooga), 140 miles; Rome to Kingston, on the Western and Atlantic railway, 20 miles; Dalton to Knoxville (Eastern Tennessee and Georgia), 82 miles; South-Western (Macon to Oglethorpe), 71 miles; Muscogee (Columbus to Butler on the South-Western line), 50 miles; and Lagrange (Atlanta to West Point), 87 miles.

Geology, Mineralogy, &c.—The northern part of Georgia, occupied by members of the Blue-Ridge range of the Appalachian Mountains, is composed mainly of plutonic and metamorphic rocks. The primary formations, chiefly of the mica-schist system, cross the state in a north-west and south-east direction, having a breadth of 160 miles at the northern and 100 miles at the southern limit. They consist of gneiss, quartz, limestone, and carboniferous rocks, &c. Transition formations occupy the north-western angle of the state. South of the above formations, and extending into the middle of the state, occur chiefly rocks of the cretaceous series. The whole southern and eastern half of the state consists of tertiary deposits, comprising the extensive plain which rises very gradually from the Atlantic westward for some 100 to 150 miles.

Gold and iron are the most important minerals. The gold is found in the quartz rocks of the north-west. Iron-ore occurs in several varieties in different parts of the state. On both sides of the Etowah River, and extending south-west into Paulding county, and north-east through Cherokee county, are very extensive beds of good iron-ore, embracing, as far as yet known, a width of over 40 miles, along which numerous furnaces are in operation. Hematitic iron-ores also occur in the north-western part of the state of considerable extent; and in the gneiss formations are magnetic iron-ores of great purity. Specular ores are found in several places. Veins of sulphate of barytes occur of great extent. In the extreme north-western angle beds of coal are found. Limestone is worked largely, as are also gypsum and marl, for manure. Granite, marble, limestones, &c., are quarried to a great extent for building purposes. Millstones are obtained from the hills dividing the plain from the northern districts.

Climate, Soil, Productions.—The climate of a country extending over more than four degrees of latitude, and whose northern half is several hundred feet more elevated than its southern districts, must of course present great varieties. The hilly region is rather cold in winter. Frost is of common occurrence, and snow sometimes falls to the depth of five or six inches. But these districts are very healthy. The plain approaches in its climate the tropical regions of the globe. It is unhealthy on the bottoms of the rivers, and along the sea-coast in the vicinity of stagnant water. The heat in summer is very great, and the thermometer sometimes rises to 98° or even 102°: its common range is between 76° and 90° in this season. In winter the thermometer ranges between 60° and 40°, and sinks occasionally lower. The weather however is then dry and constant, and this is considered the most healthy and pleasant season of the year. The rains are most frequent in spring.

The great difference in the climate produces a corresponding differ-

ence in the productions. In the southern and south-western districts the temperature is suitable to the sugar-cane, orange, olive, fig, pomegranate, &c. Agriculture however is mostly limited to maize, sweet potatoes, cotton, rice, tobacco, and indigo. The swamp and tide lands produce vast crops of rice. Adjoining these lands are the oak-lands, on which black-seed cotton is largely raised. The hilly region resembles, in climate as well as in products, the countries of Middle Europe. The greatest part of the plain is covered with several kinds of the pine, a tree which extends also over the higher portion of the hilly region in vast quantities; and here tar, pitch, and turpentine are largely manufactured. The middle regions produce tobacco, cotton, and grain. In the northern parts, known as Cherokee-Georgia, the valleys are remarkably fertile; some cotton is grown, but this is peculiarly a grain district; the mountain slopes afford excellent grazing ground. Along the sea-coast as well as on the bottoms of the rivers, oak, hickory, ash, palmetto, and some other trees are common.

Bears and deer are numerous in the forests and near the swamps. Alligators frequent the Alatamaha and other rivers. Honey-bees are frequent in the swamps east of Flint River. The rivers abound with several kinds of fish.

The following are the principal results of the inquiries made respecting the agricultural statistics of the state at the last Census. The number of farms under cultivation in the state on the 1st of June 1850 was 51,759; the extent of improved land in farms was 6,378,479 acres, of unimproved 16,442,900 acres. The cash value of farms was returned at 95,753,445 dollars, of farming implements and machinery 5,894,150 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 1,088,534 bushels; rye, 53,750 bushels; maize, 30,080,099 bushels; oats, 3,820,044 bushels; barley, 11,501 bushels; rice, 33,950,691 lbs.; potatoes, 227,379 bushels; sweet potatoes, 6,986,428 bushels; peas and beans, 1,142,011 bushels; tobacco, 423,924 lbs.; ginned cotton, 199,636,400 lbs.; wool, 990,019 lbs.; hay, 23,449 tons; cane sugar, 1,642,000 lbs.; molasses, 216,150 gallons. The value of orchard products was 92,776 dollars, and of market-garden products 76,500 dollars. Very little wine is made. Only a small quantity of hops and flax is grown.

The number of horses in the state in 1850 was 151,831; asses and mules, 57,379; milch cows, 334,223; working oxen, 78,286; other cattle, 690,019; sheep, 560,435; swine, 2,168,617. The value of live stock was 25,728,416 dollars; of animals slaughtered, 6,839,762 dollars. The products of animals were, butter, 4,640,559 lbs.; cheese, 46,976 lbs.; bees'-wax and honey, 782,514 lbs.; silk cocoons 813 lbs.

Manufactures, Commerce, &c.—Owing to the abundant supply of water-power furnished by the hill-streams in the northern part of the state, and especially in Cherokee-Georgia, manufactures have increased rapidly of late years. At the census of 1850 there were returned 28,715 free males above the age of 15 as employed in trade, commerce, and manufactures, and 83,362 employed in agriculture. The whole number of manufacturing establishments, producing to the value of 500 dollars and upwards, in 1850 was 1407. Of these 35 were cotton factories, employing a capital of 1,736,156 dollars, and an average of 873 male and 1399 female hands—but the number of cotton factories has since been much increased; 3 woollen factories; 140 tanneries; and 10 iron-works. The other principal establishments consist of flour-, saw-, and paper-mills, boot and shoe manufactories, agricultural implement-works, &c. The home-made manufactures of the year were valued at 1,838,968 dollars.

But a small portion of the produce of Georgia is exported directly to foreign countries. The great bulk of its produce is shipped coast-wise by vessels belonging to the northern states to northern ports, to be thence exported to foreign parts. The whole of the commerce of Georgia is centred in Savannah, but a large portion of the produce of Western Georgia is shipped at Apalachicola in Florida. The shipping owned by the state in 1850 was 21,690 tons, of which 10,487 tons were employed in the foreign trade; of the remainder, 6479 tons were navigated by steam-power. Only one vessel, of 822 tons burden, was built in the state in 1852. The value of the articles of domestic produce exported from Georgia in 1850 was 7,551,943 dollars, in 1852 it was 4,999,015 dollars; the imports in 1850 amounted to 686,964 dollars, in 1852 to 474,925 dollars. The total entries in 1850 were 118 of 57,017 tons burden, of which 71 of 45,184 tons were foreign. The clearances were 141 of 72,563 tons, of which 88 of 51,524 tons were foreign.

Divisions, Towns, &c.—Georgia is divided into 94 counties. Mill-edgeville is the political capital of the state, but Savannah is the most important town. Besides these there are few places of much consequence; the following are all which call for notice here: the population is that of 1850:—

Mill-edgeville, the capital, is situated on elevated ground at the head of the navigation of the Oconee River, in 33° 7' N. lat., 83° 19' W. long., 642 miles S.W. from Washington: population 2216, of whom 1020 were slaves. The city is laid out on a regular plan, the streets being at right angles to each other. Washington, the main avenue, is 120 feet wide; the others are each 100 feet wide; and there are three public squares, each of which has its sides 450 feet long. The principal building is the state-house, a handsome gothic edifice occupying a lofty site near the centre of the city. The other chief public buildings are—the governor's house, state arsenal and

magazine, penitentiary, market-house, five churches, &c. Milledgeville stands in the centre of a rich cotton district, and is a place of considerable business. It is well connected by railway with the other leading towns of the state and union. Five newspapers and journals are published here.

Savannah, the chief city and port of entry of Georgia, is built on the right bank of the Savannah, about 18 miles from its mouth. The population in 1850 was 15,312, of whom 6281 were slaves; according to a local census taken in 1852 the population in that year had increased to 18,301, of whom 5478 were slaves. The city is generally regarded as one of the finest and healthiest on the south coast. It is about a mile long by three-quarters of a mile wide, is laid out at right angles, and has several good public squares. Along the river are convenient wharfs and ranges of warehouses. The principal public buildings are—the custom-house, a fine new edifice 110 feet long and 52 feet deep; a court-house, jail, city-hall, exchange, arsenal, United States barracks, market-house, theatre, 15 churches, some of which are handsome structures; several asylums, hospitals, &c. Of the private houses a large number are built of wood, owing to which the city has several times suffered severely from fire. Savannah is one of the chief commercial cities of the south, and is especially eminent as a mart for cotton, rice, and lumber. From it in 1851-2 the quantity of bags of cotton exported was 353,068, of which 228,614 were sent coastwise and 124,454 to foreign ports, 109,378 of the last quantity being sent to English ports. Of rice 39,929 tierces were exported from Savannah in 1851-2, and of lumber 25,508,500 feet. The entire foreign commerce of the state centres in Savannah, and the city is consequently well provided with railway communication with every town and district of the state. The city maintains also regular communication by steamers with Florida, Charleston, New York, &c. Several newspapers are published here.

Athens, on the right bank of the Oconee, 57 miles N. from Milledgeville, has a population of 1661 free persons and an 'undefined' number of slaves. It is chiefly noticeable as the seat of the University of Georgia. Four newspapers are published here. *Atlanta*, at the junction of the Georgia, Western and Atlantic, and Macon and Western railways, is an important entrepôt of the internal commerce: population, 2572. *Augusta*, on the left bank of the Savannah, 90 miles E.N.E. from Milledgeville, is one of the most flourishing towns in the state, being the commercial centre of a fertile cotton and tobacco district; the population in 1850 is not given in the general census, but a local census taken in 1852 showed that the town had then 11,753 inhabitants, of whom 4718 were slaves. The town is regularly laid out, and contains several good public buildings; the chief are a city-hall, county court-house and jail; several churches, an arsenal, hospital, theatre, &c. Three newspapers and two monthly magazines are published here. *Columbus*, on the left bank of the Chattahoochee, at the head of steam navigation, and immediately below the falls of the river, population 5942, of whom 2258 were slaves. The town, which is regularly laid out, contains two streets, running parallel to the river, each 165 feet wide, and six streets of 182 feet wide, with 12 other streets intersecting them, each 99 feet wide. The public buildings are the court-house and other county buildings, several churches, a market-house, &c. The town is the centre of a rich cotton district, and contains several cotton and woollen factories, flour-mills, &c. Steam-boats drawing five feet of water ascend the river to Columbus at all seasons; and a large number of steam-vessels maintain constant communication with the sea-board, New Orleans, &c. Railways connect the town with all parts of the state. Three newspapers are published here. *Griffin*, on the Macon and Western railway, 63 miles W.N.W. from Milledgeville, population 2320, is an important railway centre, and rapidly growing in commercial consequence. *Macon*, on the right bank of the Ocmulgee, at the head of steam-boat navigation, 29 miles S.W. from Milledgeville, population 5720, of whom 2353 were slaves. A very large quantity of cotton is sent down the river in the steam-boats from this place, and the town is an important commercial depôt. Besides the usual county buildings, churches, and market-house, it contains the Wesleyan Female College; several extensive stores, lumber-yards, printing-offices, grist-mills, foreign commission houses, &c. Four newspapers are published here.

Government, Judicature, &c.—The right of voting appertains to every free male citizen 21 years of age, who has lived in the county six months, and paid all taxes demanded for 12 months. The legislative body, styled the general assembly, consists of a senate of 47 members, and a house of representatives, consisting of 130 members, who are elected biennially. The governor, who has a qualified veto on the acts of the general assembly, is also elected biennially; his salary is 3000 dollars. The public debt of the state, which is redeemable from 1863 to 1874, amounts to 2,801,972 dollars. The property of the state, consisting of shares in the Western and Atlantic railway, is valued at the cost price, 5,000,000 dollars. The total revenue for 1853 was 922,140 dollars, the expenditure 900,534 dollars. The state militia is composed of 78,699 men, of whom 5050 are commissioned officers.

The judicature consists of a supreme court, and superior and inferior courts. The judges of the supreme court are elected by the general assembly for a term of six years, and receive each a salary of 2500 dollars; the judges of the superior court are elected for four

years by the people of the district over which they preside. The judges of the inferior courts are also elected by the people for four years.

The state has made considerable provision for the education of the children of free citizens. In 1850 Georgia possessed 13 colleges, 219 academies or high schools, and 1251 common or primary schools. The total number of children attending school was 77,016, of whom 42,365 were boys. Among the attendants at school one free coloured boy is returned. The principal colleges are the Franklin, or Georgia University, at Athens, founded in 1785, which has 8 instructors, 182 students, and a library of 15,500 volumes; the Oglethorpe college near Milledgeville, founded in 1838, which has 5 tutors and 69 students; the Emory college at Oxford, which has 5 tutors and 115 students; and the Mercer (Baptist) University at Penfield, having 7 tutors and 127 students. Among religious sects by far the most numerous are the Baptists and Methodists. In 1850 the Baptists had 879 churches, affording accommodation for 319,293 persons; the Methodists had 795 churches, with accommodation for 237,318 persons. Next to these are the Presbyterians, who had 97 churches, with accommodation for 40,596 persons. Fifty-one newspapers and periodicals, circulating 4,070,866 copies annually, are published in the state.

History, &c.—The colony of Georgia was founded in 1732 by a private company, and received its name in honour of King George II. In 1733 General Oglethorpe founded the town of Savannah. In 1752 it became a royal government, and in 1755 a provincial legislature was established. The original limits of the state included also the territory which now forms the states of Mississippi and Alabama. It joined the other provinces in 1776 in declaring war against Great Britain; but in 1778 was occupied by a British force, and continued in such occupation till the peace of 1786. A new constitution was introduced in 1785, and afterwards was amended in 1798.

The whole population of Georgia is now composed of Europeans and Africans, or their descendants. Not a trace remains of the old Indian population. The Creeks, who up to 1826 inhabited the country between the Flint and Chattahoochee rivers, sold their lands in that year, and emigrated to the banks of the Arkansas. Up to 1835 the Cherokees were in possession of the north-western corner of the state, but in that year they were obliged to abandon it.

By the constitution the importation of slaves from Africa or any foreign state is prohibited: the legislature cannot liberate slaves without the owner's consent, or prevent immigrants bringing slaves into the state with them from any other state. The persons of slaves are protected equally with those of free people, and persons killing them are liable to punishment for murder, "unless their death should happen from accident in giving such slaves moderate correction."

(*Statistical Gazetteer of the United States, 1853; Seventh Census of the United States, Official Report, 1853; American Almanac, 1854.*)

GERA, a town in the principality of Reuss, in Germany, is situated in about 50° 52' N. lat., 12° 6' E. long., in a valley on the banks of the White Elster, and contains about 10,000 inhabitants. The streets are in general broad and at right angles to one another, and embellished with handsome houses. Gera has a fine town-hall; five churches; a gymnasium attended by between 600 and 700 pupils; a training school; a house of correction, to which an orphan asylum is attached; two hospitals; and a free school. Gera possesses numerous manufactures, particularly of fine woollens, mixed cotton and silk goods, woollen and cotton yarns, china, earthenware, printed cottons and woollens, oil-cloth, tobacco, carriages, chemical colours, hats, leather, musical instruments, soap, beer, &c. A canal from the Elster passes through the town. The china manufactory of Schloss Untermaus, and the princely residences of Osterstein, Köstritz, and Ronneburg are in the vicinity of the town, which is about 35 miles S.S.W. from Leipzig.

GERMAIN-EN-LAYE, ST., a town in France in the department of Seine-et-Oise, stands on the left bank of the Seine, 14 miles by railway W. by N. from Paris, and has about 14,000 inhabitants including the commune. It is situated on a height which commands a beautiful prospect of the valley of the Seine, with a distant view of Paris and its environs. The streets are wide, handsome, and well laid out; the houses lofty and well built. There are many mansions in the town in which formerly the grandees of the French court resided, before Louis XIV. forsook St-Germain for Versailles: and even to this day many of the old French noblesse continue to reside in this their ancient haunt. The town originated in a monastery founded about A.D. 1010 by King Robert, on the summit of the hill which was then surrounded by the forest of Lida (Laye). The same king or one of his immediate successors built a royal residence near the abbey. Louis Le-Gros (1124) occasionally resided here, and the palace of St-Germain was the residence of Baudouin, emperor of Constantinople, during his visit to France in the reign of St. Louis. The English plundered and burnt the town and the palace in A.D. 1346. They seized it again on account of its commanding military position in the invasion of Henry V., and held it from 1419 to 1435. The château, or palace, which replaced the more ancient royal residence and was erected by François I., is built chiefly of brick, surrounded by wide and deep ditches; the apartments are handsome. Henri II., his sisters Madeleine of France (queen of James V. of Scotland), and

Marguerite of Valois, Charles IX., and Louis XIV. were born at St. Germain, and Louis XIII. died there. Among its other historical associations must be mentioned that it was the residence of James II. of England, its last royal occupant. After his death in 1701 it was neglected till 1809, when Napoleon established in it a military school. In 1815 a body of 10,000 English soldiers were quartered in it. It afterwards served for a barrack for the royal guards. After the revolution of 1830 it was offered for sale, but found no bidder. It is now a military prison. The Château-Neuf, built by Henri IV. for his mistress Gabrielle d'Estrées, is now a heap of ruins. The forest or park of St. Germain, surrounded by walls and occupying more than 10,500 acres, is adorned by trees of immense size, and has numerous broad avenues. A noble terrace, of more than a mile and a quarter in length and nearly 100 feet wide, extends from the palace along the skirts of the forest, and affords to the townspeople an agreeable promenade. In the forest are several small edifices erected at different periods by the kings of France. The most remarkable of these is the structure called Les Loges, formerly a monastery, now an orphan school, in which 220 orphans, daughters of members of the Legion of Honour, are brought up. The town has a handsome parish church, in which is a monument erected at the expense of George IV. over part of the remains of James II., which were found in making some alterations in the church; a corn-market, a theatre, and three handsome squares, of which the one called Place-du-Château is the largest. The manufactures consist of cotton hosiery, crinoline, and leather. A yearly fair is held for business; and one a few days afterwards for pleasure: the latter, which is called the fair of Les Loges, is held in the forest for three days after the 30th of August, and is one of the gayest in France, attracting numerous visitors from Paris and the surrounding country. There are many schools in the town and neighbourhood. A weekly market is held every Monday chiefly for the sale of pigs, of which above 100,000 are annually sold in the town. St. Germain is considered a very healthy place. In the picturesque nomenclature of the French republicans it bore the name of *Montagne-du-Bon-Air*.

GERMAN BANAT. [SERVIA AND TEMESVAR BANAT.]

GERMANS, ST., Cornwall, a market-town, and the seat of a Poor-Law Union, in the parish of St. Germans, is situated on the small river Tidi, in 50° 24' N. lat., 4° 16' W. long., distant 22 miles E.S.E. from Bodmin, and 228 miles S.W. from London. The town is governed by a portreeve. The population of the town in 1851 was 2967. The living is a perpetual curacy in the archdeaconry of Cornwall and diocese of Exeter. St. Germans Poor-Law Union contains 13 parishes and one chapelry, with an area of 42,141 acres, and a population in 1851 of 16,542.

The town of St. Germans stands on the southern slope of a tolerably high hill, and consists chiefly of one street. It was once the seat of a bishop, afterwards united with the bishopric of Crediton, and from this union arose the see of Exeter. The parish church, which was once the church of a monastery of Augustinian priests, and is said to have been the cathedral church of the diocese, was formerly much more extensive. The ancient chancel fell to the ground in 1592: the church now consists of a nave and two aisles. The west front has two towers: the north tower is octagonal above and quadrangular below; the south tower is quadrangular throughout. Between the towers is the entrance, formed by a deep Norman arch with shafts and mouldings, and two small Norman windows above. The south aisle is pointed, of later erection; the pointed arch is found also in the west front, which has probably undergone partial alteration. The Methodists have three places of worship. In the town are an Endowed school for poor boys, National and Infant schools, and a parochial book-club. The seat of the Earl of St. Germans, called Port Eliot, occupies the site of the ancient priory; many of the apartments are convenient and spacious, and decorated with paintings.

The population is chiefly agricultural. There is a considerable fishery at the port. At St. Germans Quay coals are imported, and lead-ores from mines in the adjoining parish of Menheniot are shipped to Swansea for smelting. The market-day is Friday, and there are two cattle fairs in the year.

(Lysons, *Magna Britannia*; Wallis, *Cornwall Register*; *Communciation from St. Germans*.)

GERMAN OCEAN. [NORTH SEA.]

GERMANY extends from 45° 5' to 57° 50' N. lat., 6° 20' to 20° 10' E. long. It is bounded W. by the Netherlands, Belgium, and France; S. by Switzerland and the Austrian territories in Italy; E. by the kingdoms of Hungary, Galicia, Poland, and Prussia; and N. by the Baltic. Its area is estimated at 284,000 square miles, or about twice and a half the area of the British Islands.

The states included within Germany, and forming the Germanic Confederation, are as follows (their area and population will be found under EUROPE):—Austria, Prussia, Bavaria, Saxony, Hanover, Würtemberg, Baden, Hesse (electorate of), Hesse (grand duchy of), Holstein (duchy), Lauenburg (duchy), Luxemburg (duchy), Brunswick, Mecklenburg-Schwerin, Nassau, Saxe-Weimar, Saxe-Coburg and Gotha, Saxe-Meiningen-Hildburghausen, Saxe-Altenburg, Mecklenburg-Strelitz, Oldenburg, Anhalt-Dessau, Anhalt-Bernburg, Anhalt-Köthen, Schwarzburg-Sonderhausen, Schwarzburg-Rudolstadt, Lich-

tenstein, Waldeck, Reuss (principalities of), Schauenburg-Lippe, Lippe-Detmold, Hesse-Homburg, Lübeck, Frankfurt, Bremen, and Hamburg.

All these states being described under their several titles, and the more important mountain ranges, rivers, and other great physical features being also separately described, it would be superfluous to repeat such descriptions here. We therefore propose under the present heading merely to give such a general notice of the physical geography of Germany as may facilitate reference to particular articles, adding a brief sketch of its history, language, and literature.

Physical Geography.—The surface is divided into four distinctly-marked districts, two plains and two mountain regions. One of the plains is low, and rises only a little above the level of the sea; the other attains a considerable elevation. Between the two plains extends a mountain region, whose summits in no part attain the snow-line, which in this parallel is about 6000 feet above the sea-level. To the north of this region extends the low plain, and to the south of it the elevated plain, which on the east and west is inclosed by mountainous tracts belonging to that region. The southern boundary of the elevated plain is formed by the Alps, which constitute the fourth natural division of Germany.

The *low plain* is only a small section of the great plain which extends nearly over the whole northern part of the old continent. This section occupies the northern portion of Germany, which lies on the southern shores of the North and Baltic seas, and extends to the peninsula of Jutland. Its length, from the boundary of the Netherlands and the Rhine to the borders of Russia, including the kingdom of Prussia, is nearly 600 miles; but its width varies, being, on the west of the Elbe, on an average about 160 miles, and to the east of that river about 300 miles. There is probably no tract of country in Europe of equal extent which has a less fertile soil than this plain. It is even less fertile than the steppes of Southern Russia to the north of the Black Sea, but as it has the advantage of abundant rains, the German plain is much better cultivated and more thickly inhabited than the Russian steppes. The sub-stratum of this plain is formed by limestone, chalk, gypsum, and sandstone, which are covered by loam, clay, and sand to an average depth of 200 feet. If this country were situated under a tropical climate and deprived of the abundant rains and snow which annually descend upon it, the surface would resemble the Sahara or the great Indian plain. West of the Elbe the plain is nearly destitute of trees, and the fertile tracts occur only in the shape of oases, which are at great distances apart. The most fertile regions are along the rivers, which run in depressions from 100 to 200 feet below the level of the plain. These bottoms have a fertile soil, which is covered in its natural state by forest-trees, and when cultivated produces good crops. These bottoms vary in width, according to the volume of water in the rivers. Along the great rivers (Weser, Elbe) they are from three to six miles wide, where these rivers issue from the mountain tracts in which they originate; but farther down they widen to 20 or 30 miles, and even more. Where the rivers approach the sea the bottoms are united with the marshes which line the shores of the North Sea; these marshes are not of great extent, being only five or six miles across on the average, but they do not yield in fertility to any tracts in Europe. Being below the level of the sea at high tides, it is necessary to protect them by dykes from its invasions. Nearly in the middle of the plain occurs a fertile tract, inclosed by two ridges of high hills, which issue from the mountain tract farther south, on both sides of the parallel of 52° N. lat. The more northern of these ridges, called the Süntel, rises to the south of the town of Hanover, and runs westward; the southern ridge has the name of Egge east of Paderborn, but north-east of that town it turns west-north-west, and is known as the Teutoburger Wald, or Osnig. The valley between these two ridges is of considerable fertility; its eastern portion forms the principality of Lippe Detmold, and its western belongs to the Prussian province of Westphalia and the Hanoverian province of Osnabrück. That portion of the plain which lies east of the Elbe has a somewhat different character. Tracts covered with heath and moor occur here also, not contiguous, but separated from each other by great intervals of sandy surface. These sandy tracts however are not destitute of vegetation, nearly all of them being covered by various kinds of pine, which give the soil a greater degree of solidity. Still, all lands of this description are only cultivated in a comparatively few and favoured places, and the crops are very scanty; but this portion of the plain contains a greater number of fertile tracts, which in some places are of considerable extent. The beds of the rivers are less depressed below the level of the plain, and the rich lands along their banks have a greater width. The marshes which are adjacent to such lands, and nearly on the same level with them, have been drained, and changed into meadows and fields. Along the shores of the Baltic no marshes occur, but the larger rivers, especially the Vistula and Niemen, form deltas at their mouths, whose alluvial soil is of great fertility, and can hardly be exhausted by successive crops. Besides these there are several fertile tracts at some distance from the rivers, whose soil is a heavy loam of considerable fertility.

Through the northern part of this plain a higher tract may be traced, which in general runs west and east, but with two great bends. It begins on the west at Oldeale in Holstein, whence it runs east-south-east nearly in a straight line to Schwedt on the Oder, where it

is about 70 miles from the sea. East of that river it continues due east to Arendswalde, and then inclines to the north, gradually approaching the sea. Some distance west of Danzig it takes a short south-east course, and then again due east, terminating on the banks of the Niemen, near Grodno. This tract of high ground forms the watershed between a great number of small rivers which fall into the Baltic, and many others with a much longer course, which run off to the southward, and increase the waters of the Elbe, Oder, and Vistula. It is also remarkable for the immense number of small lakes which occur on its higher parts or near them. Some of these are lakes of considerable extent, as the Lake of Schwerin, near the western extremity, and the Lake of Spirding, towards the banks of the Niemen. On the northern side of this high ground we find those numerous erratic blocks or boulders which have attracted the attention of geologists.

The mountain region of Central Germany extends to the south of the low plain, and incloses the elevated plain on the east, north, and west. That portion of it which is to the east of the elevated plain may be called the mountain system of Bohemia, because it incloses that kingdom on all sides. That which extends to the north of the elevated plain may be called the Central mountain system of Germany; and the ranges inclosing the elevated plain on the west the Rhenish mountain system, because they run parallel to the middle course of the Rhine. This region is composed of numerous groups of mountains and hills, with connecting table-lands, such as the Fichtelgebirge, the forest of Bohemia, the Sudetes or Sudetch Mountains, the Moravian Mountains, the Reisingebirge, the Lusatian Mountains, or the Wolish Kamm, the Erzgebirge, the Frankenwald, Thüringerwald, Röngebirge, Spessart, the Harz Mountains, the Egge Mountains, the Haarstrang, the Sauerland, the Westerwald, and the Taunus. These mountain systems are described under their own names [ERZGEBIRGE, FICHELBERG, HARZ MOUNTAINS, &c.], or under the names of the states in which they are situated. [BADEN, BAVARIA, BOHEMIA, &c.] Most of the principal rivers of Germany have their sources in these mountains: the great rivers, as the Elbe, the Rhine, the Weser, the Ems, &c., are described in separate articles; the others under the states through which they flow.

The interior of the central mountain region, or the countries inclosed by the mountain ranges which we have described, presents nothing but a succession of valleys and high hills. The valleys are frequently wide, but generally of only moderate fertility. The hills have in general a gentle descent, and many of them are cultivated to some height. No hill rises to the elevation of a mountain except the Vogelsberg, north of the Spessart, and west of the Rön Mountains, which consists of basalt and lava.

The elevated plain is inclosed on the west by the Rhenish mountains, which rise at their northern extremity, at no great distance from the place where the river Main joins the Rhine, a few miles south of the town of Frankfurt. This range is known under two names, the northern being called Odenwald, and the southern Schwarzwald, or Black Forest, the division being made by the narrow valley through which the river Neckar flows.

The elevated plain, or the table-land of Bavaria, extends between the Schwarzwald and Odenwald on the west to the Böhmerwald on the east, as far north as the Thüringerwald and Rön Mountains, and is bounded on the south by the Alps. Its length from north to south is about 180 miles, and its mean breadth probably exceeds 120 miles. [BAVARIA.]

The fourth natural division of Germany comprehends the Alps and their numerous valleys, of which a description is given under AUSTRIA and ALPS.

That part of Germany which lies on the left bank of the Rhine contains level tracts only along the river, the greater part of it being occupied by mountain ranges which partly constitute the northern extremity of the Vosges Mountains, and partly the eastern districts of the Ardennes. The Vosges enter Germany as a broad-backed range, and descend rapidly towards the flat tract, which, with a mean breadth of 8 or 10 miles, separates them from the Rhine; they lower gradually towards the west, where they terminate in a flat level of moderate extent. The Vosges terminate properly at Kaiserlautern, where a valley, about 50 miles long and 4 miles wide, extends from the Rhine to the Saar; its mean elevation is 800 feet above the sea, and it is partly covered with moors. North of this valley lies a rather extensive mountain tract, the ridges of which are known by the names of Donnersberg (Thunder Mountain), Hochwald, the Idarwald, and Hundsrück. This mountain region occupies the whole tract between the valley of the Rhine and the rivers Moselle and Saar. On the other side of the Moselle is the Eifel.

The Eifel and the Höhe Veen constitute the southern boundary of the low plain on the west of the river Rhine. In this part the plain extends over Belgium and the southern provinces of the Netherlands. Though the districts united to the Netherlands are not much superior in fertility to that part of the low plain which lies on the other side of the Rhine, those which form Belgium, and which belong to Germany, exhibit a different character, being fertile to a considerable degree.

Climate.—The climate of the different parts of Germany differs in no great degree, if we except the countries situated on the southern

declivity of the Alps and its valleys. At Trieste, on the Adriatic Sea, the mean annual temperature is 58° Fahr.; but north of the Alps the temperature is nearly equal all over Germany. Though the northern districts are 7 or 8 degrees farther north than the southern, the difference of temperature due to this cause is compensated by the much higher elevation of the southern districts. The mean annual temperature varies only between 45° and 50° of Fahrenheit (that of London is 48° Fahr.). In the greatest degree of cold which has been experienced, the thermometer sunk to 31° below zero, and in the greatest degree of heat it rose to 95°. The countries along the banks of the rivers Rhine and Main enjoy the mildest climate, and here the almond-tree and the chestnut succeed very well. Vines do not grow north of 51° N. lat., unless peculiar care is taken to shelter them. The low plain, which lies exposed to the winds that blow from the northern seas, has a much moister and more variable climate than the interior, which, owing to its greater elevation, is much drier and less subject to sudden and frequent variations. The quantity of rain which annually falls varies greatly with the localities of places. It amounts at Wittenberg to 18 inches, at Berlin to 21 inches, and at Ulm to 28 inches.

Ancient Germany.—The word Germania was employed by the Romans to designate a country of greater extent than modern Germany. They included under this name all the nations of Europe east of the Rhine and north of the Danube, bounded on the north by the German Ocean and the Baltic, including Denmark and the neighbouring islands, and on the east by the Sarmatians and Dacians. It is difficult to determine how far Germany stretched eastward. According to Strabo (vii. c. 1) Germanic tribes dwelt nearly as far as the mouths of the Borysthenes (Dnieper). The northern and north-eastern parts of Gaul were also known under the name of Germania in the time of the emperors, after the province of Belgica had been subdivided into Germania Prima and Germania Secunda.

The Greeks and Romans had very little knowledge of Germany before the time of Julius Cæsar, who met with several German tribes in Gaul, and crossed the Rhine more than once, rather with the view of preventing their incursions into Gaul than of making any permanent conquests. His acquaintance was however limited to those tribes which dwelt on the banks of the Rhine. Under the early Roman emperors many of these tribes were subdued, and the country west of the Visurgis (Weser) was frequently traversed by the Roman armies. But at no period had the Romans any accurate knowledge of the country east of this river; and it is therefore difficult to fix with certainty the position of the German tribes, particularly as the Germans were a nomad people. Some parts of Germany were inhabited by the Gauls, who were, according to Cæsar ('Bel. Gal.' vi. 24) the more warlike nation in early times. Two great countries of Germany, Bohemia (Boihemum), and Bavaria (Boioaria), derived their names from the Boii, a Gallic tribe.

The name of Germani was first applied by Cæsar to the whole nation east of the Rhine, though it properly belonged only to those tribes which he conquered in Gaul. Tacitus states ('Germ.' c. 2) that the first tribe which crossed the Rhine were the Tungri, who were afterwards called Germani, which is supposed to be the same as Wehrmann; that is, 'Man of War.' It is doubtful whether the Germans themselves employed any one name to designate the whole nation. Tacitus ('Germ.' c. 2) divides them into three tribes—1, Ingævones, bordering on the ocean; 2, Hermiones, inhabiting the central parts; 3, Istævones, including all the others. Pliny ('Nat. Hist.' iv. 14) makes five divisions—1, Vindili, including Burgundiones, Varini, Carini, Guttones; 2, Ingævones, including Cimabri, Teutoni, and Chauci; 3, Istævones, near the Rhine, including the midland Cimabri; 4, Hermiones, inhabiting the central parts, including the Suevi, Hermunduri, Catti, and Cherusci; 5, Peucini and Bastarnæ, bordering on the Dacians.

History.—The origin of the Germanic nations, like that of all others, is uncertain. Some authors, taking as their guide the affinity of languages, have traced their descent from the inhabitants of Asia; and Von Hammer calls them a Bactriano-Median nation. But to assign to the Germanic nations a distinct historical origin is to make an assertion without evidence, though it is now indisputably established that the Teutonic dialects belong to one great family with the Latin, the Greek, the Sanscrit, and other European and Asiatic tongues. All the positive knowledge however that we have of the German nations previous to their contact with the Romans is mere conjecture. The Romans first became acquainted with them, B.C. 113, when they appeared under the name of Teutones and Cimabri on the confines of the Roman dominion and defeated the consul Papirius Carbo. They made successive attacks on the frontiers, but were repelled by Marius, who defeated these barbarians in the years A.C. 108 and 101. When Julius Cæsar had subjugated Gallia and penetrated to the Rhine, he became acquainted with a nation then designated by the name of Germani. Ariovistus, the leader of the nation which had formerly inhabited the banks of the Danube, attempted to establish himself in Gallia; but being defeated by Cæsar, was obliged to fly beyond the Rhine. Cæsar twice crossed the Rhine in order to secure Gallia from the inroads of the barbarians: he took some Germans into his army, whom he employed against the Gauls and afterwards against Pompey.

The civil wars which divided the Romans withdrew their attention for some time from Germany, and the Sigambri ravaged Gallia with impunity. After they had defeated Lollius, the legate of the emperor Augustus (B.C. 15), he himself hastened to the defence of Gallia ('Vell. Pat.' ii. 97); and in order to oppose the inroads of the Germans, he erected several fortresses on the Rhine, and gave his stepson Drusus the command of the forces stationed on the banks of that river. Drusus made several successful expeditions against the Germanic nations, and penetrated as far as the Elbe. After the death of Drusus (B.C. 9), his brother Tiberius commanded for two years the legions stationed on the Rhine. Tiberius employed policy rather than force against the Germans. He engaged many of them to enter the Roman service; and when he was again (A.D. 4) entrusted with the same command, he penetrated as far as the banks of the Elbe; and Germany would have perhaps become a Roman province if the imprudence of his successor, Quintilius Varus, had not destroyed all the advantages already gained. The violent measures which he adopted to change the manners and institutions of the Germans caused a general conspiracy against the foreign invaders. Arminius, who was educated at Rome, and who had served in the Roman armies, was at the head of this conspiracy. The legions of Varus were attacked by the Germans in the forest of Teutoburg (A.D. 9), and entirely destroyed. This defeat of the Romans was followed by the loss of all their conquests beyond the Rhine; and the Germanic nation of the Cherusci, among whom Arminius was born, became the most powerful nation in Germany. Four years afterwards, Germanicus restored for a time the fortunes of the Roman arms, but without regaining the former acquisitions. From that time the Romans seem to have abandoned the idea of extending their conquests in that direction, and to have contented themselves with repelling the inroads which the Germans occasionally made on their frontiers. The Germans were also prevented from making any serious attempts against the Romans by the internal wars which distracted them for many years. They again attacked the Roman empire under Domitian, Nerva, and Trajan, the last of whom entirely defeated them. From this time their attacks on the Roman empire became more frequent and more formidable, and their history becomes blended with that of the decline of the Roman empire, on the ruins of which they established several new states. We shall pass over the period to the death of Charlemagne, under whose successors the modern history of Germany begins. Those who would study the state of Ancient Germany may refer to the 'Germania' of Tacitus, and to the work of Mannert on Ancient Germany, published in 1829, as well as to several other German works on the subject, but particularly those of Barth and Ledebuhr.

Modern History.—Louis, surnamed the Germanic, son of Louis Le Debonnair, and grandson of Charlemagne, was, by the treaty of Verdun, 843, the first king of the Germans. Germany was divided at that time from France by the Rhine, and possessed on its left bank only Speyer, Worms, and Mainz, with their respective districts. Under the reign of Louis were established the margraves; and burghs, that is, fortified towns or castles, were founded in order to prevent the inroads of the Normans as well as of the Slavonians. This emperor increased his dominions by the acquisition of Cologne, Treves, Aix-la-Chapelle, Utrecht, Metz, Strasburg, Basel, and many other towns and districts which he inherited from his nephew, Lotharius II. Louis died in 876, and his three sons, Carloman, Louis the Younger, and Charles the Fat, divided his empire. In 884 Germany was re-united to France by the accession of Charles the Fat to the throne of the last-named country, who thus became sovereign of almost all the empire possessed by his great predecessor Charlemagne. But the Germans (in 887) renounced their allegiance to him, and raised to the throne his nephew, Arnulph of Carinthia, a natural son of his brother Carloman, who was crowned emperor in 896, after a victory over Berengar, duke of Friuli. He died in 899, and was succeeded by his infant son Louis, who died in 911, and with whom the Carolingian dynasty ended in Germany. Otho, duke of Saxony, having refused the imperial dignity on account of his great age, Conrad, the first duke of Franconia, was elected emperor of Germany. After Conrad's death (918), Henry the Fowler, duke of Saxony, was elected emperor. From that time the crown of Germany remained elective until the 6th of August, 1806, on which day the emperor Francis II. abdicated the imperial crown of Germany, and declared the dissolution of the Germanic empire. Henry the Fowler died in 936, and the imperial dignity continued in his house until the death of Otho III. in 1002. The emperors of Germany assumed the title of Roman emperors from the time of Otho I., who was crowned at Rome in 962: when a successor to the throne was elected during the emperor's lifetime, he was called the king of Rome. Conrad II. (1024-39) organised the feudal system, and first endeavoured to put an end to the factions and quarrels then universally prevalent, by the establishment of the so-called peace of God, *Freuga Dei*. He extended the limits of the empire by the incorporation of Burgundy. His successor, Henry III. (1039-56), humbled the Roman see by deposing three successive popes, but the papal influence was again restored by Gregory VII., who maintained a protracted struggle with the emperor Henry IV. (1056-1106).

The crusades began during the reign of this emperor, which was constantly disturbed by his quarrels with the Roman see, as well as with the powerful vassals of the German empire. Henry V. (1106-25),

son of the foregoing, was a prince without any talents, and of a bad character. Under his reign the great vassals of the empire became entirely independent, and thus the division of Germany into several states was established. The reign of Frederick I., or Barbarossa (1152-90), a prince of ability, is memorable for the establishment of the Hanseatic League. The reign of Frederick II., who died in 1250, is after that of Charlemagne perhaps the most remarkable period of the middle ages. His son, Conrad IV., was opposed by William of Holland, and died in 1254. Upon Conrad's death there were several competitors for the imperial crown, among whom was Richard, earl of Cornwall, brother of Henry III. of England. The parties who supported the different competitors took advantage of the disturbed state of the empire in order to strengthen their own power. Peace was restored by the accession of Rudolph I., count of Habsburg (1272-91). This great prince destroyed the strongholds of the nobles, who exercised constant depredations on the adjacent country, and established order by severe measures. Rudolph is the founder of the Habsburg dynasty, which through a female line still reigns in Austria.

After Henry's death Louis of Bavaria was elected emperor; he reigned from 1314 to 1347. The reign of Charles IV. of Luxembourg, king of Bohemia (1347-78) is particularly remarkable by the constitution of the empire which he proclaimed (in 1356) under the name of the Golden Bull. This constitution regulated the rights, privileges, and duties of the electors; the manner and formalities of the election and coronation of an emperor; the coinage, customs, and other articles relating to the commerce of the empire; the rights and obligations of the free imperial cities, &c. Charles's son, Wenceslaus (1378-1410), was a weak prince, whose reign was disturbed by internal commotions and distinguished by the commencement of Huss's reformation. After the death of Wenceslaus, his brother Sigismund ascended the throne (1411-37). During his reign the council of Constance was held, when Huss was executed, a transaction which gave rise to the wars of the Hussites.

The long reign of Frederick III. (1439-93), a weak-minded prince, was marked by the great progress of science, which was promoted by the foundation of many universities in Germany. Frederick's son, Maximilian I. (1493-1519), was a prince of a superior mind and character. He put an end to many abuses which had desolated the empire, particularly private feuds. He improved the organisation of the courts of justice, introduced a system of police for the better security of the inhabitants, and established (in 1516) the post. He gave also a new and better organisation to the army, being himself an accomplished military commander. It was also during his reign that the reformation of Luther began (1517), at the university of Wittemberg, which had been founded in 1502. The Reformation led to protracted and bitter dissensions, owing to the refusal of the emperor to grant religious liberty to the Protestants. Entire toleration was first granted to the Protestants by Ferdinand I. (1556-1564), a prince of a mild and conciliatory character, the grandson of Maximilian I., who became emperor on the abdication of his brother, Charles V., in 1556. Under Matthias (1612-19), the Thirty Years' War commenced in 1618. Matthias was followed by Ferdinand II. (1619-37), a bigoted Roman Catholic, whose fanatical zeal against the Protestants, as well as his political ambition, continued to involve Germany in the Thirty Years' War. The treaty of Westphalia, which terminated the war in 1648, established a new organisation of the German empire. By this treaty, which served as the basis of the constitution of Germany till the formation of the Confederation of the Rhine in 1806, the religious and political liberties of the Germans were established on a sure footing. The sovereignty of the states of the empire was acknowledged, as well as their right to form alliances among themselves and with foreign states, provided none were concluded against the emperor or the empire. It was also declared that the emperor should not, without the consent of the states, put any one of them under the ban of the empire. The Palatine of the Rhine, who had lost his states, recovered them by that treaty and was created an elector. The Protestants were confirmed in all the liberties which they possessed before the war, and the estates of the Roman Catholic Church, which had been seized by the Protestants and possessed by them in 1624, were left in their hands, but those seized after this time were restored to the Roman Catholics. The members of the Reformed Church received equal rights with the Lutherans. Several bishoprics and abbeys were secularised, and given as an indemnity to different states. All the sovereigns were put under an obligation not to persecute their subjects who professed a religion different from their own. Alsatia was ceded to France; Sweden received a part of Pomerania, Bremen, Verden, Wismar, and a sum of 5,000,000 dollars for its army; Brandenburg received the secularised bishoprics of Halberstadt, Minden, Kamin, and the expectation of the possession of Magdeburg; Mecklenburg, the secularised bishoprics of Schwerin and Ratzeburg. Hanover was invested with the right to have one of its princes created, alternately with a Roman Catholic, sovereign bishop of Osnabrück, and also received some convents with their estates. The abbey of Hirschfeldt and 600,000 dollars were given to Hesse-Cassel. Austria consented to all these measures in order to preserve her hereditary states. Holland was acknowledged by Spain as an

independent state. France and Sweden declared themselves guaranties of all the provisions of the above-mentioned treaty. Leopold I. (1657-1705), was involved in constant wars with France and with the Turks, who besieged his capital, Vienna, which was saved by John Sobieski, king of Poland. Leopold granted in 1692 the electoral dignity to the duke of Brunswick-Lüneburg, and conferred in 1701 the royal crown on the elector of Brandenburg, who took from that time the title of king of Prussia.

The elector of Bavaria, who was elected emperor in 1742, put forward claims to the succession of the Austrian states, and other sovereigns took advantage of that circumstance to attack Maria Theresa, who was married to the Duke of Lorraine. A war ensued, which was ended by the peace of Aix-la-Chapelle in 1748; but the emperor Charles VII. having died in 1745, the husband of Maria Theresa was elected emperor under the name of Francis I. In his reign the Seven Years' War was concluded by the treaty of Hubertsburg in 1763. Francis was succeeded in 1765 by his son Joseph II., who distinguished himself by the numerous reforms which he introduced into his dominions, and particularly by his act of toleration to all the religious persuasions, proclaimed in 1781. The short reign of Leopold II. (1790-92) is marked by the treaty of Pilnitz, which he concluded in 1791 with the king of Prussia against the French. Leopold was succeeded in 1792 by his son, Francis II., who, after the formation of the Rhenish Confederation, having resigned the title of emperor of Germany, took that of emperor of Austria.

It may be useful to give here an outline of the Capitulation, or Constitution of the German Empire as it existed prior to this Confederation, or rather before the French Revolution.

The states of the Germanic empire consisted of the following members, divided into three colleges, or chambers:—

I. The Electoral College, which consisted of the Ecclesiastical Electors; the archbishop of Mainz, arch-chancellor of the empire for Germany, the archbishop of Treves, arch-chancellor of the empire for Gallia and the kingdom of Arles (a purely titular office); and the archbishop of Cologne, arch-chancellor for Italy (also a titular office).

II. The Secular Electors were—the king of Bohemia, arch-cup-bearer of the empire; the elector of Bavaria, arch-carver of the empire; the elector of Saxony, arch-marshal of the empire; the elector of Brandenburg, arch-chamberlain of the empire; the elector palatine of the Rhine, who had the title of the arch-treasurer of the empire: this electorate became united with that of Bavaria by the accession of the elector to the throne of the last-named principality in 1777; and the elector of Brunswick-Lüneburg, or Hanover, created by the emperor Leopold I. in 1692, who received in 1706 the title of arch-treasurer.

The Second College consisted of the princes of the empire, who were in rank next to the electors: they had each a vote in the diet of the empire and were divided into Spiritual and Temporal princes.

The Spiritual princes of the empire who had a vote in the diet were:—the archbishop of Salzburg, and formerly the archbishop of Besançon; the grand-master of the German order; the bishops of Bamberg, Würzburg, Worms, Eichstædt, Speyer, Straßburg, Constance, Augsburg, Hildesheim, Paderborn, Freysingen Passau, Ratisbon, Trent, Brixen, Basel, Münster, Osnabrück, Liege, Chur, Fulda, Lubeck; the princely (gefürstete) abbot of Kempten; the princely prebendaries of Berchtolsgaden and Weissenburg; the princely abbots of Prüm, Stablo, and Cervey.

The Temporal princes were:—the archduke of Austria; the dukes of Burgundy, Magdeburg; the counts palatine of Lautern, Simmern, and Neuburg; of Deuxponts (Zweibrücken), of Veldenz, and Lautercken; the dukes of Bremen, of Saxe-Weimar, Eisenach-Gotha, Altenburg, Coburg; the margraves of Brandenburg-Culmbach, and of Brandenburg-Onolzbach; the dukes of Brunswick, Zell, Grubenhagen, Calenberg, and Wolfenbüttel; the prince of Halberstadt; the dukes of Upper and Lower Pomerania; of Verden, Mecklenburg-Schwerin, Mecklenburg-Gustrow (afterwards Strelitz); of Württemberg; the landgraves of Hesse-Cassel and Hesse-Darmstadt; the margraves of Baden-Baden, Baden-Durlach, and Baden-Hochberg; the dukes of Holstein, Gottorp, and Saxe-Lauenburg; the prince of Minden; the landgrave of Leuchtenberg; the prince of Anhalt; the princely count of Henneberg; the princes of Schwerin, Kamin, Ratzeburg, and Hersfeldt; the princely count of Montbeliard. The princes enumerated belonged to the old body; the following who were elevated to their dignities after the time of the emperor Ferdinand II., were called the new:—the duke of Aremberg; the princes of Hohenzollern, Salm, Lobkowitz, Dietrichstein, Nassau-Hadamar, Nassau-Dillenburg, Auerberg, East Friesland, Schwarzenberg, Lichtenstein, Thurn-Taxis, and Schwarzburg. Many of these principalities were in the possession of one individual, who had consequently several votes, the votes being attached to the states and not to individuals.

The prelates, abbots, and abbesses of the empire were divided into two benches, the Suabian and the Rhenish, of which each had one vote. The counts and nobles of the empire were divided into four benches; of Suabia, Franconia, Westphalia and of Wetterau, each having one vote. They belonged to the second college.

The free imperial cities formed a college at the diet divided into two benches, the Rhenish with 14 cities, and the Suabian with 37. Each town had a vote.

The above-mentioned three colleges formed the diet of the empire, whose ordinary meetings were formerly summoned by the emperors twice a year, in addition to extraordinary meetings. But from the year 1663 the diet sat at Ratisbon. Every college voted separately; and when their respective decisions on the subject under discussion agreed the matter was presented for the ratification of the emperor; after which it became law, and was called 'conclusum imperii.' The emperor could refuse his ratification, but could not modify the decisions of the diet.

The diet had the right of enacting, abolishing, and interpreting laws, of declaring war, concluding peace, contracting alliances, receiving foreign ambassadors, &c. A declaration of war was decided, on an imperial proposition, by a majority of votes; and when it was decided even those states that had voted against it were obliged to furnish their contingents. The diet also imposed taxes for the general expenses of the empire.

There were two tribunals for the decision of points in dispute between the members of the empire—the Aulic Council of the empire, which had its seat always at the residence of the emperor; and the Cameral Tribunal of the empire (Camerargericht), which sat at Wetzlar. They were composed of members delegated by the different states of the empire, and an imperial deputy presided.

The emperor was elected only by the electors, who could do it either personally or by deputies. The place of election was Frankfurt-on-the-Main, where the coronation also took place, although the golden bull of Charles IV. declared that the emperor should be elected at Frankfurt, but crowned at Aix-la-Chapelle. All strangers, even the princes of the empire and foreign ambassadors, were obliged to leave the town on the day of the election, which took place in a chapel of St. Bartholemew's church. Mainz was the teller; and after having collected the votes gave his own to Saxony. The emperor, immediately after the election, swore to the constitution, or, as it was legally termed, capitulation. He could do it either personally or by deputy.

The immediate nobility of the empire, who acknowledged no other sovereign than the emperor himself, and who, as we have mentioned, had their collective votes in the diets, were also judged by the two above-mentioned courts of justice.

The Confederation of the Rhine was established by an act, signed at Paris on the 12th of July 1806, by the various electors of the empire. The French emperor declared himself Protector of the Confederation. By the establishment of this confederation several princes received new and higher titles; many towns and principalities lost their political existence; and several petty sovereign princes were by the same act mediatised, or deprived of their sovereign rights. The events of 1813 however put an end to the Confederation of the Rhine; and the Congress of Vienna established by an act, June 8, 1815, the present Germanic Confederation, composed of all the states of Germany. The central point and the organ of the Confederation is the Federative Diet, which sits at Frankfurt-on-the-Main. It exercises its authority in a double form: 1st, as a general assembly, called Plenum; and 2nd, as a minor council, or the Federative government. The Plenum meets only whenever an organic change is to be introduced, or any affair relating to all the confederation is to be decided. The plenum contains 66 votes, of which Austria and the five German kingdoms have each 4 votes, and the other states in proportion to their importance, 3, 2, or 1 vote each. The Federative government is composed of 17 votes, out of which 11 principal states have each a single vote, and the remaining 27 only 6 joint votes. Austria presides in both the assemblies, and decides in case of equality. The Federative government has the initiative, and deliberates on the projects which are presented to the Plenum, where they are not debated, but simply decided by a majority of ayes or noes. It executes the enactments of the Plenum, and despatches the current business of the Confederation. It decides by a simple majority, and seven votes form a quorum. The meetings of the Federative Diet are either those wherein preparatory debates take place, but no protocols are made, or those wherein affairs are finally decided.

The object of the Germanic Confederation and the duties of the Federative Diet are—the maintenance of external security or mutual defence from a common enemy, and the preservation of internal peace among the Federative states, which have no right to declare war on each other, but must submit their differences to the decision of the diet. The maintenance of internal security comprehends not only the prevention of conflicts among the Federative states, but also the suppression of any attempt by the subjects of any of the states to subvert the existing order of things. A movement, which had for its original object a new and more thorough union of the German people, excited intense and general interest in Germany during 1848 and the following year or two. It was first formally embodied in a proclamation issued March 22, 1848, by the King of Prussia, under the stimulus of the violent revolutionary excitement then prevalent throughout Germany. In this proclamation he urged the German princes and people to the abandonment of their local names and independencies, and to a hearty and cordial union under one guiding hand; while, by way of showing his sincerity and commencing the work, he offered

himself as that guide, and "fused and dissolved" the name of Prussia into that of Germany. A congress of deputies was soon after constituted at Frankfurt to make arrangements for convoking a National Constitutional Assembly. This assembly met at Frankfurt (June 28th), and appointed a provisional central power, to be presided over by an imperial regent, or administrator (Reichsverweser), elected by the assembly. They then proceeded to elect the Archduke Johann of Austria regent of the German empire, and he at once accepted the office. The assembly next proceeded to discuss various measures for the government of the empire, but little real progress was made. The partisans of Austria and Prussia were nearly balanced, and the main business soon resolved itself into a struggle for the ascendancy of one or other of these powers. At length by one vote Austria was excluded from the German empire, and by another (passed March 28, 1849) the King of Prussia was elected hereditary Emperor of the Germans, but nearly half of the members refrained from taking part in this election; while Austria, by a circular note (dated 3rd of April) protested against this as well as all future proceedings of the Frankfurt National Assembly, and refused any longer to recognise its existence; and eventually the King of Prussia declined the Imperial crown and rejected the Frankfurt constitution. Other protests and withdrawals quickly followed, and the assembly, its members much diminished, and its resolutions utterly disregarded, fell into anarchy, impotence, and dissolution. Austria and Prussia entered (Sept. 30, 1849) into a separate treaty for the formation of a new, *ad interim*, central power, and the Archduke Johann, in consequence, resigned into the hands of the plenipotentiaries his office as regent of the empire. Meetings of the German princes, &c., were subsequently called, and various proceedings taken, but matters have eventually fallen back pretty much into the condition in which they were at the beginning of 1848. The diet of the German Confederation meets as of old, and discusses the state of Germany, but its resolutions do not at the present time appear to carry much weight. [See GERMANIC CONFEDERATION in Supp.]

German Language and Literature.—The German or Teutonic language may be divided into two great branches, which are subdivided into several dialects: the High German, or the language of Southern Germany; and the Low German, or Saxon, which is used in the northern part of that country.

The High German was formerly divided into two dialects, the Francic and the Allemannic. The Francic was the idiom of the Franks, and that of the French court till the reign of Charles the Bald, when it was replaced by the French. The principal monuments of this dialect are, the fragments of a treatise of Isidore, 'De Nativitate Christi,' which date from the beginning of the 8th century, and some fragments of the poem of Hildebrand and Hadubrand, which belong to the end of the same century, as well as the oath of Charles the Bald. It was used at the court of the German emperors till the accession of the Hohenstauffen. The Allemannic dialect prevailed in the south-western part of Germany, including a great part of Switzerland. Its most ancient monuments are—a translation of the 'Rules of St. Benedict,' made about the beginning of the 8th century; the poetical 'Paraphrase of the Gospels,' by Otffried, and a translation of Psalms, by a monk called Noker, made about the beginning of the 10th century. Both the above-mentioned dialects seem to have disappeared in the middle ages, and to have been replaced by the Suabian dialect, which became the language of the court under the Hohenstauffen dynasty, and in which the Minnesingers composed their poems.

The modern German, also called High German (Hoch Deutsch) may be considered as chiefly derived from the old High German, or southern dialect. Its universal usage as the literary language of all Germany dates from Luther's translation of the Bible, by which circumstance it acquired a decided superiority over all the dialects of Germany.

The written language of modern Germany must however be distinguished from that which is only spoken. The spoken language may be divided into the following dialects:—1, the Swiss, which is spoken in German Switzerland, and which itself may be subdivided into several dialects, as for instance that of Berne and Argau, that of the valley of Hasli, of Freiburg, of the Grisons, and of Appenzel; 2, the Rhenish dialect, which is likewise subdivided into many dialects, as that of Alsatia, of Suabia, &c.; 3, the Danubian, subdivided into the Bavarian, Austrian, and Tyrolese dialects.

The Saxon, that is, the language of Northern or Lower Germany, may be divided into the following dialects:—1, the old Low German (Alt Nieder Deutsch), called also the old Saxon, from the nation that spoke it. This language, which is now entirely extinct, was spoken at an early period, and during a part of the middle ages in all the north of Germany as well as in the Low Countries, except the parts inhabited by the Frisians and the Angles. The works written in this language were composed from the 8th to the 11th century; the principal of them is the 'Evangelien Harmony,' which seems to date from the beginning of the 9th century. 2, the Low German of the middle ages, which was in use from the 11th to the 16th century, contains many works; but its literature is very inferior to that of the Suabian, or the High German of the middle ages. The chief productions in that dialect are—a 'Vocabulary,' composed in the 12th century; a translation of the Bible, made at the beginning of the 13th century; and the well-known comic productions, 'Reineke der Fuchs' and 'Til

Eulenspiegel.' 3, the modern Low German, which is spoken over almost all Northern Germany, but has ceased to be a written language. Its literature is very poor, and contains, besides popular songs, only some grammars, vocabularies, and a few chronicles, of which the principal is that of Livonia by Russow. This language, which is subdivided into many dialects, is distinguished by the softness of its sounds, and has fewer gutturals and accumulated hissing consonants than the High German dialects. The Low German is divided into three principal dialects: 1, the Saxon proper, or the idiom of Lower Saxony, which is subdivided into the dialects of Hamburg, Holstein, Schleswig, Hanover, &c.; 2, the Oriental Saxon, which is also subdivided into the idioms of Higher Saxony, Brandenburg, Pomerania; 3, the Occidental Saxon, or Westphalian, which is also subdivided into several dialects.

The Frisian language is a branch of the German tongue. It may be divided into three dialects: 1, the Batavo-Frisian, which very much resembles the Anglo-Saxon, and which was formerly spoken in many parts of the north of Holland, but is now preserved only in a few places about the towns of Moleweren and Hindelopen in West Friesland; 2, the Westphalian Frisian, which was spoken in many parts of Westphalia, but is now entirely extinct and replaced by the Saxon; 3, the Northern Frisian, which still exists on the island of Heligoland as well as in some parts of Schleswig, where Frisian settlers established themselves in the middle ages. The Frisian literature is very poor.

The Anglo-Saxon; the Dutch and Flemish; and the Scandinavian languages are also branches of the German tongue.

Those who wish to study the history of the Teutonic languages will find ample information in the learned works of the two brothers Grimm, which have been republished several times in Germany.

The most ancient monument of German literature extant is the translation of the Bible into the Gothic language by Bishop Ulfilas. It was made in the second part of the 4th century, for the use of the Gothic tribe of the Thervingians, who, having settled on the banks of the Danube in the ancient Roman province of Mœsia, were generally called Mœso-Goths. Ulfilas on that occasion introduced a new alphabet by modifying the old Runic characters, which were in general use amongst the Teutonic nations. The library of Upsal in Sweden possesses a remarkable fragment of this translation, well known under the name of the 'Codex Argenteus,' being written in silver letters on a purple-coloured parchment. It contains the four gospels, and is supposed to have been written in the 5th or at least in the beginning of the 6th century, among the Goths of Italy. Some fragments of St. Paul's Epistles to the Romans were discovered on a palimpsest in the library of Wolfenbüttel; and several parts of the books of Esdras and Nehemiah, as well as several epistles of St. Paul, preserved in the same manner, were discovered in the library of Milan by Angelo Mai.

The reign of Charlemagne may be considered as the commencement of the German literature, although there are some fragments of translations from ecclesiastical books which were probably made prior to that epoch. Charlemagne, who was very anxious to promote the cultivation of his native language, introduced German names of months. He ordered the scattered monuments of the Teutonic language, particularly laws or customs, and songs to be collected. He also ordered the ministers of religion to preach in German, and directed the translation of several things from the Latin for the information of the common people. The two most ancient German poems are, the 'Lay of Hildebrand and Hadubrand,' and the 'Prayer of Weizenbrun,' which have been published by Grimm, and which belong to the 8th century.

After the reign of Charlemagne, the Christian religion being established throughout all Germany, many fragments of the Bible and some ecclesiastical writings were paraphrased from the Latin into the vulgar tongue. The separation of the Germanic empire from the French, which took place in the middle of the 9th century, acted beneficially on the national language and literature. The earliest known German poem of that time is a song written in commemoration of the victory which Louis III. of France gained over the Normans in 881. Another curious monument of the literature of that time is the laudatory poem on Saint Anno, archbishop of Cologne and tutor of the emperor Henry IV. But the most remarkable production is the metrical paraphrase of the Gospels by Otffried, a Benedictine monk, made about 870, which shows an uncommon poetical genius in the author, who had to contend with all the difficulties presented by a rude and uncultivated language. To this period belong also the chroniclers Wittikind, Dithmar, Lambert, and Bruno, who all wrote in Latin.

The reign of the emperors of the Suabian family of Hohenstauffen is the golden age of the romantic or chivalrous poetry of Germany. This poetry being written in the Suabian dialect, which came into fashion through the influence of the reigning family, is generally called the Suabian. The poets of that period are known under the name of Minnesingers, from the old German word 'minne,' which signifies 'love.' They may be compared in many respects with the Troubadours of Provence, and were generally knights and nobles, whose life was divided between the occupations of love, war, and devotion, which inspired their poetical effusions with tender, noble, and pious feelings. They lived chiefly

at the courts of German princes, who were fond of poetry, and many of whom were poets themselves. Love and the praise of ladies were the principal themes of their compositions, in which however were intermingled the description of chivalrous exploits generally performed either in defence of religion or for the honour of the fair. The versification of these poems is exceedingly varied, and they were generally set to music and sung by their authors. The most ancient Minnesinger whose works have reached us is Henry von Veldek; next to him the most celebrated are Walter von der Vogelweyde, Reimar the Old, Reimar von Zweter, Ulrich von Lichtenstein, Wolfram von Eshenbach, Hartman von der Aue, and some others, who all lived either at the end of the 12th or at the beginning of the 13th century. The last of these poets who deserve notice are John of Würzburg and John Hadloup, who both lived at the end of the 13th century.

The most remarkable production of that time is the celebrated 'Nibelungen Lied,' which is quite different from the poems of the Minnesingers, and whose origin is by many ascribed to a much more remote period. It is a kind of epic poem, of which the chief heroes are Attila, or Etzel, king of the Huns, and Dietrich, or Theodoric, of Berne, king of the Goths. There are several minor poems of the same kind and on similar subjects, which were collected and published for the first time in 1490 under the title of 'Heldenbuch,' or heroic book. This collection has been reprinted several times in the old language, and also translated into modern German. The decline of chivalry put an end to the Minnesingers, and the art of poetry descended from the nobles to the burghers of cities: welfare and civilisation being secured by their fortified towns, gave them a decided advantage over the nobles, who abandoned themselves to the greatest excesses, and lived in a most lawless state, being constantly engaged in mutual feuds and depredations during the troubles which agitated the German empire in the latter part of the 13th century, after the death of Frederick II.

The cultivation of poetry by the burghers became a kind of trade, and the poets, who formed a corporation like other artisans and tradesmen, were called Meistersingers, or master singers. They had their rules like other corporations, and the members were obliged to submit to an apprenticeship. Their poetry was of a different kind from that of the Minnesingers. The exploits of chivalry and the enthusiastic love or rather worship of ladies were no longer the exclusive themes of their compositions, although they produced some metrical chronicles. The general subjects of the poems of this period are of a moral and satirical character, but there are also some of the didactic kind. The most celebrated productions of this school are the well-known poems, 'Reineke der Fuchs,' translated into English and published by Caxton; and the 'Narrenschiff,' which has also been translated (not from the German original, but from a Latin translation entitled 'Stultifera Navis') into English under the title of the 'Shippe of Fools,' by Alexander Barclay.

There are many other productions of a similar kind, all characterized by an overflowing comic and satirical humour. The best specimen of this national humour is the celebrated production called 'Eulenspiegel,' translated into English under the title of 'Owl-glass,' London, 1709.

To this epoch belongs the commencement of the original dramatic literature of Germany, which is due to the Meistersingers' school of Nürnberg. Before that period the Germans were only acquainted with the so-called mysteries or dramatised biblical stories, written and performed for the most part in Latin. About the middle of the 15th century, Hans Volz, a barber by profession, Rosenblut, and some others, introduced a kind of farce called 'Carnival Plays.' They were all excelled by Hans Sachs, a shoemaker by profession, who lived from 1494 to 1576: his works are full of wit and invention, and next to the Spaniard Lope de Vega, he is the most fertile of dramatic writers.

Many historical and allegorical poems were written during the 15th century, and several ballads and other metrical productions were rendered into prose, which may be considered as the commencement of the novel in Germany. Amongst the historical works which belong to this period we may mention the chronicles of Bishop Otho, of Freisingen, and his 'History of Frederick I.:' the works of Henry of Erfurt, who died in 1370; those of Gobelinus, who died about 1420; and some others, all written in Latin. The 'Fürstenbuch,' or 'Book of Princes,' by John Euenkel, 1250; the 'Metrical Chronicle' of Ottokor, of Horneck, born about 1264; the 'Chronicles' of James von Koenigshofen, of John Rothe, of John Thurmayr (Aventinus); the 'Pomerian Chronicle,' by Kantzow, and that of Lubeck, by Detmar, were written in German. The 'Chronicle of the World,' by Sebastian Frank, is the first universal history in the German language. Among the scholastic philosophers several Germans distinguished themselves from the beginning of the 13th century; we may mention as one of the most celebrated Albert Groaz, or Grot, better known under the name of Albertus Magnus, who distinguished himself also by a knowledge of natural philosophy superior to that of his contemporaries, and who in many respects may be compared with Roger Bacon. Many collections of laws were also made during this period, of which the most celebrated are the 'Sachsenspiegel' and the 'Schwabenspiegel,' that is, the Saxon and the Swabian Mirror, both compiled in the 13th century. The

invention of the art of printing, of which the Germans are so justly proud, gave a new impulse to the national literature, and prepared the way for the Reformation. From this period dates the rise of the modern literature of Germany, rendered illustrious in all branches by a numerous array of writers of the highest eminence, in whose biographies, in another section of this English Cyclopædia, the further progress of German literature will be treated.

GERONA. [CATALUÑA.]

GERS, a department in the south of France, situated between 43° 17' and 44° 4' N. lat., 1° 11' E. and 0° 16' W. long., is bounded N. by the department of Lot-et-Garonne, N.E. by that of Tarn-et-Garonne, E. and S.E. by Haute-Garonne, S. by Hautes-Pyrénées, and W. by Basses-Pyrénées and Landes. The form of the department is very compact; its greatest length from east to west is 73 miles, from north to south 53 miles: the area is 2425 square miles, and the population in 1851 was 307,479, which gives 126.79 to the square mile, being 47.79 below the average population per square mile for the whole of France. According to the census of 1841 the population of the department amounted to 311,447. The department is formed out of the old districts of Condomois and Armagnac, and a small part of Comminges—territories formerly comprised in Gascony and Guienne.

Surface, Hydrography, and Communications.—The department is hilly; the lower slopes of the Pyrenees, running generally from south to north, cover the greater part of the surface. The most important of these ridges runs north by west, and separates the basin of the Garonne from that of the Adour. Thirty-eight watercourses mark out as many valleys of great beauty and fertility, opening in width from a few yards in their southern, to three or four miles in the northern extremities, and separated from each other by the ridges of hills before mentioned. The rivers Save, Gimone, Arratz, Gers, Baïse, and Lousse flow northward through the department on their way to join the Garonne. The Gers from which the department is named rises in the heathy moor of Pinas, in the arrondissement of Bagnères, and department of Hautes-Pyrénées. It passes Mauldon, Auch, and Lectoure, and enters the Garonne on the left bank about five miles above the city of Agen, after a course of above 90 miles: no part of its course is available for navigation or floatage except during the spring floods, when timber is sent down it to the Garonne. The Midou and the Douze flow north-westward, and unite at Mont-de-Marsan in the department of Landes to form the Midouze, a feeder of the Adour. The Arros joins the Adour in this department a little below Plaisance. The Adour itself crosses the south-western angle of the department, receiving several mountain streams on its left bank. All these rivers are subject to inundations at the time of the melting of the snows on the Pyrenees; none of them is navigable within this department. The gradual rise of the country from north to south is seen by the height of the hills inclosing the valley of the Gers. On the confines of Lot-et-Garonne these hills are 318 feet, at Auch 721 feet, and at Mont d'Astarac in the south of the department 1180 feet above the sea-level. The department is traversed by 8 imperial, 19 departmental, and 46 pariah roads.

The climate is very changeable. From October to May rain, snow, and frost alternate, the cold being most intense in January; from May to the end of June the weather is warmer, and thunder and hailstorms are frequent; July and August are very hot; September is the most agreeable month, but even then the mornings and evenings are cold. The prevailing winds blow from east and west.

The department contains 1,551,954 acres. Of this surface 824,336 acres are arable: 150,406 are natural pasture; 150,075 are covered with woods and forests; 216,897 are occupied with vineyards; 49,999 are covered with ponds, rivers and canals of irrigation; 88,347 are heath and moorland. The soil consists of a stiff loam resting on thick layers of clay of great depth, which are separated in some instances by thin strata of sand or tufa. The nucleus of the hills is argillaceous limestone. Breadstuffs are grown in quantity more than enough for the consumption; wheat, maize, oats, and rye are the principal grain crops; peas and beans, cabbage of various kinds, garlic, and onions are cultivated extensively. Horned cattle, sheep of inferior breed, mules for the Spanish market, swine, game, and poultry are abundant. Geese and ducks especially are very numerous, and of large size; their wings and legs are salted for export. Marble, building-stone, gypsum, marl, potters' clay, and a fusible spar used in glass and china works are found. Some mineral springs, but no metals, are found in the department.

Of manufacturing industry there is little. Coarse woollens, bricks, glass, pottery, and other articles of common necessity are made for home use. The quantity of leather tanned is in excess of the consumption, and some of it is exported. The other exports are brandy, wine, corn, flour, wool, poultry, and cattle. The number of wind-mills and water-mills exceeds 1000.

The quantity of wine produced in this department yearly is about 25,000,000 gallons, about one-fourth of which is used for home consumption, and the greater part of the remainder is distilled into brandy, known by the name of Armagnac, from the former name of the district. In quantity of alcohol, the Armagnac brandies bear to the Cognac the ratio of 19.5 to 22. But for mildness and delicacy of

flavour, and for a peculiarly agreeable aroma, both of which qualities improve with age, the Armagnac is a superior spirit.

The department is divided into five arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1861.
1. Auch	6	85	61,925
2. Lectoure	5	73	51,135
3. Mirande	8	152	83,113
4. Condom	6	87	69,901
5. Lombes	4	71	41,415
Total	29	467	307,479

1. In the first arrondissement the chief town is AUCH, which is also the capital of the department, and is described under its proper head. The more important of the other towns are here given; the population in each case being that of the commune. *Gimont*, E. of Auch on the Gimone, has a college, a good trade in agricultural produce, and 2816 inhabitants; the parish church and the market-house, which is built over the main street, are the most remarkable structures. *Jegun* is not far from the right bank of the Baise, to the north-west of Auch, and has a population of 2076. *Saramon*, a small place on the left bank of the Gimone, has 1276 inhabitants. *Vic-Fezensac*, which stands on the left bank of the Losse, is a well-built town with 3365 inhabitants, who carry on a brisk trade in brandy, wine, corn, hoops, &c.

2. In the second arrondissement the chief town, *Lectoure*, situated on the platform of an isolated rock not far from the right bank of the Gers, has a tribunal of first instance, a college, and 6030 inhabitants (in the commune), who manufacture coarse woollens, serge, and leather, and trade in corn, cattle, wine, brandy, hides, &c. It is an ugly and ill-built town; the principal buildings are—an hospital, which occupies the site of the old castle; a large and handsome gothic church, built by the English; and the former episcopal palace, which, purchased by Marshal Lannes, a native of the town, and presented to the corporation by his widow, now serves for the residence of the mayor, and for the courts of justice. A statue of the marshal in white marble has been recently erected in front of this building. *Lectoure* is surrounded by several fine promenades: from that of the Bastion the southward view embraces a magnificent scene, with the main ridge of the Pyrenees in the background. *Lectoure* is an ancient place. The castle was for a long period the residence of the counts of Armagnac, one of whom, Jean V., by his incestuous marriage with his sister Isabelle, and perhaps still more by his supposed leaning towards the English, incurred the displeasure of Charles VII., who seized *Lectoure*, drove the count to take refuge in Aragon, and confiscated his property (1455). He was restored to his estates by Louis XI. in 1461, against whom however he subsequently revolted. *Lectoure* was again taken in 1473 after a capitulation, the terms of which however were not observed; the count was murdered, the inhabitants of the town massacred, and the countess Jeanne de Foix, his legitimate wife, sent to the castle of Burzet and poisoned. The town of *Lectoure* had hardly recovered from this terrible disaster when the opposing parties in the so called religious wars of France frequently took and plundered it. The Duke of Montmorenci was confined in the castle of *Lectoure* previous to his trial and decapitation at Toulouse in 1632. *Fleurance*, a well-built town with 3409 inhabitants, stands 6 miles S. from *Lectoure*, on the left bank of the Gers. *Mauvesin*, on the Arratz, has a population of 2674, and the remains of an ancient castle which belonged to the counts of Fezensac.

3. In the third arrondissement the chief town, *Mirande*, stands upon the Baise, and has a tribunal of first instance and 3410 inhabitants. It is regularly and well built, and surrounded with walls pierced by four gates, from which the principal streets lead to a square in the centre of the town. *Mirande* was formerly the chief town of the county of Astarac, which now forms the arrondissement of Mirande.

4. In the fourth arrondissement the chief town is *Condom*, which is situated on the Baise, 32 miles N.W. from Auch, in 43° 57' 81" N. lat., 0° 22' 27" E. long., and has a tribunal of first instance, an agricultural society, a college, and 7027 inhabitants in the commune. The town seems to have existed in the 9th century; it was the capital of Condomois, and was governed by a seneschal. The fortifications were demolished in 1229, but were afterwards repaired. The town gave title to a bishop from 1817 till the French revolution. In 1569 *Condom* suffered much from the Calvinists. The town is built on a hill above the Baise, the highest part of which is an open square, with the parish church, a handsome gothic edifice, on one side of it. Like most old towns, *Condom* is an ill-built place, but it is improving every year. The ramparts are planted and laid out as promenades, and in the environs are many pretty country houses and numerous vineyards. The chief trade is in wheat and flour ground in the numerous corn-mills on the Baise; there is also a considerable commerce in wine and brandy, and also in leather, woollen-yarn, corks, paper, tiles, and porcelain, which are among the industrial products of the town. *Cazandon*, in the north-west of the department, has brandy distilleries and 2657 inhabitants. *Eauze*, the ancient *Elusa*, and the metropolitan see of the Roman division *Novempopulana*, lies N.W. of *Condom*, and

has 8340 inhabitants. The ancient city was sacked by the Goths in the 5th century, again by the Saracens in 732, and finally in the 9th century by the Northmen, who massacred the population. At this last period the seat of the archbishop was transferred to Auch. *Montreuil*, W. of *Condom*, has manufactures of woollen-yarn, tiles, and brandy, and a population of 2727. *Nogaro*, prettily situated near the Midou, and once the residence of the counts of Armagnac, has 2187 inhabitants.

5. In the fifth arrondissement the chief town, *Lombes*, situated in a plain of great fertility on the left bank of the Save, has a tribunal of first instance and 1677 inhabitants. It was formerly the capital of Bas-Comminges, and the seat of a bishop from 1817 till the first French revolution, when the see was suppressed. *Isle-en-Jourdain*, a neat well-built town in a pretty situation on the right bank of the Save, has 4938 inhabitants, including the commune; it was formerly fortified, but in 1799, in consequence of a royalist insurrection, its castle and ramparts were razed to the ground.

The department forms the see of the Archbishop of Auch, is included in the jurisdiction of the High Court of Agen, and belongs to the 18th Military Division, of which Bayonne is head-quarters. The department returns 8 members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

GÉVAUDAN, LE, a district which formed a part of the old province of Languedoc, and was divided by the river Lot into Upper and Lower Gévaudan. It derived its name from the Gabali, its ancient inhabitants. It was bounded E. by the rivers Allier and Borne and the mountains of Lozère, which separated it from the districts of Vévey and Vivarais, which with Gévaudan form the country of Cévennes; S. by the diocese of Alais; W. by Rouergue; and N. by Auvergne. It now forms nearly the whole of the department of Lozère. Mende was the chief town of the Gévaudan, and is now the capital of the department.

GEX, a district on the eastern frontier of France, was ceded to France by Switzerland in 1601, and was included in the military government or province of Bourgogne. Under the empire it was comprehended in the department of Léman, but when at the peace of 1814 France lost the greater part of that department the district was included in the department of Ain. The county of Gex is mountainous, being traversed by the ridges of the Jura; it is bounded on the south-east by the Rhône, which is not here navigable. [Ain.]

GEYSERS. [ICELAND.]

GHAUTS. [HINDUSTAN.]

GHEEL. [ANTWERP, Province of.]

GHENT (in Flemish *Gend*, in German *Gent*, in French *Gand*), a city in Belgium, the capital of East Flanders, is situated in 51° 3' 12" N. lat., 3° 43' 51" E. long., at the intersection of the railroads that connect Malines with Ostende and Lille with Antwerp, from which towns it is distant 33, 38, 42, and 32 miles respectively. The population in 1850 amounted to 103,729. The city is built at the confluence of the Schelde and the Lys, and is intersected by a great number of navigable canals which communicate with those rivers, and thus form 26 islands connected with each other by above 80 bridges. The Sas-van-Ghent Canal, which runs northward from Ghent into Zealand (where it joins the Neuzen Canal) connects Ghent with the West Schelde at Terneuzen, and allows sea-going vessels, drawing 18 feet water, to enter the city, which thus enjoys all the advantages of a sea-port. It was opened in December 1823. At Sas-van-Ghent, about 14 miles to the northward of Ghent, are sluices, by means of which the whole country hereabouts can be laid under water.

The origin of Ghent is ascribed by tradition to the Vandals, who in their irruption into Belgium in the 5th century built a fort, named from them Vanda, which name was afterwards changed to Ganda, or Gandavum Castrum. This tradition receives some confirmation from the existence of a fort on the left bank of the Schelde within the city, still bearing the name of Wandelaers Kasteel (Castle of the Vandals). About A.D. 629 King Dagobert sent St. Amand to Ghent to convert its inhabitants from paganism, and he (the saint) founded two monasteries to the honour of St. Peter, one on a rising ground called St. Peter's Mount, the other near the Antwerp Gate. Many of the inhabitants, who were converted to Christianity by the preaching of St. Amand, bequeathed their wealth to the second of these monasteries. One of these benefactors gave his name to the abbey of St. Bavon, some parts of the ruins of which buildings are still visible: this quarter of the city for some time bore the name of St. Bavon.

In 868 Baldwin Iron-Arm, the first count of Flanders, built a fortress at Ghent, which was called Count's Castle, and Baldwin and his successors encouraged weavers and persons skilled in the woollen and linen manufactures to settle in Flanders. About the end of the 12th century the Flemish nobles, in order to equip themselves for the Crusades, sold their domains to their vassals, who by that means were enfranchised. At the same time the inhabitants of the Flemish towns, already become wealthy by trade and manufactures, were enabled to purchase great commercial and political privileges, which laid the foundation for the extraordinary prosperity and freedom enjoyed by these communities during the middle ages. Accordingly the men of Ghent proceeded to establish a form of municipal government; they

elected sheriffs, adopted a public seal, and established a court of justice. They joined the association of the Hanse Towns, and obtained from the emperor Frederick I. the free navigation of the Rhine. In 1180 Ghent, which was then a populous city, became the capital of Flanders, and obtained a charter from Count Baldwin of Hainault, with great privileges.

By these means the city increased so rapidly, that towards the end of the 13th century it exceeded in extent and population the capital of France. At the beginning of the 15th century the number of its citizens employed in the manufacture of woollens, it is said, amounted to 40,000, and in times of war furnished from their number 18,000 armed men. With wealth and freedom the weavers and artisans of Ghent waxed turbulent, and led on first by Jacques van Artevelde and afterwards by his son Philip, they gave many a proof of their sturdy valour and the extent of their resources in their frequent insurrections against the counts of Flanders, and in the subsequent century against the dukes of Burgundy. Temporary successes however were followed by humiliations, confiscations, and loss of privileges; and to this spirit of dissension and revolt, and to their intermeddling in the political quarrels of the times, may be ascribed the ultimate decline of Ghent and the other great Flemish towns. Charles V. was born at Ghent in February 1500: the site of the palace in which he was born is now occupied by the new street called Cour des Princes. During his reign the city contained 35,000 houses, and a population of 175,000. In 1537 Maria, sister of Charles V., who then administered the government of the Netherlands, demanded from Flanders an extraordinary subsidy of 1,200,000 florins of gold, one-third part of which was to be paid by the citizens of Ghent, who, having already advanced considerable sums to the emperor towards the expenses of the war with France, refused to comply with this fresh demand, and made a show of armed resistance, but were speedily reduced to submission; and the emperor, to punish the citizens, took away from them all their privileges, besides confiscating the property of such as had been actively concerned in the revolt, several of whom were condemned to death. On this occasion a citadel was erected for the purpose of holding the citizens in check.

When the confederation was formed for expelling the Spaniards from the Belgian provinces, a congress was held in Ghent; and a document known in history as 'the Pacification of Ghent' was publicly signed by the confederates met together in the town-hall 8th November 1576. On the 11th of the same month the Spanish garrison shut up in the citadel capitulated to the citizens. This citadel was afterwards destroyed; but some portions of it may still be seen near the railway station to the east of the town.

The capitulation signed 17th September 1584 again placed Ghent under the dominion of Spain; the citadel was rebuilt, and so many of the inhabitants quitted the city that one-third of the houses were empty. In 1598 the Belgian provinces were severed from the crown of Spain in favour of Isabella, daughter of Philip II., who married Albert, son of the emperor of Germany. Ghent was taken by Louis XIV. in 1678, after a siege of six days. The city was occupied by Marlborough in 1706. In 1745 Louis XV. having entered Flanders with Marshal Saxe at the head of 100,000 men, took Ghent by surprise, but the country soon again came into possession of Austria. In 1792 the Netherlands fell under the power of France, and Ghent was constituted the capital of the department of the Schelde, and so continued till the downfall of Napoleon in 1814, when Flanders became part of the kingdom of the Netherlands. In 1814 the treaty of peace was signed here between Great Britain and the United States of North America, which put an end to the war between the two countries. On the return of Napoleon from Elba in 1815, Louis XVIII. took refuge in Ghent. In consequence of the revolution of 1830 Ghent, with the rest of Flanders, was comprised in the new kingdom of Belgium.

Ghent is a handsome well-built city. It contains numerous squares, wide handsome streets, a large number of turret- or steeple-crowned churches, and many large and imposing public buildings. The tall, elegant, column-shaped chimneys which rise from above 60 cotton-mills, contribute their quota to the imposing appearance of the town, and indicate the existence of great industrial activity still within its walls. The houses in general are picturesque objects, their gable-ends rising like steps in every fantastic variety, and ornamented with scrolls and carving. The city is surrounded by walls about 8 miles in circuit and pierced by seven gate entrances, some of which date from the 14th century, and are interesting for their architecture; the Antwerp gate is the most admired.

There are several fine promenades in the interior of the city. The finest is on the bank of the Coupure Canal, which connects the river Lys with the Bruges Canal. It is planted with three rows of large trees, and is much frequented in spring and autumn. The Boulevards which surround the city are also much used as public walks. The Vrijdags Markt (Friday Market) is a large square space in which meetings of the citizens were formerly held, and where criminals are executed. In the centre of the square the citizens erected, in 1600, a column 50 feet high to the memory of Charles V. This column was surmounted by a statue of the emperor; it was restored in 1772, and taken down during the revolutionary troubles of 1793. In the Place St. Pharisilde, near the fish-market, stands an old turreted

gateway, which is a relic of the castle built here by Baudouin Bras-de-Fer, count of Flanders, in A.D. 868. The castle of which this relic formed a part was for some time (in 1838-9) the residence of Edward III. of England and his family; and here Queen Philippa gave birth to a son, who, from his birthplace, was called John of Gaunt. The site of the castle is now covered with mean buildings. The relic above mentioned is built into the walls of a cotton factory.

The cathedral church of St. Bavon (St. Baefs), a fine gothic edifice, was consecrated in 941. Its rebuilding was undertaken in 1228, but was not entirely finished until the beginning of the 16th century. It was formerly dedicated to St. John, and took the name of St. Bavon in 1540, when Charles V. caused the collegiate chapter of the abbey of St. Bavon to be removed to it; twenty years afterwards the church was constituted a cathedral. The tower is remarkable both for its elegance and its height, which is 271 feet. The high altar is adorned with a statue of St. Bavon, in his ducal dress, by Verbruggen. In front of it are four tall copper candlesticks, which belonged to Charles I., and still bear the arms of England. On each side of the choir are handsome monuments and statues of four bishops of Ghent. The twenty-four chapels in this cathedral contain some paintings of first-rate excellence. One of these pictures, a master-piece of Rubens, represents the reception of St. Bavon into the abbey of St. Amand, after having distributed his goods among the poor. The Adoration of the Spotless Lamb, the joint production of Hubert and John van Eyck, is perhaps the finest work of the early Flemish school; it contains above 300 heads, all finished with the most scrupulous minuteness. The beauty and grace of the countenance of the Blessed Virgin in this picture are only surpassed in the productions of Raffaele. This wonderful picture, which dates from 1432, is in the sixth chapel beyond the transept, on the right hand, as you go round the choir. The church of St. Michael, situated in the centre of the city, on the bank of the Lys, is built in a light and delicate style of architecture. It contains the only picture by Vandyck which is possessed by the city of Ghent; the subject is the Crucifixion, but the painting has been much injured by cleaning. The pulpit of carved mahogany, with a bas-relief of the Ascension, deserves notice. The parish church of St. James also contains several good paintings. There are many other churches within the city, several of them very ancient, and many among them contain paintings and sculptures of considerable merit. St. Nicholas's church is the oldest in Ghent. The only Protestant place of worship in Ghent is the English church on the Brabant Dam.

The University of Ghent, an institution founded by royal ordinance in 1816, stands on the banks of the Lys. The first stone of the building was laid in August 1819, and it was finished with great rapidity. The façade presents an octostyle portico of the Corinthian order, copied from the Pantheon in Rome. The building is large and commodious, and is well furnished with philosophical apparatus and specimens of natural history. The library contains about 60,000 volumes, besides numerous valuable manuscripts taken from suppressed abbeys and convents. This library is open to the public every day except Sunday. The number of students who attended the University in 1850 was 350. The Royal College of Ghent occupies the greater part of the ancient abbey of Baudeloo, a vast and very commodious building, in which several of the students, numbering from one to two hundred, as well as the professors, reside. The Royal Academy of drawing, painting, and architecture occupies the former Augustinian College. The students who avail themselves of the advantages offered by this institution are very numerous. The studies comprise drawing, geometry, arithmetic, perspective, and anatomy, as applied to sculpture and painting. The collection of statues in the academy is considered to be valuable. There is also an extensive gallery of paintings taken from the suppressed abbeys and convents in 1795.

The Beffroi, or Belfry Tower, which originally served as a watch-tower, and contained the tocsin-bell, dates from A.D. 1181. The gilt dragon on the top of it was brought from Bruges in 1382 as a trophy of the conquest of that town by the men of Ghent, under Philip van Artevelde. It was originally brought from Constantinople by the men of Bruges, who went on the first crusade with Count Baudouin of Flanders. The view from the top of this tower is very fine. Near the Beffroi is the town-hall, a striking building with two façades, one built in 1482, the other in 1620; the former in the florid gothic style; the latter, facing the butter-market, is in a mixed style, columns of three different orders appearing one above another. The Pacification of Ghent was signed in this building.

The Béguinage, a quarter inhabited by the Beguine nuns, deserves notice. It is of great extent, surrounded by a wall and ditch which inclose streets and squares. The sisters live in small communities in separate houses, the doors of which are inscribed with the names of saints; they are bound by no vow, and may return to the world if they please; they attend to the sick within their inclosure, and are constantly seen in the hospital. They wear black robes with white veils; and the whole sisterhood, numbering above 600, may be seen at the different services of the church.

Among other noticeable objects in Ghent may be named the new Casino, near the Coupure Canal; the Kauter, or Place d'Armes, which is planted with trees and surrounded with large buildings; the Maison

des Bateliers, the oldest house in Ghent, on the Quai aux Herbes, dating from 1513; the new theatre, built by the town at a cost of 100,000*l.*, in one corner of the Kauter, and containing a magnificent saloon, ball- and concert-rooms; the Palais de Justice (in the handsome Rue du Theatre), the lower part of which serves as an exchange, while the upper part is fitted up for the courts of justice; the modern citadel, finished in 1830, and built on Mont Blaudin, at the extremity of the elevation on which the western part of the city stands; the post office, in the Rue de l'Université; and the botanic garden belonging to the university.

Ghent contains 21 public hospitals, besides several private establishments for benevolent purposes. The Hospital of Byloke, which was founded in 1225, has accommodation for 600 patients, and ordinarily contains 200. It is believed that the body of Jacques van Artevelde was buried in the church of the Byloke, after his assassination at his own house, which stood in the Padden Hoek. The school for the poor, founded by the magistrates of the city in 1623, contains 150 youths, who receive an education suitable to artisans. Each scholar is instructed in some particular branch of industry. A similar establishment was founded at the same time for poor girls, and is still in existence.

The central prison of Ghent, situated in the Coupure, is remarkable for its size and its judicious arrangements. This establishment has all the appearance of a busy workshop. Weaving, and its accessories of spinning and winding, are the most common employments of both males and females. The two sexes are separated. The women are also employed in washing and mending the clothes of the prisoners, and in the other necessary household duties. The building will hold 2600 prisoners. This prison, so far from being a cause of expense, brings in an annual profit to the city of 4000*l.* (50,000 florins). A considerable portion of their earnings is given to the prisoners, part at the time and the remainder at their discharge from prison.

About 20,000 persons are employed in various occupations connected with the cotton manufacture, in spinning, weaving, bleaching, and printing. Sugar-refining is extensively carried on. Among the other industrial products of Ghent are lace, silk, salt, paper, leather, linen, and woollen goods, soap, pins, beer, spirits, sail-cloth, oil-cloth, haberdashery, cutlery, steam-machinery, chemical products, &c. There are some good ship-building docks in the town, which has a large trade in agricultural produce, and an active transit trade.

Ghent is the residence of the governor of the province; it is also the seat of a tribunal of first resort, and of a court of appeal, which last has jurisdiction over the whole province of Flanders; it likewise gives title to a bishop, and is the head-quarters of the first of the four divisions of the Belgian army.

Besides the market held every Friday, horse-fairs are held in Mid-Lent and on the 23rd of July; there is also a general fair in August.

GHILAN. [PERSIA.]

GHOOLGHoola, a remarkable hill in the valley of Bameean in Afghanistan, is situated about 35 miles N.W. from Cabul. It is chiefly noticeable here on account of the great number of excavations in the mountains which inclose the valley on both sides. The greater number of the caves occur on the northern face of the hill. The hill is detached and stands in the middle of the valley. The caves are very numerous and extend in every direction. On the face of the hill are colossal statues of a male and a female, in alto-rilievo, cut out in the mountain rock. They are not distinguished either by symmetry of form or elegance in their drapery. The male figure is about one hundred and twenty feet high, and the female about seventy feet.

GHUZNEE, Afghanistan, a fortified city, once the capital of an empire reaching from the Tigris to the Ganges, is situated in 33° 34' N. lat., 68° 21' E. long., distant about 80 miles S.S.W. from Cabul. The city was once adorned with the most splendid buildings in Asia, but the houses which now occupy the site are of mean appearance and considerably reduced in number. In the vicinity however some remains of the ancient grandeur of the city are observable. At a distance of about three miles is the tomb of Sultan Mahmood, the conqueror of India, which though not magnificent is spacious and covered with a cupola. The doors, or rather gates, of this tomb, which were of sandal-wood and said to have been brought as a trophy from the temple of Somnauth in Guzerat, were removed by the British in 1842. The population has been variously stated, but is probably about 6000. The city stands on a rock about 230 feet above the adjacent plain. The citadel contains a palace, a magazine, and a granary. The city was taken by Lord Keane July 23rd 1839, and was surrendered to the Afghans in 1842. On September 6th 1842 it was re-taken by General Nott. [AFGHANISTAN.] Ghuznee is a commercial depot for the trade between Afghanistan and the Panjab.

GIANT'S CAUSEWAY. [ANTRIM.]

GIBARA. [CUBA.]

GIBRALTAR, a British town and fortified rock in Andalusia, the most southern province of Spain. The rock, which is connected with the continent by an isthmus of low sand, and almost wholly surrounded by the waters of the Mediterranean, forms a promontory three miles in length from north to south. The width is irregular, but the entire circumference is about seven miles. Towards the south it terminates in a point called Europa Point, which is in

36° 2' 30" N. lat., and 5° 15' 12" W. long. This rock, under the name of Calpe, and Mount Abyla (now called Ceuta), opposite to it on the African coast, were called by the ancients the Pillars of Hercules, and in very early ages were regarded by the people dwelling to the east of them as the western boundary of the world. In the early part of the 8th century an army of Saracens under the command of Tarif, or Tarek, from the coast of Africa, landed near to Gibraltar with the intention of dethroning Roderic, king of Spain. The Saracens erected a castle on the shoulder of the rock, and called the rock itself Gibel-Tarif (the mountain of Tarif), whence its present name of Gibraltar is supposed to be derived. The ruins of this castle may still be seen. The African Moors continued in possession of Gibraltar till the beginning of the 14th century, when it was recovered from them by Ferdinand IV., king of Castile and Leon. It subsequently fell into the hands of the king of Granada, from whom it was taken in 1462 by the Christians under Henry IV., king of Castile, who gave it the arms it still bears, namely, a castle with a key hanging to the gate, alluding to its being the key of the Mediterranean. From this time to the end of the 16th century Gibraltar remained in the hands of the Spaniards, by whom the fortifications were so far increased and modernised that the place was looked upon as impregnable until taken by an English and Dutch fleet under Sir George Rooke and the prince of Hesse Darmstadt on the 24th of July 1704. During the nine following years several unsuccessful attempts were made to recover the fortress by force or stratagem, in which the loss of the assailants was very great. In 1713 the possession of Gibraltar was confirmed to the English by the peace of Utrecht. In 1727 it was again attacked by the Spaniards with an army of 20,000 men. The siege continued for several months, and was terminated by the general peace on the 12th of May. The last and most memorable of all the sieges of Gibraltar was commenced in 1779, and did not terminate till the 2nd of February 1783, when it was announced that the preliminaries of a general peace had been signed.

The rock consists principally of a gray compact marble. It abounds with caves, the most remarkable of which is St. Michael's on the south-west side. The entrance to this cave is 1000 feet above the sea-level, and leads to a spacious hall, apparently supported by massive stalactites. Beneath this is a succession of descending caves beautifully picturesque, but of difficult access. In the perpendicular fissures of the rock bones of various animals, including human bones, have frequently been discovered. The natural productions of Gibraltar are wild rabbits, woodcocks, teal, and partridges; there are also large numbers of monkeys, of a dark-fawn colour, and without tails. The climate is temperate during the greater part of the year, and even in the summer months the excessive heat is allayed by a refreshing sea-breeze that sets in during the forenoon and continues till sun-set. The temperature in winter is considerably higher than in the neighbouring country, so that the snow, which falls but seldom, soon disappears, while it continues for many weeks on the mountains of Africa and the Sierra Morena. On whichever side the rock is approached it has a barren and forbidding appearance. From the ship's deck not a spot of verdure can be seen, and yet it is by no means destitute of vegetation, for besides acacias, fig and orange trees, there is a great variety of odoriferous plants. The rock rises to a height of about 1600 feet above the sea. On the east and north sides it is so steep as to be wholly inaccessible. Towards the south it is also very precipitous, but on the west side, where the town is built, it gradually declines towards the bay, where the strength of the fortifications is such that the fortress appears to be impregnable. Besides the fortifications of which we have just spoken there are excavations, wrought with extreme labour, in the solid rock, called galleries, which extend from two miles to three miles in length, and are of sufficient width for carriages. Along these galleries, at intervals of every twelve yards, are portholes bearing upon the neutral ground and bay. Of late years the fortifications have been carefully strengthened at every vulnerable point. The Spanish lines, which extend across the isthmus, are defended by two forts, the principal of which is called St. Philip. The space between these lines and the foot of the rock is called the neutral ground, and it is here that the lazaretto is situated.

The town is built on a bed of red sand, near the foot of the north-west side of the hill. It is paved and lighted, and consists chiefly of one street, extending about a mile in length from South-Port to Water-Port. The principal buildings are the governor's and lieutenant-governor's houses, the Admiralty (formerly a monastery of White friars), the barracks, victualling-office and store-house, the cathedral, the Spanish church, and the Jews' synagogue. Towards Europa Point are the South barracks and navy hospitals, both fine buildings, pleasantly situated, and well adapted to the purposes for which they were built. There are also a chapel for Wesleyan Methodists, an exchange, a library, a news-room, several subscription schools, a lunatic asylum, almshouses, &c. The water for the supply of the town and garrison is collected during the rainy season, and conveyed to the garrison by means of an aqueduct erected by the Spaniards. The roofs of the houses are so constructed as to receive the falling rain and to conduct it to a tank beneath, with which every house is provided. The nearest spring is on the neutral ground, and even there the water is brackish. The provisions are principally derived from Africa. The town can neither be called clean nor neat. The

houses are built in the English style, without regard to their ventilation, so essential to the health of the inhabitants, and so studiously observed in all Spanish towns.

There is a charter according to which all criminal causes are to be determined according to the laws of England. Disputes between debtor and creditor are referred to the judge-advocate, from whose award an appeal may be made to the governor, whose decision is final, unless the sum exceed 300*l.*, in which case a further appeal may be made to the privy council at home. Every precaution is taken to prevent the increase of new residents. Foreigners are allowed permission to remain during specified periods on giving the required security. The trade of Gibraltar has much declined within the last half century. Gibraltar being a free port, subject to few duties and few restrictions, is a convenient entrepôt for merchandise destined for the neighbouring provinces of Spain and Africa. The principal articles imported into Great Britain and Ireland from Gibraltar in 1851 were sheep's wool, tobacco, wines, silk raw and thrown, and senna. The articles of foreign and colonial merchandise exported from Great Britain and Ireland to Gibraltar in 1851 included spices, spirits, tea, tobacco, wines, and cotton-wool. The declared value of British and Irish produce exported to Gibraltar in 1851 was 431,286*l.* The average annual revenue collected in the town appears to be nearly 30,000*l.*, which is about sufficient to defray the public civil expenditure of the place. The strength of the garrison in 1847 was 3667 of all arms. The population of the town in 1850 was 15,823, being 7752 males and 8071 females: of the whole number 3641 were aliens.

The *Bay of Gibraltar*, formed by the headlands of Cabrita and Europa Points, is commodious and secure from all the more dangerous winds. The greatest width from east to west is five miles; the greatest length from north to south, reckoning from Rocabillo to Cabrita Point, is about eight miles; the depth in the centre is about 110 fathoms. The tide rises about four feet, and the variation of the needle is 22° 31'. The bay supplies the garrison with abundance of fish. The shipping is protected by two moles, constructed at a great expense, and extending into the bay to the respective distances of 700 and 1100 feet. On the western side is situated the pretty town of Algeiras, which the Spaniards have fortified since Gibraltar has been in the possession of England. A little to the south-west of this town is an island (Isla Verde), which adds to the general beauty of the bay.

The *Straits of Gibraltar*, anciently called the Straits of Hercules, are about 12 leagues in extent from Cape Spartal to Ceuta Point on the African coast, and from Cape Trafalgar to Europa Point on the coast of Spain. Their width at the western extremity is about 8 leagues, but at the eastern extremity it does not exceed 5 leagues. A strong current is constantly running from the Atlantic into the Mediterranean, which renders the passage of sailing vessels bound to the westward extremely precarious, and only practicable by means of a brisk Levant wind. Dr. Halley was of opinion that the daily evaporation of the Mediterranean was sufficient to account for the consumption of this constant influx of water; but there are two counter currents along the shores of Spain and Africa respectively, although their breadth and rapidity are small compared with the principal current.

(Parliamentary Papers.)

GIEN. [LOIRET.]

GIESSEN, a town in the grand-duchy of Hesse, is built on the banks of the Lahn and Wieseck, which form a junction at this spot in the centre of a beautiful country. It is 41 miles by railway to the north of Frankfurt-am-Main, and has about 9000 inhabitants. The town is old and ill-built, with the exception of three or four broad streets. The fortifications have been razed and their site converted into promenades. It has three squares, an old castle, an arsenal, three churches, university buildings, an hospital, and a house of correction. The University of Giessen, established in 1607, has become famous in recent times for its school of organic chemistry under Professor Liebig, whose classes are attended by students from all parts of Europe. The buildings appropriated to its use are handsome, and contain lecture-rooms, a library of 36,000 volumes, clinical establishment, chemical laboratory, museums of natural history, &c. Connected with it are an academy for forest economy, a gallery of antiques, an obetetric institute and school, a botanic garden, and an observatory. The number of professors and teachers in the University of Giessen is about 40; of students, between 500 and 600. Giessen is the seat of government for the province of Upper Hesse. It is not a place of much commercial industry: it has some manufactures of woollen goods, cotton, tobacco, and leather.

GIGGLESWICK. [YORKSHIRE.]

GIJON. [ASTURIAS.]

GILEAD. [PALESTINE.]

GILFORD. [DOWN.]

GILLINGHAM. [DORSETSHIRE; KENT.]

GILLY. [HAINAULT.]

GILMERTON. [EDINBURGHSHIRE.]

GILOLO. [MOLUCCAS.]

GINGEE. [CARNATIC.]

GIOIA. [BARI, TERRA DI.]

GIOJA. [CALABRIA.]

GIOVENAZZO. [BARI, TERRA DI.]

GIRGEEH. [EGYPT.]

GIRGENTI, the chief town of a province of Sicily, is built on the slope of a hill about three miles from the coast, and about one mile from the ruins of old Agrigentum. The town is irregularly built; it is a bishop's see, and has a clerical seminary with a library and cabinet of medals. The population, which is about 15,000, carry on some trade in agricultural produce through the neighbouring harbour, which is frequented only by small vessels. The principal articles of exportation are corn, fruit, oil, and sulphur. The principal buildings are—the cathedral; the public seminary; the public library and museum; and several churches and convents. [AGRIGENTUM.] The province of Girgenti has an area of 889 square miles, and a population (according to the census of 1851) of 245,974. It is divided into three districts, Girgenti, Sciacca, and Bivona. The other towns besides Girgenti are—*Sciacca*, a maritime town with 13,000 inhabitants, whose chief occupation is the fishing and pickling of sardines, which abound on this coast. The country around has many plantations of pistachio nuts. Hot mineral springs, the ancient *Thermae Selinuntiae*, are in this neighbourhood. *Castronovo*, inland, on a mountain, with 6000 inhabitants. *Bivona*, with 6000 inhabitants, and a royal college. Petroleum is procured in the neighbourhood. *Aragona*, with an old castle and 6500 inhabitants, is situated in a delightful country interspersed with almond plantations. The mud volcano of *Maccaluba* is in the neighbourhood.

GIRONDE, a maritime department in the south-west of France, lies between 44° 10' and 45° 34' N. lat., 0° 15' E. and 1° 18' W. long. It is bounded N. by the department of Charente-Inférieure, E. by that of Dordogne, S.E. by that of Lot-et-Garonne S. by Landes, and W. by the Bay of Biscay. The form of the department is very irregular. The greatest length of the department is 106 miles; its greatest breadth 80 miles. The area is 3761 square miles. The population in 1841 was 568,034—in 1851 it was 614,387, which gives 163.35 to the square mile, being 11.23 below the average for all France. This is the largest department in France; it is formed out of the western part of the old province of Guienne.

Coast-line.—The coast, which runs in nearly a direct line north and south for 75 miles, is lined with sand-hills, and these are skirted on the land side by the shore-lakes of Carcans and Canau, and the Bay of Arcachon. The lakes communicate with each other and with the bay, which is shallow and studded with islets, and opens into the sea. On the land side the Bay of Arcachon forms a vast shallow lagoon inclosing several small islets. A considerable portion of this part of the bay has been recently drained and converted into arable land. The river Leyre runs into the south-eastern angle of the bay. The sand-hills along the coast between the Gironde and the Adour are in many places planted with pines, from which rosin and pitch are made, the chief exports besides fish from the Bay of Arcachon. The harbour is at Tête-de-Buch, a fishing village near the entrance of the bay which is rising into some importance since its connection by railway with Bordeaux, some of whose exports are shipped in the Bay of Arcachon. On Cape Feret (the ancient Curianum Promontorium), on the northern side of the entrance, there is a lighthouse, in 44° 39' N. lat., 1° 15' W. long.

Surface, &c.—The general character of the surface in the interior is level except towards the east, where there are some hills; the country west of the Garonne is a dead flat. The principal rivers are the GARONNE and the DORDOGNE, which unite in this department to form the Gironde; and the north-east is watered by the Isle, an affluent of the Dordogne from the north bank. The feeders of the Garonne which are in the department are, with the exception of the Dropt, all small. In the south of the department the Leyre flows into the bay of Arcachon. The department is crossed by 7 imperial, 19 departmental, and a great number of parish roads. A railroad running northward through Angoulême and Poitiers to the Paris-Nantes line at Tours connects Bordeaux with Paris. There is also the railroad to Tête-de-Buch. A line is projected to connect Bordeaux with Cetta, which is to run up the valley of the Garonne to Toulouse; and another railway is to run from the Tête-de-Buch line to Bayonne.

The climate is temperate, and, except in the Landes, generally healthy; the sea-breezes and the frequent rains temper the heat, which would otherwise be excessive. The Landes, or sandy heaths, of which only a small part has been brought into cultivation, occupy nearly half of the department, extending from the sea to the valley of the Garonne. The sands of the downs along the sea-shore, driven inland by the winds, gradually overspread a considerable tract of country, encroaching yearly from 70 to 80 feet along the whole extent of the coast. The increasing devastation has however been checked by planting pines, broom, and other shrubs, by means of which the sand has in most parts become fixed. Between the Garonne and the Dordogne, and in that part of the department which is to the north of the latter river, the soil is chiefly calcareous; it is mingled with considerable districts of sandy and some of gravelly soil, and with rich loamy tracts.

Products, &c.—The surface of the department measures 2,406,972 acres. Of this area 564,298 acres are arable; 159,650 are grass-land; 343,051 are under vine-culture; 806,606 are barren heath and sand; 274,030 are covered with woods and forests; 67,841 various cultiva-

tion; and 45,782 are rivers, brooks, and estuaries. The breadstuffs chiefly cultivated are wheat and rye; a considerable quantity of maize and millet are also grown. The rye and millet are raised in such parts of the Landes as have by dint of manure been brought into cultivation. Excellent fruits and a large quantity of hemp are grown. But the staple produce of the department is wine, of which 44,440,000 gallons are produced annually. The finest clarets are from this part of France, as the growths of Lafitte, Latour, Château-Margaux (these are in the Médoc district, on the left of the Garonne and Gironde, between Bordeaux and the sea), Haut-Brion, Sauterne, Barsac, and the Vins de Grave. The extensive woods which skirt the sea-coast, or pervade the Landes, consist chiefly of the pine (*Pinus maritima*), from which turpentine, pitch, and charcoal are procured, as well as timber for building and masts for vessels. The cork-tree is abundant.

Geological Character.—The department is occupied by the various supercretaceous strata, the chalk rising to the surface only on the north-east boundary. Good building stone is quarried.

Inhabitants.—The Landes are thinly peopled; the inhabitants make charcoal or tend the numerous flocks which obtain scanty food amid these sandy wilds. The shepherds, clothed in sheepskins, traverse the waste on high stilts, balancing and supporting themselves by the aid of a long staff, of the broad head of which they occasionally make a seat, and which they also use to guide their flocks: they employ their leisure in knitting coarse woollen stockings for their own use or for sale. They travel to markets and fairs on these stilts. Among the sheep of the department are many flocks of merinoes, and the proprietors are trying to extend the long-wooled English breeds.

Manufactures.—The chief manufactures are calico, muslin, soap, chemical products, pottery, paper, vinegar, brandy, sugar, beer, leather, glass, &c. Ship-building is extensively carried on in Bordeaux. There are several tobacco-factories, dye-houses, rope-walks; and a great deal of salt is made along the coast. The department contains 1826 wind-mills and water-mills, 46 iron-foundries, and 347 factories of different kinds.

Divisions and Towns.—The department is divided into six arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Bordeaux	18	153	296,632
2. Blaye	4	56	59,469
3. Lesparre	4	30	39,677
4. Libourne	9	132	111,104
5. Bazas	7	68	55,112
6. La-Réole	6	105	52,395
Total	48	544	614,387

1. In the first arrondissement the chief town is **BORDEAUX**, which is also the capital of the department. The more important of the other towns are here named, with the population of the commune in each case. *St. André-de-Cubzac*, on the road from Paris to Bordeaux, and not far from the Dordogne, has 2010 inhabitants. *Cadillac*, in a fertile plain on the right bank of the Garonne, is a pretty town, surrounded by old walls flanked with towers, and has 1967 inhabitants. The fine old castle of the Duke of Epéron, the great ornament of the town, and the finest edifice of the kind in France except the royal palaces, is now used as a penitentiary for women. *Carbon-Blanc*, 6 miles N. from Bordeaux, has copper and lead rolling works, potteries, and 1869 inhabitants. *Castelnau-de-Médoc*, not far from the left shore of the Gironde, stands in a district which produces excellent red wine, and has 1211 inhabitants. *Labrède*, a hamlet of 1329 inhabitants, deserves notice for its château, in which Montesquieu was born, and which was purchased in 1839 by the late Duke of Orléans. *La Teste-de-Buch*, a small sea-port on the south shore of the Bay of Arcachon, is about 33 miles S.W. from Bordeaux, with which it is connected by railroad. There is a large pine-forest near the town. The inhabitants number 3447, and are chiefly engaged in the coasting trade and in fishing.

2. In the second arrondissement the chief town is **Blaye**, which is a sea-port and fortress, on the right shore of the Gironde, and has tribunals of first instance and of commerce, and 4350 inhabitants. The town is built at the foot and on the slope of the rocky hill, the summit of which is crowned by a strong citadel. The citadel, with the fortified tower of Paté on an islet in the middle of the estuary, and the fort of Médoc on its left shore, completely command the passage of the Gironde. Blaye has linen and woollen factories, glass-works, potteries, ship-building-yards, and a considerable commerce in wines, brandies, spirits, oil, soap, fruits, ship-timber, staves, &c. Large vessels put into the port of Blaye to complete their cargoes, and to supply themselves with provisions. *Bourg*, advantageously situated for trade on the left bank of the Dordogne, and near its confluence with the Garonne, is a well-built town, with a small harbour for vessels of 300 to 400 tons, and has 2564 inhabitants.

3. In the third arrondissement the chief town is **Lesparre**, about 44 miles N.W. from Bordeaux. It has a tribunal of first instance, and contains 1520 inhabitants. The district in which it is situated produces grain, pulse, and wines of excellent quality; the pasturage is

also good, and the fruit is abundant. Its commerce consists entirely in the sale of agricultural produce. *St. Laurent-de-Médoc*, a town 12 miles S. from Lesparre, with 2692 inhabitants, has a considerable trade in wine, pitch, and tar. *Paulliac*, a maritime town on the Gironde, 26 miles N. from Bordeaux, with a commodious port and a lighthouse. Vessels drawing too great a depth of water to ascend to Bordeaux unload at Paulliac, and here they take in provisions and water on proceeding to sea. Near Paulliac is the lazaretto of Trem-loup. The local trade consists in the exportation of the wines of Château-Lafitte, which are produced in the commune: population, 3805. *St. Vivien*, a town with 985 inhabitants, who manufacture salt, of which 6,000,000 bushels are annually produced from the neighbouring salt-works.

4. In the fourth arrondissement the chief town is **Libourne**, a handsome ancient town, situated on the right bank of the Dordogne, at its junction with the Isle, 22 miles by railway E. from Bordeaux. It has a tribunal of first instance, a chamber of commerce, a hydrographical school of the first class, a communal college, and 11,552 inhabitants in the commune. It contains also a public library of 3000 volumes, a museum, and a botanic garden. A handsome brick bridge of nine arches crosses the Dordogne, and a suspension-bridge of remarkable elegance crosses the Isle. Its port, where the tide rises from 13 to 16 feet, receives vessels of 300 tons burden. The manufactures are of cotton-yarn, iron, leather, ropes, and nails; ship-building is also carried on. The chief trade is in wine and brandy, oak-staves, iron, coal, and salt. *Castillon*, on the right bank of the Dordogne, 25 miles E. from Bordeaux, has 3000 inhabitants. There are cotton-factories, tan-yards, rope-yards, and cooperages here; and nails are manufactured to a considerable extent. There is also some trade in wool. Near the town are the remains of an old castle, near which in 1451 the English were defeated, and Earl Talbot and his son slain. *Coutras*, a town with 3302 inhabitants, 10 miles by railway N.E. from Libourne, is built at the confluence of the Dronne and the Isle, which streams are employed for working flour-mills for the supply of Bordeaux. Under its walls Henry IV. gained a victory over the Duc de Joyeuse in 1587. *Sainte-Foy-la-Grande* has 2924 inhabitants, and its trade consists in the making of cotton and woollen caps, linen, and leather. The district around produces an esteemed white wine, brandy, grain of all sorts, and good pasturage for cattle. It is on the left bank of the Dordogne, about 38 miles E. from Bordeaux.

5. The fifth arrondissement has **Bazas** for its chief town. It is an ancient place, dating from the Roman period, and is mentioned by Ptolemaeus as an important place under the name of Cossio, the capital of the *Vasates*, or *Vocates*. It possesses a tribunal of first instance, and has 4437 inhabitants. It is picturesquely seated on an eminence, at the foot of which flows the Beuve. It is ill built on the woele, but has agreeable walks formed upon the walls, the remains of its ancient fortifications. In a handsome square surrounded by an arcade stands the cathedral, a gothic building of the 13th or 14th century, which, though not large, is well proportioned, and has been classed among the 'historical monuments' of the country. The inhabitants manufacture druggets, make glass-bottles, blanch wax, and tan hides. They deal in corn, cattle, wood for fuel, and timber for building. The town stands in a sandy country on the high road from Bayonne to Bordeaux, about 33 miles S.S.E. from Bordeaux. *Langon*, a handsome little town on the right bank of the Garonne, and on the road from Bayonne to Bordeaux, has distilleries, tan-yards, and 3986 inhabitants. The town is advantageously situated for commerce, as the tide ascends to its port, whence the excellent wines of the district are shipped. The town is not well built, but the scenery in the vicinity is fine. A suspension-bridge over the Garonne unites the town with that of *St.-Macaire* on the opposite bank.

6. In the sixth arrondissement the chief town, **La-Réole**, about 25 miles E.S.E. from Bordeaux, is built on the side of a steep hill on the right bank of the Garonne. It is a place of great antiquity, and there yet remain the ruins of a pagan temple, called the *Grande-Ecole*, and two towers of a fortress erected by the Visigoths, called the *Castle of the Four Sisters*. The town possesses a tribunal of first instance, and a communal college. The streets are steep and narrow, the houses ill-built. There are no noticeable public buildings, but the scenery around is pleasant, and from the summits above the town a prospect of great variety is afforded, which includes a large number of villa residences on the banks of the Garonne. The number of inhabitants is 4036, who are employed in manufacturing combs, hats, vinegar, leather, &c.; and they have some trade in corn, wine, brandy, and cattle. All the other chief towns of cantons are small. *St.-Macaire*, opposite Langon, is a small but ancient town with 1513 inhabitants. It is ill built, and surrounded with old walls, in a state of tolerable preservation. There is a handsome gothic church, classed among the 'historical monuments,' and a small port on the Garonne.

The department forms the see of the archbishop of Bordeaux. It is included in the jurisdiction of the High Court, and in the circuit of the University Academy of Bordeaux, and in the 11th Military Division, of which Bordeaux is head-quarters. It returns five members to the Legislative Body of the French Empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers.*)

GIRONS, ST. [ARIZEX.]

GIRVAN, Ayrshire, Scotland, a small town and burgh of barony in the parish of Girvan, is situated in 55° 14' N. lat., 4° 50' W. long., on a fine bay at the mouth of the Water of Girvan, which here forms a small harbour, 21 miles S. from Ayr, 61 miles S.W. from Glasgow. The population of the town in 1851 was 7319. The town consists principally of cottages containing each two rooms: one room devoted to domestic uses, the other containing the weavers' looms. The inhabitants are chiefly weavers; a few are employed in fishing. In addition to the Established Church, there are chapels for Free Church Presbyterians, United Presbyterians, and Episcopalians. There are in the town a subscription library and several friendly societies. (*New Statistical Account of Scotland*.)

GISORS. [EURE.]

GISSI. [ABRUZZO.]

GIULIANOVO. [ABRUZZO.]

GIVET. [ARDENNES.]

GIZEH, or JIZEH. [EGYPT.]

GLAMMIS. [FORFARSHIRE.]

GLAMORGANSHIRE, a maritime county of South Wales, lying between 51° 23' and 51° 48' N. lat., 3° 3' and 4° 18' W. long. This county is bounded N. by Brecknockshire and Caermarthenshire, E. by Monmouthshire, and S. and W. by the Bristol Channel. Its form is irregular; the greatest length is from east to west, from Llanvedw bridge over the Rumney to the headland between Rossily Bay and the river Burry, 52 or 53 miles; its greatest breadth, from the head of the river Rumney to the coast near Sully Island, 27 miles. The area is estimated at 547,494 statute acres. Its population in 1841 was 171,138; in 1851 it was 231,349, being an increase of 35·4 per cent.

Coast-line, Islands, &c.—The line of the Glamorganshire coast, from the mouth of the Rumney, where it adjoins Monmouthshire, to Pennarth harbour, formed by the estuary of the Taafe and the Ely, is marshy. From Pennarth Point, on the south side of the harbour, to Lavernock Point, are high cliffs, which continue with a few interruptions to Sker Point. About midway between Lavernock and Nash points is Breaksea Point, the most southerly part of the county. Between Lavernock and Breaksea points are Sully Island and Barry Island, both small. Barry Island, the larger of the two, is joined to the mainland by an isthmus, or causeway, dry at low water; it is nearly surrounded by cliffs, is about a mile and a half in compass, and contains about 300 acres of land occupied by a farmer, but for the most part retained in the state of a heath or warren for rabbits. The island is supposed to have derived its name from St. Baruch, a Welsh saint, who is said to have died here about A.D. 700. Leland, who has described the island, says, "There is no dwelling in the isle, but there is in the middle of it a fair little chapel of St. Barock, wher much pilgrimage was used." The cliffs along this part of the coast and in Barry Island are chiefly composed of *lias*, except those in the neighbourhood of Sker Point, which are chiefly of mountain limestone.

From Sker Point to the Mumbles the line of coast forms Swansea Bay. There are no cliffs here; the coast is comparatively low, and skirted by broad sands, dry at low water. At the Mumbles, which are small rocky islets just off shore, the limestone cliffs recommence, and continue with some interruptions along the line of coast, which runs westward to Worms Head, forming several small bays. At Worms Head the coast turns northward to the point opposite Holmes Island, whence it runs eastward along the shore of the Burry estuary, making the western part of the county a narrow peninsula, called Gower. The river Loughor, which runs into the Burry, forms the boundary of Glamorganshire and Caermarthenshire. Whitford Point is a small headland of the peninsula of Gower, jutting out for a mile or two into the Burry. The length of the coast, following its principal windings, may be estimated at 89 miles.

Surface, Hydrography, Communications.—Glamorganshire is covered with mountains, some of which branch off from the principal range that extends east and west through Brecknockshire into Caermarthenshire. The centre of the county is occupied by a group of mountains branching off in every direction except the north, and having its chief extension from east to west from the valley of the Cynon to that of the Neath. The highest mountain in the county, Llangeinor (1859 feet high), from which some of the principal tributaries of the Ogmores flow, belongs to this group. Margam Down, 1099 feet high, is near the east side of Swansea Bay. The general course of the streams is from north to south. The *Rumney* rises just at the north-east extremity of the county, which it separates from Monmouthshire. Its whole course is about 30 miles; it is not navigable, nor does it receive any tributary worth notice. The *Taafe*, *Taff*, or *Taf*, the largest river in the county, rises in Brecknockshire, between the mountains Capellante and the Van, or Beacon of Brecon, and flows past Merthyr Tydvil, Llandaff, and Cardiff, into Pennarth harbour, which is formed by the joint estuary of this river and the Ely. The whole course of the Taafe is about 40 miles. Its chief tributaries are the Taafe Fechan, or Little Taafe, the Cynon, and the Rontha Vavr, or Great Rontha. The Ely, or Elwy, may also be considered a tributary of the Taafe, since they have a common estuary; it is not navigable. The *Daw* or *Thaw*, rises near Cowbridge, and flows 10 or 12 miles past that town into the sea. Its mouth forms the little harbour of Abertaw, close to Breaksea Point. The *Ogmores* rises in the central mountain group

of the county, and flows past Bridgend, about 18 miles, into the sea between Nash Point and Sker Point. It receives on its right bank the Garw, and the Llynfi, or Llynvi, which flow from the same group of mountains, and on the left bank, near its mouth, it receives the Ewenny. The *Avon* rises on the north side of Llangeinor mountain, and flows south-west 15 miles into Swansea Bay; it receives the Corrwg and the Avon Fechan, or Little Avon, both small. It is navigable a mile or two above its mouth for vessels of small burden, employed by the proprietors of some neighbouring copper-works. The *Neath*, or *Nedd*, rises in Brecknockshire and flows south to the border of Glamorganshire; in this part of its course it receives several tributaries. From the border it flows through Glamorganshire into Swansea Bay. Its whole course is about 23 miles; it is navigable for vessels of 200 tons up to Neath Bridge, about 2 miles. There is a bar at the mouth with several rocks. It receives only one tributary of any importance in Glamorganshire, the Dulais, or Dylais, which rises in Brecknockshire and joins the Neath about 2 or 3 miles above the town of Neath. The *Tawe* rises in Brecknockshire, and flows south-west through Brecknockshire and Glamorganshire into the sea at Swansea, called by the Welsh *Abertawe*, the harbour of which is formed by the mouth of this river. Its course is about 26 miles, about half being in each county. The *Loughor* rather belongs to Caermarthenshire; it has the lower part of its course, for 12 or 14 miles, along the border of this county, and is navigable up to the town of Loughor. Its principal Glamorganshire tributaries are, the Lan or Llan, and the Leu or Liu. The estuary of this river is called the Burry, which name it takes from a streamlet of the peninsula of Gower, which flows into it.

There are several canals in the county. The Glamorganshire or (as it is sometimes called) the Cardiff Canal commences on the east side of the river Taafe, near its entrance into Pennarth harbour, about a mile and a half below Cardiff. In its course it passes the town of Cardiff, and is carried over the river Taafe by an aqueduct bridge, soon after which it is joined by the Aberdare Canal. The remainder of its course is on the west side of the river, to the town of Merthyr Tydvil, near the border of Glamorganshire and Brecknockshire. Its whole length is about 25 miles, with a total rise of 611 feet. At its termination in the tideway of the river Taafe there is a sea-lock, with a floating dock 16 feet deep, capable of receiving vessels of 300 tons. The line from Merthyr to Cardiff was opened in 1794. There are several railways along its line, connecting it with the mines and coal-pits. The Aberdare Canal is connected with the Glamorganshire Canal near the aqueduct bridge over the Taafe; and runs along the valley of the Cynon, on the eastern side of the river, and nearly parallel to it, to within a mile of Aberdare. Its length is 6½ miles, with a total rise of 40 feet. From the termination of the canal near Aberdare is a railway, which extends 2 miles farther in the same direction. The Neath Canal commences at Abernant, on the north-west side of the river Neath, or Nedd; it crosses the river, and passes the town of Neath, a mile or two below which it terminates in the Neath River. The Neath Canal is about 14 miles long. A branch cut from this canal on the south-east side of the Neath is carried across that river, and runs on the north-west side of it till it terminates in the Britton Canal. The Britton Canal, which is little more than 4 miles long, is cut from the river Neath, opposite to where the main line of the Neath Canal opens into it, and runs nearly parallel to the coast into Swansea harbour. The Swansea Canal commences in Swansea harbour, and runs along the valley of the Tawe, on the west side of that river, into Brecknockshire. It is about 17 miles long, with a rise of 373 feet. Several railways connect it with the neighbouring mines. The Penclawdd Canal commences at the village of Penclawdd, on the estuary of the Burry, and has a crooked course eastward for nearly 4 miles. Some railways are connected with this canal, which runs through a part of the coal-field of South Wales.

There are several railways for the conveyance of minerals in Glamorganshire. Amongst these are the Cardiff and Merthyr Tydvil railway, the Duffryn Llynvi and Porth Cawl railway, the Bridgend railway, the Aberdulais railway, and the Oystermouth railway. Other railways connect the various canals with the mines near which they pass. There are others connecting the little harbour of Aberavon with the coal-pits and mines of the vicinity. The South Wales railway, the great passenger line in connection with the Great Western railway, enters Glamorganshire near Cardiff, and traverses the county in a generally western direction, quitting it at Swansea. Its length in this county is about 42 miles. A branch, called the Taff Vale railway, runs from Cardiff to Merthyr Tydvil. Another connected line, called the Neath Valley railway, about 22 miles long, runs from Merthyr Tydvil to the main line at Neath.

The principal coach-road enters the county from the east by Rumney bridge, over the Rumney, between Newport (Monmouthshire) and Cardiff, and runs by Cardiff, Cowbridge, and Neath to Swansea, and quits this county for Caermarthenshire at the bridge over the Loughor at Pontarddylais. From Cardiff one road leads to Caerphilly, and thence into Monmouthshire; another follows the valley of the Taafe to Merthyr; and a third runs north-west to Llantrissant and Bridgend. Several other roads traverse the county.

Geology, Mineralogy, &c.—The uppermost of the formations which are found in this county is the blue *lias*, which occupies the most

southern portion of the county. It forms, with some interruptions, the cliffs which are found from Lavernock Point to the mouth of the Ogmere, and occupies the lower part of the valley of the Ogmere. The lias here is chiefly found filling up the valleys and depressions in the subjacent formations. Its strata are nearly horizontal, except where disturbed by the faults of the lower formations. The cliffs formed by this rock are bold and lofty, and samphire grows more plentifully on them than on any other. In the southern part of the county the newer red marl or red-sandstone is also found, especially in the neighbourhood of Cardiff, and along the coast from the Rumney to Lavernock Point. The conglomerates associated with this rock predominate near Llandaff and in the vale of Ely. Gypsum is found near Lavernock Point. The newer magnesian or conglomerate limestone, which is the lowest rock before coming to the coal-measures, is found in several places in the southern part of the county; its thickness varies from 30 feet to as many inches, almost in the same cliff.

The rest of the county is occupied by the coal-measures and the associated beds, the mountain limestone, and the old red-sandstone. The coal measures occupy all the northern part of the county; they are bounded on the south by a line drawn across Gower Peninsula from Whitford Burrows to Oystermouth on Swansea Bay, by the shore of Swansea Bay, and by a waving line drawn eastward from Margam on that bay by Llantrissant and Caerphilly to the river Rumney. The miner finds coal without any considerable descent; for the whole country is intersected with deep valleys in a north and south direction; and the miner, taking advantage of this, drives levels into the adjacent hills and obtains ironstone and coal. There are however many mines in valleys and low places. Near Swansea an enormous fault, many fathoms thick and filled with fragments of the disrupted strata, traverses the field effecting a rise, on one side of the fault, of 240 feet in the strata. Near Merthyr, where the coal-field approaches its northern limit, and at the head of the Neath valley, is found a coarse conglomerate of the millstone grit formation, separating the coal measures from the subjacent carboniferous limestone, which skirts the coal-field nearly all round. A belt of this limestone crosses Glamorganshire south of the coal-field; and the old red-sandstone is found at each extremity of the county, in the valley of the Rumney, and in the peninsula of Gower, cropping out from beneath the carboniferous limestone. In the peninsula is a central ridge of old red-sandstone, with two parallel limestone belts resting one on each side of the sandstone ridge. In the lower part of the valleys of the Tawe and Neath, and along the southern limits of the coal-field, the coal is principally of a bituminous or binding quality; the pits round Merthyr and Aberdare yield 'coaking or iron-making coal;' and those in the upper valleys of the Tawe and Neath yield 'stone-coal,' which gives out little smoke, and is used, the large coal for malting, and the small coal, or culm, for burning lime.

Ironstone is found in the valley of the Neath, but most abundantly in Aberdare and near Merthyr, which last may be considered the capital of the iron district of South Wales. The black-band ironstone is found and extensively smelted by means of the anthracite or stone-coal. There are some lead mines in the district occupied by the carboniferous limestone, near Cowbridge and Llantrissant. Limestone is quarried in various places.

Produce.—The Vale, or Plain of Glamorgan, is distinguished by its fertility. Dairy husbandry is much attended to in this district, and butter and cheese are largely exported.

Divisions, Towns, &c.—The county of Glamorgan derives its name from Morgan, a chieftain, who possessed this territory after the departure of the Romans. Its designation was Morganwg (Morgan's country), or Gwlad Morgan, whence by corruption Glamorgan. This designation extended at first to Monmouthshire, but as the princes who held the district in aftertimes were gradually dispossessed of their territories, the limits of Morganwg were contracted. Down to the time of Henry VIII., when the present boundaries of the Welsh counties were fixed, the name Morganwg was given to the country between the Usk and the Neath, or perhaps the Tawe. The peninsula of Gower, and probably all that part of the county which is west of the Tawe, belonged at that time to Caermarthenshire. The modern divisions of Glamorganshire are as follows:—Caerphilly, or Caerphili, east; Cowbridge, south and central; Dinas Powis, south and south-east; Kibbor, or Cibwr, including Cardiff, south-east; Llangevelach, or Llangyfelach, north-west; Miskin, central and north; Neath, central and north; Newcastle, south-west; Ogmere, central and south; Swansea, including the borough of Swansea except the hamlet of St. Thomas in the hundred of Llangevelach, west.

Glamorganshire contains one city, LLANDAFF; ten parliamentary boroughs, CARDIFF, SWANSEA, MERTHYR TYDVIL, COWBRIDGE and LLANTRISSANT, LOUGHOR, NEATH, ABERAVON, KENVIG, or KENFIG, and ABERDARE. Loughor, Aberavon, Kenwig, and Aberdare are not market-towns. Besides the boroughs are the market-towns of BRIDGEND and Caerphilly.

Aberavon, or Port Talbot, 30 miles N.N.W. from Cardiff, is a small place on the right bank of the river Avon, about 2 miles above its mouth. The population of the borough in 1851 was 6567. A large increase has arisen from extended mining operations in the neighbouring valley of Cwm Avon, and from the construction of a floating

harbour at the port by Mr. Talbot. The parish church is a small modern edifice. There are chapels for Independents, Baptists, and other Dissenters. There is a stone bridge of one arch over the river. The borough is contributory to Swansea in returning a member to the Imperial Parliament. The sea-lock of the docks is 45 feet wide, and vessels of large burden can, at spring tides, enter the harbour. Considerable quantities of copper, iron, and tin-plate are shipped here. There is regular communication with Bristol by steam-vessels. A station of the South Wales railway is at Aberavon. The works in Cwm Avon valley, which are among the largest in South Wales, are under the management of the Bank of England, into whose hands they have come in consequence of some financial arrangement with the proprietors, styled—The Governor and Company of the Copper Miners of England. Several reading-rooms, and a mechanics institute, with lectures and musical performances, have been established for the benefit of the workmen and their families; the day-schools have been extended, and evening schools opened; and other measures of a like character have been adopted.

Aberdare is on the right bank of the river Cynon, 20 miles N.N.W. from Cardiff; the population of the parish in 1851 was 14,999; a large increase has taken place in consequence of the extension of coal and iron mining operations. Large quantities of the coal raised in the district are used in the iron-works, and a considerable amount of coal is exported. The parish church is a plain edifice. The Independents, Baptists, and other Dissenters have places of worship. Three fairs are held in the course of the year. The Aberdare Canal, communicating with the Glamorganshire Canal, commences about a mile west from the town. Aberdare forms part of the parliamentary borough of Merthyr Tydvil, which it adjoins.

Caerphilly is a small, irregularly-built town, 7 miles N. by W. from Cardiff, population of the hamlet of Ener-Glyn, in which the town is situated, 952. The town is situated near the river Rumney, which forms the eastern boundary of the county. It consists for the most part of well-built houses. The ruins of the ancient castle occupy a moderate elevation near the middle of a level tract, and consist of walls and towers with various apartments. The most remarkable feature of the castle is the leaning tower, a vast fragment of a tower, still called 'the Mint,' which has been thrown considerably out of the perpendicular without falling. This tower is 70 feet in height, and is at least 11 feet out of the perpendicular, and divided by a fissure. The ruins are now the property of the Marquis of Bute. There are in Caerphilly a chapel of ease, chapels for Independents, Baptists, and other Dissenters, and a savings bank. Some small woollen manufactures are carried on. In the vicinity are extensive coal-mines and iron-works. The market is held on Thursday, and there are six fairs in the course of the year.

Llantrissant, 10 miles N.W. from Cardiff, population of the borough 1007, occupies a commanding situation on the brow of a lofty hill which overlooks some of the finest parts of the vale of Glamorgan, the Bristol Channel, and the hills of Devonshire. The church is a capacious Norman building, and being dedicated to three saints, gave name to the town (Llan-tris-saint). In the town are chapels for Baptists, Independents, Calvinistic and Wesleyan Methodists. The town-hall and market-house are of modern erection. There are some remains of an ancient castle. The market is on Friday for provisions; there are four yearly fairs. The borough is contributory to Cardiff in returning a member to the Imperial Parliament.

Loughor (in Welsh *Cas Lluchwr*), 45 miles W.N.W. from Cardiff, population of the borough 821, is at the mouth of the river Loughor, on the left bank of the river. Loughor consists chiefly of one main street, having the church at the western end of it, on a point jutting into the river. There is a National school. A bridge was thrown across the river Burry in 1833, in lieu of the ancient ferry of Loughor, as a means of communication with Caermarthenshire. Several hands are employed in collieries and copper-works within the borough. Vessels of 200 tons burden can come up to the wharf. There is the shell of an old castle at Loughor, and east of the town are two small Roman camps. The borough is contributory to Swansea in returning a member to the Imperial Parliament. Two annual fairs are held.

The following are some of the more important villages, with the population of the parishes in 1851, and other particulars:—

Aberthaw, on the coast, 13 miles S.W. from Cardiff, is a small village in the parish of Penmark; the population of the entire parish in 1851 was 495. Limestone of a peculiar kind, which immediately hardens on being immersed in water, is raised in considerable quantity here, and is shipped at the port. A vessel plies between Aberthaw and Bristol once a fortnight. The headland named Breaksea Point protects the harbour. *Boverton*, 15 miles S.W. from Cardiff, population included in the parish of Lantwit Major, of which Boverton is a hamlet. Roman coins and other antiquities have been found here. Remains of an ancient castle, one of the chief residences of the Lords of Glamorgan, previous to the reign of Henry III., are still extant at Boverton. *Briton Ferry*, 33 miles W.N.W. from Cardiff: the population in 1841 was 718; in 1851 it was 1737, the great increase being attributed to the increase of trade at the port. Rolling-mills were established here a few years since, with an engine of 300-horse power. Much of the iron produced in the Vale of

Neath is here made into bars. The scenery of this neighbourhood is very fine. *Cadoxton-juxta-Neath*, 36 miles N.W. by W. from Cardiff, population of the parish 7314, is properly a suburb of the borough of Neath. Cadoxton parish church, dedicated to St. Catwg, has a curious monument, containing engraved on sheets of copper, a long pedigree of the family of Williams. *Cheriton*, population of the parish 312, is situated on the peninsula of Gower, near the left bank of the Burry estuary, about 14 miles W. from Swansea. Limestone is quarried in the vicinity, and vessels bringing supplies of coal to the harbour have limestone freights in return. An accumulation of sand however makes the harbour very shallow. *Dowlais*, 23 miles N. by W. from Cardiff, population of the ecclesiastical district, 13,636 in 1851. Besides Dowlais church there are chapels for Welsh Independents, Welsh Baptists, Welsh Calvinistic Methodists, and English Wesleyan Methodists. Connected with the Dowlais iron-works there are 18 blast furnaces, 77 puddling furnaces, and 66 balling furnaces, or 161 in all: the daily consumption of coal in the works is about 1000 tons. Sanitary arrangements were for a long period entirely neglected, both in Dowlais and in Merthyr Tydvil, and the result was an excessive mortality, arising from epidemic diseases. A Local Board of Health for the parish of Merthyr Tydvil, which includes Dowlais, has recently been established. *Kenwig* is a straggling village on the edge of the sand-hills which border the eastern side of Swansea Bay, 26 miles W. by N. from Cardiff. There are a small church and a town-hall of modern date, and near the town the remains of an ancient castle. Kenwig was once of some importance: its downfall dates from a tremendous inundation in the 16th century. Kenwig Pool, nearly 2 miles in circumference, is between the village and the sea. The population of the borough, which is contributory to Swansea, was 433 in 1851. Several British and Roman antiquities have been found in the neighbourhood. *Llantwit-Major* is situated on the coast, 17 miles W.S.W. from Cardiff, population of the parish 1077 in 1851. The church is dedicated to St. Illtyd, the head of a monastery and famous seminary for training young men for the priesthood. The church consists of a nave, aisles, and chancel; it is of considerable size, and of various styles and dates. Adjoining this edifice are the remains of the old church, which has been of much smaller dimensions; between the two churches rises an embattled tower, which contains six bells. The shaft of an ancient cross stands in the church-yard. *Newbridge*, or *Pont-y-Pridd*, 11 miles N.W. by N. from Cardiff, population included in the parishes of Llantwitvairdre and Llanwornno, in which it is situated. Newbridge derives its name from the bridge erected here about a century ago by William Edwards, the celebrated self-educated Welsh bridge-builder. The span of the bridge is 140 feet; it was Edwards's first successful effort at bridge-building. Messrs. Crawshay's iron-works at Treforest, and the chain-cable works of Messrs. Brown and Lenox give extensive employment. Besides two parochial chapels, there are chapels for Welsh Baptists and Independents. Stations of the Taff Valley railway are at Newbridge and Treforest. *Newton*, situated on the coast 23 miles W. by S. from Cardiff, was formerly a well frequented bathing village, but had fallen into decay, when the late Sir John Guest purchased property here, and commenced erecting new houses. The church, which is close to the shore, is a plain strong building. *St. Nicholas*, 6 miles W. by S. from Cardiff, population of the parish 414, is noticeable for several cromlechs and other druidical antiquities, which are found in the neighbourhood. *Oystermouth*, 48 miles W.N.W. from Cardiff, population 1938, was formerly called *Caer Tawy*. The old castle, which is here in ruins, and is now the property of the Duke of Beaufort, has been recently cleared of the rubbish which had accumulated. Oystermouth is a fishing village; at the most active period of the season the oyster fishery employs about 400 men and 70 boats. Factors or middlemen at Swansea purchase the oysters, and supply the dealers in Bristol, Liverpool, London, and other great markets. Limestone is abundant. Oystermouth is much frequented by visitors during summer. *Portcawl*, 24 miles W. by S. from Cardiff, is a small bathing village, possessing a harbour for the shipment of coal and iron which are brought down from the interior by the Llynvi Valley railway. *Southerndown*, 20 miles W.S.W. from Cardiff, population of the hamlet 271, is a small bathing village, a mile E. from which is Dunraven Castle, and about a mile and a half W. are three remarkable caves of considerable extent, which can only be visited with safety at the first ebb of spring tides.

Divisions for Ecclesiastical and Legal Purposes.—The parishes are for the most part in the diocese and archdeaconry of Llandaff; some in the western and north-western parts of the county are in the diocese of St. David's. By the Poor-Law Commissioners Glamorganshire is divided into five Unions, Bridgend and Cowbridge, Cardiff, Merthyr Tydvil, Neath, and Swansea, comprising 162 parishes and townships, with a population in 1851 of 239,571. The county is included in the South Wales circuit. The Lent assizes are held at Swansea, the summer assizes at Cardiff. The county jail is at Cardiff, and there are houses of correction at Cardiff and Swansea. County courts are held at Bridgend, Cardiff, Merthyr Tydvil, Neath, and Swansea. Five members of parliament are returned from Glamorganshire, namely, two for the county, and one for each of the three districts of boroughs.

History, Antiquities, &c.—Glamorganshire was originally included

in the territory of the Silures. [BRITANNIA.] Under the Roman dominion it was included in *Britannia Secunda*. A Roman road, the *Julia Strata*, traversed the county, in nearly its greatest extent, east and west; and several Roman stations are supposed to have been established within its boundaries. At *Caerau*, about 3 miles W. from Cardiff are traces of a Roman camp, in good preservation. The sites of *Bovium*, or *Bomium*, *Nidum*, and *Leucarum*, mentioned by *Antoninus*, have not been definitely fixed. Some vestiges of the *Julia Strata* still remain between *Ewenny* and *Neath*; and there are traces of two cross-roads, one from Cardiff and one from Neath, both leading to *Bannium*, now *Caer Banna*, near *Brecon*. About the close of the 11th century Glamorganshire fell into the hands of the Anglo-Norman barons, for whose warlike activity their sovereigns gladly found exercise by encouraging their efforts for the conquest of Wales. The county became subject to *Robert Fitzhamon*, a Norman knight, who proceeded to parcel it out in lordships among his followers, and, with wise though unusual policy, among the native chieftains who had assisted him, and even among the children of *Jestyn*, who had been his rival. About this period arose the Norman castles, of which there are several remains. *Fitzhamon* himself was raised to the dignity of Earl of Gloucester, and was in favour at the court of *William Rufus*. The Anglo-Normans retained possession of the conquered districts, though they conceded to the natives some immunities from the requirements of the feudal system. The district of Glamorgan passed by his marriage with *Mabel*, heiress of *Fitzhamon*, into the hands of *Robert Earl of Gloucester*, natural son of *Henry I.* Glamorganshire remained united with the other possessions of the earldom of Gloucester. In the troubled reign of *Edward II.* considerable lands in Glamorganshire were granted to his favourite the younger *Despencer*; in consequence of which the county became the scene of violence and confusion. At length the king and his favourite were captured near *Llantrissent*. The heirs of *Despencer* obtained the restoration of his Glamorganshire estates, and had the title of lords of Glamorgan. These estates came by marriage to the Earl of *Warwick*, the 'king-maker,' in the reign of *Henry VI.* and *Edward IV.*, and afterwards, also by marriage, to the Duke of Gloucester, afterwards *Richard III.* In the reign of *Henry VIII.*, when the territory of Glamorgan was made a county, the manors of the former lords of Glamorgan passed into other hands.

Of the middle ages Glamorganshire contains many memorials in its ruined castles and monastic remains. Besides the castles of Cardiff, *Caerphilly*, *Neath*, and *Swansea*, there are several others. *Coity Castle* is about 2 miles north-east of *Bridgend*; the ruins once among the most extensive in South Wales, are now in a very dilapidated condition. Of the castles of *Llanblethian* and *Talavan*, near *Cowbridge*; of *Morlais*, near *Merthyr Tydvil*; of *Penarth* and *Penrice*, in the peninsula of *Gower*; and of *Ogmore Castle*, near the junction of the *Ewenny* and the *Ogmore*, there are remains. *Oystermouth Castle*, a bold and majestic ruin, stands on the shore of *Swansea Bay*, south-west of *Swansea*; the grand gateway is still nearly perfect, and other parts of the building are in good preservation. The remains of *St. Donatt's Castle*, near *Nash Point*, on the coast, are considerable. Part of it is inhabited: it is principally in the perpendicular English style. Of *Marcross Castle*, near *St. Donatt's*, the remains are unimportant. Of *Oxwich Castle* and *Bewper Castle*, castellated mansions of the 16th century, there are some remains. *Penmark* and *Fonmon* castles are near the *Daw*; the first is in ruins: the second has been modernised.

Of the ecclesiastical remains the most conspicuous is *Margam Abbey*, between the *Ogmore* and the *Avon*, south-east of *Neath*. Of the chapter-house, a beautiful polygon of about 50 feet in diameter, the walls remain. Part of the abbey church, which is of Norman architecture, is used as the parish church. In the neighbourhood is a farmhouse called *Egley's Nynydd*, or the nun's church, probably a nunnery dependent on *Margam Abbey*. Of the *Benedictine priory of Ewenny*, at the village of that name near *Bridgend*, the church, an edifice in the Norman style, has been kept in repair and is used as a parish church. There are some remains of the college-house of *Llantwit Neath Abbey* is noticed elsewhere.

In 1647, in the great civil war between *Charles I.* and the Parliament a severe battle was fought at *St. Fagan's*, near *Llandaff*, and was obstinately contested for two hours, when the Royalists were defeated with great slaughter, and their leaders, with what forces remained to them, were compelled to retreat westward into *Caermarthenshire* and *Pembrokeshire*.

Statistics.—In 1852 the county possessed four savings banks, at *Bridgend*, *Caerphilly*, *Cardiff*, and *Swansea*. The amount due to depositors on 20th November 1852 was 179,732*l.* 0*s.* 2*d.* According to the Census of Education taken in 1851 it appears that of 348 schools in the county for which returns are given, 144 were public schools with 14,529 scholars, and 204 were private schools with 5728 scholars. The number of evening schools for adults was 13, with 416 pupils. Of Sunday schools there were 431, of which 121 were supported by Independents, 96 by Calvinistic Methodists, 78 by Baptists, 74 by the Church of England, 39 by Wesleyan Methodists, and 23 by minor bodies. The total number of scholars was 45,563. Of literary and scientific institutions there were 16, with 1405 members, and 21,735 volumes in the libraries under their superintendence.

GLANFORD-BRIGG, or GLANFORD-BRIDGES, or by familiar abbreviation, BRIGG, Lincolnshire, a market-town and the

seat of a Poor-Law Union, in the parish of Wrawby, is situated in 53° 33' N. lat., 0° 27' W. long., distant 24 miles N. by E. from Lincoln, 155 miles N. by W. from London by road, and 184 miles by the Great Northern and Lincolnshire railways. The population of Glanford-Brigg in 1851 was 3097. The living is a perpetual curacy in the archdeaconry and diocese of Lincoln. Glanford-Brigg Poor-Law Union contains 52 parishes and townships, with an area of 145,430 acres, and a population in 1851 of 33,541. The town is advantageously situated near to the Ancholme navigation, by means of which a considerable trade is carried on in corn, coal, and timber. The town possesses a handsome corn-exchange, gas-works, and a new police station. Besides the parochial chapel there are places of worship for Independents, Wesleyan and Primitive Methodists, Quakers, and Roman Catholics. The Free Grammar school, founded in 1674, has an income from endowment of about 250*l.* a year, and had 80 scholars in 1850. There is a savings bank. The market is on Thursday; a yearly fair is held on August 5th.

GLANWORTH. [CORK.]

GLARUS, a canton of Switzerland, is bounded N. by St. Gall, E. and S. by the Grisons, and W. by Schwyz and Uri. Its greatest length is about 32 miles, its greatest breadth about 16 miles: its area is 279 square miles, of which only one-fifth is arable land. It consists mainly of the great valley of the Linth, which river crosses it from south to north, and of the Sernft Thal, or valley of the Sernft, which is an affluent of the Linth. The Linth is subject to sudden inundations, which frequently cause much damage. The impetuosity of the river in its flooded state has deposited on each side of the channel a broad fringe of sand and gravel, which but for want of cohesiveness must long ago have formed a natural embankment, and saved the rest of the valley from the ravages caused by the inundations. There are also small valleys, such as the Klönthal, which open into the two principal ones. The canton is divided on the south from the valley of the Upper Rhine in the Grisons by a chain of the Alps, among which the summits called Dödiberg and Scheibe rise to 9000 or 10,000 feet above the sea. An offset of this chain detaches itself from the Dödiberg, and running northward divides the waters of the Linth from those which flow into the Reuss through the valleys of Uri and Schwyz. To this offset belongs the high and extensive group called Glärnisch (9000 feet above the sea, and covered with perpetual snow), which extends into the canton of Glarus, and rears its head above the town of that name. The general inclination of the surface of the canton is towards the north, to the banks of the Lake of Wallenstadt, and towards the low country between that lake and the Lake of Zürich. Glarus is chiefly a pastoral country. Cows, sheep, and goats are numerous. The green cheese called *schabzieger* is made here, and a great quantity of it is exported. Glarus has also manufactories of printed cottons, muslins, silks, and paper. It imports corn, wine, salt, and colonial produce. Quarries of slate and marble and iron-mines are worked in the mountains of Glarus.

The population of Glarus at the end of March 1850 was 30,197, of whom 3932 were Catholics, and the rest, with the exception of some Jews and a few hundred foreigners, Calvinists. The government is a pure democracy: the *Landsgemeinde*, or general assembly of all males above the age of sixteen, is the sovereign power. It assembles every year, appoints its magistrates, and decides upon the projects of law laid down before it by the *Landrath*, or executive.

The name of Glarus is a corruption of Hilarius, a saint in whose honour a shrine was built among these mountains. The abbey of Seckingen was at one time sovereign of this country, which passed afterwards under the dukes of Austria. In the 14th century it joined its neighbours of the *Waldstätten* in their insurrection; and the battle of Näfels, which the people of Glarus gained over the Austrian forces, insured their independence.

Glarus, the capital of the canton, is a bustling and cheerful town, in a narrow part of the valley, on the left bank of the Linth. It contains 4500 inhabitants, who manufacture cottons, muslins, and woollen cloth; it has also some iron-works, a printing-press, and a number of mills. The parish church, an old gothic building, is used for the service of both Catholics and Protestants. The other public buildings are the town-house, the hospital, and the free school. Glarus returns two members to the National Council of Switzerland.

GLASGOW, Lanarkshire, Scotland, a city, a royal and parliamentary burgh, market-town, and port, is situated on the river Clyde, about 20 miles from its mouth, in 55° 52' N. lat., 4° 16' W. long.; distant 43 miles W. by S. from Edinburgh by road, and 48 miles by railway; 396 miles N. by W. from London by road, and 404 miles by railway. The population of the city and suburbs in 1801 was 77,385; in 1821 it was 127,043; in 1841 it was 274,324; in 1851 it had increased to 358,952. In 1851 the population within the municipal boundary was 148,116; within the parliamentary city it was 329,097. The city is governed by a town council, consisting of 48 councillors elected by the constituency, a dean of guild elected by the Merchants House, and a deacon convener elected by the Trades House. The council thus constituted elect 8 bailies and a lord provost. The city returns two members to the Imperial Parliament.

The burgh, properly so called, is situated exclusively on the north side of the river. It has now spread its municipal and police jurisdiction over the burgh of Gorbals and the districts of Hutchesontown

and Kingston on the south side of the river, and over the burgh of Anderston on the west, Blythwood and Port Dundas on the west and north, and the burgh of Calton on the east.

Gorbals has been designated the Southwark of Glasgow, occupying a position with respect to that city similar to that which Southwark occupies with respect to London. Gorbals was formerly a burgh of barony, with a separate corporation, police, &c. It has increased with the growing prosperity of Glasgow. The wide fields on the south side of the river were gradually laid out and built upon, and the population of Gorbals is now 61,482. *Hutchesontown* is the name given to the eastern portion of Gorbals, from its having been built on that part of the old barony which belonged to Hutcheson's Hospital, as *Tradeston* is the name given to the western part of the same barony which belonged to the Trades House of Glasgow. *Kingston* is the extreme and more modern western district of Gorbals. The houses of the original village at the end of the bridge have been to a great extent replaced by new and substantial buildings. *Anderston*, which lies west of Glasgow, on the right bank of the Clyde, was made a burgh of barony in 1824. For a century before it had been first a country village, and then a suburb of Glasgow. *Blythwood* is the name of an extensive district lying north of Anderston and the road which formerly connected that village with Glasgow, west of Buchanan-street and south-west of Port Dundas. It has risen into existence since the commencement of the present century, and is now the fashionable or west end of the city, being nearly covered with the houses of the wealthier citizens. *Port Dundas*, on the northern boundary of the city, is composed of an assemblage of dwellings, offices, granaries, storehouses, &c., surrounding the basins of the Forth and Clyde and Monkland canals. *Calton*, formed out of the old villages of High and Low Calton, was made a burgh of barony in 1817. The district of the burgh is the low ground east of Glasgow, which is almost exclusively occupied by a population engaged in manufactures. Adjoining Calton are two other populous suburbs called Bridgeton and Camlachie, both chiefly inhabited by hand-loom weavers. All municipal and police jurisdiction is now by virtue of general municipal and police statutes vested in the town council and police board of the city of Glasgow.

Site, Aspect, &c.—On the southern side of the river, on which stand Hutchesontown, Gorbals, Tradeston, and Kingston, the land is almost entirely flat; on the north it gradually rises to the cathedral on the east, and on the west forms a series of gentle elevations on which Blythwood is built. Northward of the river a narrow belt or plain seems to have been at a remote period covered with water. In 1780 workmen digging a foundation for St. Enoch's church (a few hundred feet northward of the Clyde), found an ancient canoe at the depth of 25 feet from the surface. In 1781 a canoe was found, when digging a foundation in the Trongate; and in 1825, in digging a sewer at the head of Saltmarket, another canoe was found, at a distance of a quarter of a mile from the river, and 20 feet above high-water mark. An ancient canoe has also been discovered on the south side of the river. From these circumstances it has been supposed that the estuary of the Clyde once extended to the base of the hill on which the cathedral now stands.

In its extreme limits the city extends about 3 miles from east to west, and about 2 miles from north to south. The germ of the city was in the line of street leading southward from the cathedral to the river, by way of the High-street and the Saltmarket. In and contiguous to this line are the oldest buildings. The point of junction between the Saltmarket and High-street may be taken as the centre of the city, whence proceeds eastward the long street of Gallowgate, and westward the Trongate, which is continued by Argyle-street to the western extremity of the city. Southward of Argyle-street runs Clyde-street, in which there is a custom-house, and the Broomie-law, the street along the harbour. Eastward of the original High-street, or Old Town, the streets are invariably of an humble character.

On the left bank of the Clyde are numerous streets, branching out from the river side, and extending into the open country; other streets cross these nearly at right angles. The streets are wide and the houses substantial, and in many places elegant. On the right bank the quadrangle bounded by George-street and George-square on the north, Candleriggs-street on the east, Hope-street on the west, and the Trongate and Argyle-street on the south, contains within it a large proportion of the best buildings and of the most important commercial establishments of Glasgow. Ingram-street, stretching across part of this quadrangle from east to west, with the Exchange terminating the vista at its western end, has a very fine architectural effect. George-square, with its lofty Doric column surmounted by a statue of Sir Walter Scott, its bronze statue of Sir John Moore, by Flaxman, and its bronze statue of James Watt, by Chantrey, is a noble quadrangle. The houses of Glasgow are built of stone. The St. Rollox chimney of the vast chemical establishment of that name forms a very prominent object in approaching the city.

Civil History.—It is said that the Romans had a station on the site now occupied by the city, but its origin is generally attributed to St. Kentigern, or St. Mungo, who established a bishopric here in A.D. 560. Glasgow continued to be little else than a religious establishment until 1174-80, when by a charter of William the Lion, it

became a free burgh of barony. Soon after the Norman conquest the see was refounded, and the cathedral or church rebuilt. In the succeeding centuries the power and influence of the bishops were very great. A battle between Wallace and Percy in the streets of Glasgow in 1300; the destruction of the spire of the cathedral by lightning in 1387; the rebuilding of the great tower in 1408; and the raising of the see of Glasgow into an archbishopric about the end of the same century—are among the more important events in the history of Glasgow before the time of the Reformation. At the Reformation the cathedral was saved by the courage of the citizens, who assembled in the 'Burgher Guard,' to prevent its destruction. Down to the middle of the 16th century the town contained only about 1500 inhabitants, but after the founding of the university, which took place about that period, the population steadily increased in number. The citizens gained municipal power by slow steps. Previous to the reign of James I. of Scotland, the town was a burgh of barony. In 1450 William Turnbull, then bishop of Glasgow, obtained a charter, erecting the burgh and barony of Glasgow into a regality. In 1611 a charter was granted by James VI. to the magistrates, council, and community; and in 1636 Charles I., by royal grant, incorporated them into a free burgh, by which the city was placed in the rank of a royal burgh. These charters relate to the ancient royalty. The last charter granted to the city is that of William and Mary, dated the 4th of January 1690, and confirmed by Parliament the 14th of June following.

At Glasgow the meeting of the ecclesiastical Synod of 1688 was held, at which the Scottish clergy refused to accept the Liturgy sent to them by Laud, and commenced the eventful struggle between the Government and the Covenanters. A little later in the history a fire occurred, which consumed almost the whole of the city. After this event some improvement took place in the appearance of the city, for the former wooden houses and narrow streets were replaced by stone buildings and wide thoroughfares. The modern history of Glasgow is however to be traced from the period of the union of the two kingdoms, for it was about that time that the commercial enterprises of the citizens began to assume a national importance.

Cathedra, Churches, &c.—The cathedral, more commonly designated the High Church, occupies a commanding position in the north-east part of the city. The streets leading up to it furnish a gradual ascent to the spot on which it is built. From around this venerable structure nearly everything is gone that tells of past ages. Its site is about 100 feet above the level of the Clyde. The greatest internal length of the building is about 320 feet; the breadth 63 feet; the height of the nave is 85 feet, and of the choir 90 feet. It is supported by 147 pillars, and is lighted by 167 windows; many of which, in the decorated style of pointed architecture, are of great beauty. From the centre of the roof rises a beautiful tower, the spire of which has an altitude of 225 feet. Glasgow Cathedral is the only existing specimen of a cathedral still used, and in good condition, in Scotland, excepting that of Kirkwall, in the Orkneys. One of the most interesting portions of it is the crypt, which is beneath the choir. The length is 108 feet, the breadth is 72 feet: it is supported by 65 short pillars, many of which measure as much in circumference as in height—namely, 18 feet, and these pillars support low arches. A dim light enters in from about 40 small windows. Mr. Rickman thinks that this crypt "is not equalled by any other in the kingdom." During the last few years the cathedral has been judiciously restored in many parts; but much still remains to be done to obliterate the traces of violence and neglect.

The other churches of the city, with one exception, are not old enough to be venerable, and too much like other modern churches to claim any particular attention. The Barony Church, situated near the cathedral, and built to accommodate the congregation which before occupied the crypt, is a tasteless affair. The larger among the modern churches, such as St. Andrew's, St. Paul's, St. George's, St. John's, St. Enoch's, &c., are for the most part neat structures. The steeple of the Tron Church, or, as it is often called, the Laigh, or Low Kirk, in contradistinction to the cathedral, or High Kirk, is one of the most conspicuous objects in the Trongate. It was burnt down by accident, and immediately rebuilt, about fifty years ago. The Roman Catholic chapel, on the right bank of the Clyde, is a large and fine modern edifice. Several of the places of worship erected during the last few years by the Free Church and the United Presbyterian Church are very handsome as well as commodious structures. According to the Census of Religious Worship and Education, taken in 1851, it appears that there were then in the parishes which contain the parliamentary city 189 places of worship, of which 29 belonged to the Established Church, 27 to the Free Church, 20 to United Presbyterians, 11 to Independents, 8 to Roman Catholics, 7 to Baptists, 6 to Episcopals, and 31 to minor bodies. The number of sittings provided in 129 places of worship for which returns were procured was 100,574.

University.—About 1450 an application was made to the Pope for a bull to establish a University; and eight years afterwards a member of the house of Hamilton bequeathed four acres of ground and some houses to aid in this object. In 1577 a new and valuable charter was obtained from James VI., new estates were granted by the crown, and at various subsequent periods bequests were made to the University by private individuals, so that the institution gradually acquired a position of considerable importance. In 1698 a new disposition of

the revenues of the University laid the foundation of that prosperity by which its career has since that time been characterised.

The buildings belonging to the University have grown to their present importance by degrees: they occupy a large area of ground near the upper end of the High-street. The buildings comprise five quadrangles, bounded by the various rooms and offices belonging to the institution. The hall, the class-rooms, the library, the museum, and the houses of the professors occupy a large extent of ground. The library was founded almost as early as the University itself, and now contains a valuable collection of 60,000 or 70,000 volumes. The Hunterian Museum originated with Dr. William Hunter, a well-known Scottish physician, and brother to the celebrated John Hunter, who in the year 1781 bequeathed to the University a collection of books, coins, paintings, and anatomical preparations, valued at 60,000*l.* He also gave 8000*l.* for the erection of a building to contain the treasures. Many additions have been since made. On the upper floor of the museum building is an octagonal saloon with four recesses, occupied with minerals, books, shells, Hindoo paintings, illuminated breviaries of the 11th and subsequent centuries, early printed books by Caxton, and other curiosities. The museum contains statues and busts of Watt, by Chantrey; of Gavin Hamilton, by Hewetson; and of Thomas Campbell, by Baily. The collection of autographs is curious. On the ground-floor is a collection of minerals, fossils, coins, stuffed animals, &c. Beneath is the anatomical museum, the most valuable part of the collection, and the one to which Hunter had directed his chief attention.

The University consists in effect of two corporate bodies or establishments, one within another—the University and the College. The first is vested with the power of granting degrees; the second is an educational establishment. The University, as a separate body, consists of a chancellor, a lord-rector, a dean, a principal, the professors, and lecturers. The office of chancellor is wholly an honorary one, the only duty performed by him is to confer degrees on persons found qualified by the senate. The lord-rector is an officer of much more active powers; he is the guardian of the statutes, privileges, and discipline of the University; and, according to the charter, his jurisdiction over the members is so extensive as to authorise him to inflict capital punishment; he is elected annually by the dean, principal, professors, and matriculated students. These students are classed into four nations, called respectively, 'Natio Gtottiana sive Clydesdalie,' 'Natio Albanie,' 'Natio Loudoniana sive Thevidalie,' and 'Natio Rothseiana.' Each 'Natio' consists of the students who were born in a particular part of the country, strictly defined in the books of the University. In voting for a lord-rector each nation first decides among its own body, and the majority then constitutes one vote in a second election; if in this second election the four votes are equally divided, the former lord-rector has the casting vote. This office has become a test of political party in the University. The Principal superintends in person the whole internal arrangements of the University. The Professors are classed into the Faculties of Arts, Theology, Law, and Medicine; they comprise 'College' Professors, whose office is of ancient standing, and constitutes them members of the Faculty; and 'Regius' Professors, whose office has been more recently founded and endowed by the crown, and constitutes them members of the Senate. The Faculty has the management of the estates and revenues of the University; the Senate superintends all other matters. There are 22 professors, who are paid partly by salary, and partly by fees from students. The students are divided into 'togati' and 'non-togati.' The 'togati' wear a scarlet gown, and are required to attend the College chapel on Sundays; the 'non-togati' are restricted neither in their dress nor in their attendance on worship. The botanic garden, which is connected with the botanical class in the University, and the observatory connected with the astronomical class, have been removed outside the city on the west. The position of the new observatory is a very fine one, commanding an extensive view; and the new botanic garden is in its immediate vicinity. The University session commences on the last Wednesday in October, and closes on the 1st of May. The number of graduates in 1851-52 was 65. In 1852-53 the number of graduates was 60; of these 27 graduated M.D., 11 A.M., and 13 A.B. The others were:—Masters in Surgery, 6; Doctors in Divinity, 2; and Doctor of Laws, 1.

Schools, &c.—Glasgow is well supplied with educational establishments of a high character besides the University. The High school, or Grammar school, owes its origin to a date even more remote than the University. The present building is situated in Montrose-street. The Andersonian institution or university was founded by Mr. John Anderson, who was Professor of Natural Philosophy in the University of Glasgow in 1795. The object was chiefly the promotion of physical science; the citizens of Glasgow generally have control over the institution. Class-rooms, a lecture-room, a library, a museum, and a collection of apparatus are provided. The buildings are situated in George-street. In 1851 there were in all 18 literary and scientific institutions in Glasgow, with an aggregate membership, so far as ascertained, of about 8100. The aggregate number of volumes in the libraries attached to these institutions was about 48,000. Adherents of the Free Church have built a large and handsome Grammar school at the west end, and there are numerous other public

and proprietary schools. The Established Church and the Free Church have each a Normal school.

Buildings.—Glasgow contains the usual municipal public buildings. In 1814 the old Tolbooth, or jail, was taken down, and the new buildings containing offices for the various departments of municipal business were erected at the foot of the Saltmarket. The steeple or tower of the Tolbooth, with its oddly-shaped square battlements and pyramidal pinnacles, is however still left on the old site at the corner of Trongate and High-street. The new buildings have a façade and portico modelled after the Parthenon at Athens. With the increase of the city business the accommodation here was found to be too limited, and larger buildings were constructed in Wilson-street for the municipal business; the structure in the Saltmarket being now appropriated as the Supreme Criminal Court, or, as it is called, Justiciary Court, and local court-houses. The police buildings are extensive and substantial. The city and county bridewell, one of the largest public buildings in Glasgow, is situated between the college and the cathedral, and consists of a group of buildings in a sort of Norman style, comprising a rotunda and four radiating wings. The system adopted here provides for the maintenance of the prisoners in part from the produce of their own industry while in prison.

The charitable institutions of Glasgow are of considerable importance. A lunatic asylum at the northern end of the city was erected about 1810. The building consists of an octagonal centre, whence spring four wings of three stories each; and over the octagon is a fine dome. The city having extended itself to the immediate vicinity of the asylum, the municipal authorities purchased the building for the Town Hospital, or 'Poor's House,' and a new lunatic asylum was built about three miles west from Glasgow. The new asylum has accommodation for upwards of 500 patients. The Asylum for the Blind, situated near the cathedral, is admirably managed. Baskets, mats, twine, mattresses, rugs, sacks, netting, and various other articles are made by the inmates, and are sold to assist in providing funds for the institution. The House of Refuge, situated in the eastern part of the town, is a receptacle for juvenile offenders. The Royal Infirmary, occupying part of the site of the old Bishop's Palace, is an elegant structure; the institution has been of much benefit to the community. Hutcheson's Hospital was founded by two brothers, merchants of Glasgow, about a century ago. The revenues are applied to the support of a number of old men and women, and to the clothing and educating of the sons of decayed citizens. Among many other benevolent societies we may name the Sick Hospital, the Deaf and Dumb Asylum, and the Highland Society of Glasgow.

The Commercial Exchange is a very handsome building. The fine portico in Queen-street has over it a handsome lantern-tower, and in front is a bronze equestrian statue of the Duke of Wellington. The great room of the Exchange is 130 feet long, 60 feet wide, and 30 feet high. The whole structure is in the Corinthian style. The portico at the east front is octostyle, and three columns in depth, giving it a very noble character. The building is placed in the midst of a fine open area, lined on the north and south with uniform ranges of stone buildings, occupied as ware-rooms, offices, and shops. Two Doric arches, between which is placed the Royal Bank of Scotland, give access to this area from Buchanan-street. The buildings occupied by the various banking companies in Glasgow are in general very handsome and ornamental structures, situated in the principal streets. The market-places are commodious rather than ornamental. Some of the shops in Trongate, Argyle, Queen, and Buchanan streets rival the first-class London shops. In the north-west part of Glasgow is the 'Cleland Testimonial,' a group of houses erected by subscription, and presented to the family of Dr. Cleland to be possessed by them as an heir-loom. Dr. Cleland was one of the most active men in Glasgow during the present century in promoting the moral and material welfare of the city. The Western Club and the Union Club have handsome stone buildings for their club-houses.

Commerce.—Scarcely anything is known of the commerce or industry of Glasgow till the middle of the 16th century, when small vessels were engaged in the transport of salmon to England and France. In 1651 it is said that, "With the exception of the colligions [collegians], all the inhabitants are traders; some to Ireland with small smiddy-coals in open boats, from 4 to 10 tons, from whence they bring hoops, rungs, barrel-staves, meal, oats, and butter; some to France, with plaiding, coals, and herrings, from which the return is salt, pepper, raisins, and prunes; some to Norway for timber."

The Union was violently opposed here as well as elsewhere in Scotland; but an advantage followed which the people had not anticipated in the trade with the British colonies, not previously open to them. A Glasgow vessel of 60 tons first crossed the Atlantic in 1718. The trade in tobacco became gradually so large that the English merchants took alarm. So vast did the trade become, that in 1772 it was estimated that "out of 90,000 hogheads of tobacco imported into Britain, Glasgow alone imported 49,000." About the year 1770, when the tobacco trade had enriched Glasgow, the houses, the furniture, and the style of living were improved; wheel-carriages were set up; a theatre and an assembly-room were built; and wooden tenements with thatched roofs were replaced by stone mansions. The American revolution gave an irreparable blow to the tobacco trade; but the invention of the steam-engine and its application to the manufacture

of cotton excited the capitalists to increased vigour. If the Clyde had been deeper Glasgow might have had a great shipping trade at an early period, but the shallowness of the river below Glasgow caused Greenock to be made an emporium of trade in preference to Glasgow. As early as 1556 there was an agreement by the inhabitants of Glasgow Renfrew, and Dumbarton, to labour on the river for six weeks alternately to improve the communication. Glasgow had its shipping port in Ayrshire till 1662, when the Glasgow merchants purchased thirteen acres of ground a little above Greenock, and formed a town and harbour to which they gave the name of Port Glasgow. Having received the advice of Smeaton and other engineers, the people of Glasgow constructed in 1775 upwards of 100 jetties at different parts of the river, whereby the effective width was lessened, the rapidity of the stream increased, and the bottom scoured out to a greater depth. The quay which had formed the 'Broomielaw,' or harbour, was lengthened in 1792 by 360 feet, and in 1811 by 900 feet. Still Glasgow could only receive small vessels of 45 tons up to the beginning of the present century. But the trustees of the river kept steadily in view the improvement of the harbour, and the result has been very remarkable. By deepening year after year, the bed of the river had been so far changed, that by the year 1821 vessels drawing 13 feet of water could come up to the Broomielaw. By 1841 the quay space had reached a length of 3340 feet on the north shore, and 1200 feet on the south shore. At present the depth to the bridge has reached 18 feet at high water, and the quay offers a frontage of upwards of 10,000 feet. Loaded vessels of 1000 tons and steamers of 2000 tons can now occupy the harbour. From Glasgow to Dumbarton the bed and banks of the river are as carefully prepared as in a ship-canal. For the first seven miles of this distance the sloping banks are formed artificially of blocks or slabs of whinstone. There are no docks; and for the first mile or two below the bridge the shipping are moored so closely as to leave room only for a passage up and down; and there are times when the vessels are ranged nine tiers in depth off both south and north quays.

The vast increase in the trade of the harbour of Glasgow will be seen by a statement of the registered vessels belonging to the port, the customs duties, and the revenue of the harbour itself at different periods. The registered vessels in 1820 were 85, tonnage 6604; in 1830, 233, tonnage 40,978; in 1840, 351, tonnage 71,878; in 1850, 512, tonnage 140,741. The number and tonnage of vessels registered as belonging to the port on December 31st 1853 were:—Sailing-vessels, under 50 tons, 78, tonnage 2744; above 50 tons, 382, tonnage 152,528; steam-vessels, under 50 tons, 17, tonnage 610; above 50 tons, 91, tonnage 26,963. The number and tonnage of vessels entered and cleared at the port during the year 1853 were as follows:—Coastwise, inwards, 1435 sailing-vessels, tonnage 134,411; steamers, 1474, tonnage 351,129; outwards, 2940 sailing-vessels, tonnage 191,275; steamers, 1501, tonnage 358,336; colonial, inwards, 124 British vessels, tonnage 32,710; foreign vessels, 9, tonnage 3496; outwards, 327 British vessels, tonnage 115,388; foreign vessels, 5, tonnage 1433. In the foreign trade 275 British vessels of 51,522 tons, and 179 foreign vessels of 44,142 tons, were entered inwards; and 467 British vessels of 96,035 tons, with 244 foreign vessels of 63,269 tons, cleared outwards. The steam-vessels engaged in the foreign trade were:—Inwards, 6 British of 6912 tons; outwards, 11 British, tonnage 7577. The customs duties collected in the port were—11,000*l.* in 1820; 59,013*l.* 17*s.* 3*d.* in 1830; 463,974*l.* 12*s.* 2*d.* in 1840; 645,869*l.* 11*s.* 11*d.* in 1850; and 675,044*l.* 15*s.* 10*d.* in 1851. The revenue received by the river trustees was—in 1820, 6328*l.* 18*s.* 10*d.*; in 1830, 20,296*l.* 18*s.* 6*d.*; in 1840, 46,481*l.* 1*s.* 9*d.*; in 1850, 64,243*l.* 14*s.* 11*d.* Three bridges cross the Clyde at Glasgow—the Glasgow, Victoria, and Hutcheson bridges. The Broomielaw, or Glasgow Bridge, constructed by Telford in 1838, is to be regarded as the principal one on account of its fine proportions and construction, and of its contiguity to the harbour, it being the lowest bridge on the Clyde. Victoria Bridge is a handsome new granite bridge erected to replace the Stockwell Bridge, which dated from the 14th century. Hutcheson Bridge is a plain structure in a line with the Saltmarket.

Of the industrial occupations which give life and wealth to Glasgow, ships and steam-engines, iron and coal, are the chief elements. It was not until iron vessels came into use that any considerable number of ships were built at Glasgow. Steam-vessels of the largest and most costly description are now made in Glasgow in large numbers. Marine steam-engines are also very extensively made. The district which borders on Glasgow on the east and south-east is rich in iron-ore, which is so nearly associated with the coal, and lime, and clay, necessary for its smelting, as to be more than usually profitable. In 1809 there were only 7000 tons of iron produced in the whole county of Lanark; the quantity of pig-iron now sold annually in Glasgow exceeds 600,000 tons. With the exception of immense works in the southern suburbs, nearly all the great iron-works are at some distance from Glasgow; but almost the entire produce of the county is sent to Glasgow for sale or shipment. Coal is an important element in the commercial activity of Glasgow. The same districts which are so rich in iron are for the most part well supplied also with coal.

Glasgow is the commercial centre for the cotton manufactures of Scotland. Down to the period of the Union, linens and woollens were made for domestic use by the spinning-wheel or hand-loom;

but when the spinning of cotton became an important branch of manufacture in England, the capitalists of Glasgow lost no time in embarking in the enterprise. The first steam-engine employed at a Glasgow cotton-work was put up in 1792. Glasgow is now surrounded by more than a hundred cotton factories. It is calculated that there are 25,000 power-looms belonging to the city producing daily 650,000 yards of cloth. Some of the establishments are spinning factories only; some are weaving factories only; some combine both; while there are a few which print also. The calico-printing establishments are of a very high order. The use of bleaching-powder, and the Turkey red dye, were first introduced at Glasgow. Carpet weaving, silk weaving, the shawl manufacture, woollen and worsted manufactures, rope and sail-making, &c. are extensively carried on. There are also large glass, porcelain, iron and other works in the town and its immediate vicinity.

The St. Rollox Chemical Works are the most extensive chemical establishments in the world. The buildings occupy an immense square, from which shoot up numerous chimneys. Many of these chimneys are equal to the largest in other towns; but none of them approach the immense chimney already mentioned.

Gas was introduced into Glasgow in 1817. It is now generally used in factories, shops, and dwelling-houses. There are two water companies, which supply an average of 27 gallons daily to each inhabitant. The assessment for the poor of the old burgh in the end of last century was about 1000*l.*; it is now nearly 50,000*l.* annually; for the whole modern city it is 80,000*l.*

The Green of Glasgow covers an area of 140 acres, extending along the right bank of the Clyde, above the bridges for more than a mile, without a single building. It was laid out and greatly improved about 30 years ago, and 2½ miles of good carriage-road were formed around it. The Green was once the resort of the wealthy and fashionable; but the westward march of the city has now left it pretty much to the humbler classes of society.

The Necropolis is situated immediately behind the east end of the cathedral, from which it is separated by a narrow rivulet called the Molendinar Burn, running along the bottom of a tolerably deep ravine. The ground of which the Necropolis is formed rises 300 feet above the burn, and is laid out and planted up to the summit, from which the view of the city is very commanding. A monument has been erected here to the memory of John Knox.

Communications, &c.—Besides the small steamers which run up and down the Clyde between Glasgow and the various river-side towns on the coasts of Argyshire and Ayrshire, Loch Long, Loch Fyne, and the Gareloch, there are splendid vessels which trade regularly to the leading ports of England and Ireland. With every part of England and Scotland Glasgow is brought into direct communication by numerous railways; the Union Canal passes the northern, the Paisley and Johnstone Canal the southern boundary of the city. The ships of the Clyde find their way to every part of the world.

(*New Statistical Account of Scotland*; Cleland, *Enumeration of Glasgow*; McUre and Gibson, *Histories of Glasgow*; *Glasgow Guides*; *Land We Live In*, vol. ii.; *Communications from Glasgow*; *Parliamentary Papers*.)

GLASTONBURY, Somersetshire, a market-town and municipal borough in the parish of Glastonbury, is situated in 51° 8' N. lat., 2° 42' W. long.; distant 24 miles S.W. from Bath, and 124 miles W.S.W. from London by road. The population of the town and parish of Glastonbury in 1851 was 3125. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The livings of St. John and St. Benedict are perpetual curacies in the archdeaconry of Wells and diocese of Bath and Wells.

The town of Glastonbury stands on an eminence which is nearly insulated by marshy flats. A monastery or abbey was established here at an early period. Upon the settlement of the Saxons, the spot obtained the designation *Glaestingbyrig*. The monastery, which had fallen into decay, was rebuilt with great splendour by Ina, king of Wessex (about A.D. 708), and the establishment, enriched by the liberality of successive princes, flourished till the period of the Danish incursions, in the time of Ethelred I. and Alfred the Great. Under the abbacy of the famous Dunstan, and by the munificence of the Anglo-Saxon kings, Edmund I. and Edgar, it regained its former prosperity, and was conformed to the rule of the Benedictines. At the Conquest, the abbot of Glastonbury was a personage of importance in the Anglo-Saxon state; but the jealousy of William, who deposed the abbot and substituted a Norman in his room, and stripped the abbey of many of its lands, depressed the establishment for a while. It was however restored by the carefulness and influence of subsequent abbots. The buildings were in great part rebuilt in the reigns of Stephen and Henry II., and were subsequently repaired or enlarged. It became soon after this time a mitred abbey, and was for a short period annexed to the bishopric of Wells, which was during this interval called the bishopric of Glastonbury. At the time of the suppression, Richard Whiting, the abbot, who resisted the measures of Henry VIII., was, upon a charge of denying the king's supremacy, tried, and hanged on the adjacent eminence of the Tor Hill, in 1539. The yearly revenue at the dissolution was 3508*l.* 13*s.* 4*d.* gross, or 3311*l.* 7*s.* 4*d.* clear. The reputation of Glastonbury for sanctity did not cease at the Reformation. As late as 1750 and 1761,

crowds of invalids, to the number in one month (May, 1751) of ten thousand, flocked to Glastonbury in consequence of the account of a wonderful cure wrought by drinking the water of a spring near the town. We are not told how long the delusion lasted.

The town consists of several streets; four of these inclose a quadrangular space, in which are the ruins of the abbey; from the corners of this quadrangle other streets extend. The houses are generally low, and many of them have been built with stones taken from the ruins of the abbey. The remains of this splendid structure consist of some fragments of the church, the chapel of St. Joseph of Arimathea, and what is called the abbot's kitchen. The ruins of the church, which was cruciform, consist of two of the pillars which supported the central tower, some portions of the walls of the choir, and a fragment of the wall of the nave. The architecture belongs to the period of transition from the Norman to early English, with some portions of later date. The whole length of the church was 380 feet, the breadth of the choir and its aisles 70 feet. St. Joseph's chapel is in better preservation than the church, at the west end of which it is placed, and with which it communicates by an ante-chapel, of somewhat later date; both however belong to the same transition period as the church, but are of a more enriched character. St. Joseph's chapel is one of the very finest specimens existing of this transition style. The length of the chapel and ante-chapel together is 110 feet, the breadth 25 feet. The abbot's kitchen is a small building of the late perpendicular period. The roof is surmounted by a double lantern. Glastonbury has two pariah churches, both elegant structures in the perpendicular style, with graceful towers. The market cross is ancient. The only municipal building of importance is the town-hall. On a hill near the town is what is called the 'Tor,' a tower, which is the only portion remaining of a chapel dedicated to St. Benedict. It is of the decorated style, of beautiful though simple composition, and very perfect in its details. There are places of worship for Independents, Baptists, Wesleyan Methodists, and Quakers. The silk manufacture is carried on to a small extent in Glastonbury, and some hosiery and coarse gloves are made. A canal connects the town with the Bristol Channel by the river Bure, and affords facilities for the export of agricultural produce, timber, slates, tiles, &c. The market is on Saturday; fairs are held on the Wednesday in Easter week, September 19th, October 10th, and on the Monday week after November 30th.

GLATZ. [SILESIA.]

GLAUCHA. [HALLE.]

GLENARM. [ANTRIM.]

GLENCOE. [ARGYLESIRE.]

GLENDALE, a ward in the northern part of the county of Northumberland, which has been constituted a Poor-Law Union. Glendale Ward (East and West Divisions) contains 9 parishes, with an area of 109,816 acres, and a population in 1851 of 12,522. Glendale Poor-Law Union, the bounds of which are more extensive than those of the Ward, contains 45 parishes and townships, with an area of 143,605 acres, and a population in 1851 of 14,348.

GLENDALOUGH. [WICKLOW.]

GLENELG, RIVER. [AUSTRALIA.]

GLENNAMADDY, Galway county, Ireland, a village, and the seat of a Poor-Law Union in the parish of Boyounagh, is situated in 53° 36' N. lat., 8° 35' W. long., distant about 80 miles N.E. from Galway, and 126 miles W. by N. from Dublin. The population of the village in 1851 was 160. Glennamaddy Poor-Law Union comprises 18 electoral divisions, with an area of 100,319 acres, and a population in 1851 of 23,722. The village is situated in a wild uncultivated district, and possesses nothing of general interest. A dispensary is maintained in connection with the Poor-Law Union.

GLENTIES, Donegal county, Ireland, a small town and the seat of a Poor-Law Union in the parish of Inniskeel, is situated in a glen in the midst of a wild mountainous country, in 54° 47' N. lat., 8° 17' W. long., distant about 14 miles N.W. by N. from Donegal, and 160 miles N.W. from Dublin. The population of the town in 1851 was 506, exclusive of 279 in the workhouse. Glenties Poor-Law Union comprises 27 electoral divisions, with an area of 257,434 acres, and a population in 1851 of 40,103. The town has been considerably improved during the last few years by the Marquis of Conyngham, of whose domains the district forms a part. It consists chiefly of one street. A chapel has been recently built. There are here a National school, a sessions house, a police barrack, a corn-mill, and a corn-store for the district.

GLIN, Limerick county, Ireland, a market-town and sea-port, and the seat of a Poor-Law Union, in the parish of Kilfergus, is situated on the left bank of the estuary of the Shannon, in 52° 33' N. lat., 9° 18' W. long., distant 31 miles W. by S. from Limerick, and 150½ miles W.S.W. from Dublin. The population of the town in 1851 was 1243. Glin Poor-Law Union comprises 13 electoral divisions, with an area of 60,666 acres, and a population in 1851 of 17,634.

Glin possesses a good trade in butter and grain, for which there is a market in the town. There are here an Episcopal church and a Roman Catholic chapel. Glin Castle was besieged and taken by Sir George Carew in 1600, when most of the garrison were put to the sword. The remains of the ancient castle are in a dilapidated state.

The present Glin Castle, the residence of Fitzgerald, the 'Knight of Glin,' is about a mile west from the town.

(Fraser, *Handbook for Ireland*; Thom, *Irish Almanac*.)

GLOGAU. [LIEGNITE.]

GLOMMEN. [NORWAY.]

GLOSSOP, Derbyshire, a manufacturing town and the seat of a Poor-Law Union in the parish of Glossop, is situated on elevated ground rising from a deep valley near the north-western boundary of the county, in 53° 26' N. lat., 1° 55' W. long.; distant 49 miles N.W. by N. from Derby, 176 miles N.W. by N. from London by road, and 193 miles by the Great Northern and Manchester Sheffield and Lincolnshire railways. The population of the township of Glossop in 1851 was 5467; that of the entire parish, which contains 49,960 acres, and is the most extensive in the county, and one of the most extensive in England, was 28,626. The living is a vicarage in the archdeaconry of Derby and diocese of Lichfield. Glossop Poor-Law Union contains 10 townships and hamlets, forming a part of Glossop parish, with an area of 20,807 acres and a population in 1851 of 19,580.

The cotton manufacture, which is carried on more extensively in Glossop than in any other Derbyshire town, gives employment to many of the inhabitants. About 50 cotton-mills are in the town and neighbourhood; there are also woollen-mills, paper-mills, iron-foundries, dye-works, and bleach-fields. Besides the parish church, there are chapels for Independents and other Dissenters. A charity for clothing 24 poor men and women was founded by Joseph Hague, Esq. There is a savings bank. Melandra Castle, situated on an eminence near the town, is the site of a Roman station; the works appear to have been nearly square, 366 feet by 336 feet; the ramparts, parts of the ditch, and other portions may be distinguished. A Roman road called the Doctor's Gate runs from Melandra Castle to Brough.

GLOUCESTER, the capital of the county of Gloucester, an episcopal city, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on a gentle eminence on the left bank of the river Severn, in 51° 52' N. lat., 2° 14' W. long., distant 102 miles W. by N. from London by road, and 114 miles by the Great Western railway. The population of the city and parliamentary borough of Gloucester in 1851 was 17,572. Gloucester is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Gloucester and diocese of Gloucester and Bristol. Gloucester Poor-Law Union contains 37 parishes and townships, with an area of 29,255 acres, and a population in 1851 of 31,654.

The origin of this city is generally attributed to the Britons, by whom it was called 'Caer Gloew.' Shortly after the invasion of the country under Claudius, A.D. 44, the city became subjected to the Romans, who established a colony here as a check upon the Silures, or inhabitants of South Wales, and called it Colonia Glevum. Numerous Roman antiquities, including some fine specimens of tessellated pavement, and a statera, or Roman steelyard, have been discovered at various times, particularly in the suburb of King's Holm, which is supposed to have been the site of the Roman settlement. Several Roman roads passed through or near Gloucester. The city surrendered to the West Saxons about 577, and by them was called 'Gleau-Ceaster,' whence its present name is derived. About 680, Wuipher, son of King Penda, founded the monastery of St. Peter, and so far improved the city, that at the commencement of the 8th century, according to Bede, it was considered "one of the noblest of the kingdom." It however repeatedly suffered from fire and from the ravages of the Danes. In 1087 Gloucester was almost wholly destroyed during the contest between William Rufus and the adherents of his brother Robert. In 1263 it was the scene of many battles between Henry III. and the barons, whom he had offended by appointing a foreigner to the office of constable of Gloucester Castle. In 1641-2 it espoused the cause of the Parliament, and bade defiance to the king, with an army of 30,000 men; by way of punishment for which the ancient walls of the city were totally destroyed shortly after the restoration.

Gloucester has been represented in Parliament since the 23rd of Edward I. At a very early period the city was constituted a county in itself. As many as 27 charters have been granted to it by Henry II. and subsequent sovereigns: the last charter is that of Charles II. dated 1673. The city consists principally of two intersecting lines of street; each extremity was originally terminated by a gate, and the streets leading to them were respectively named Northgate, Southgate, Eastgate, and Westgate. There were formerly 15 churches, besides the cathedral; only 6 of these old churches now remain, but several new churches have been recently built.

Of the public buildings, the cathedral, dedicated to St. Peter, is by far the most important, and is particularly deserving of notice, not merely on account of its great antiquity and beauty, but also because it contains so many perfect specimens of the various styles of architecture which characterised the different periods in which the several portions were erected. The most ancient parts are the crypt, the chapels surrounding the choir, and the lower part of the nave, built between 1058 and 1089, the south aisle and transept in 1310-1330, the cloisters in 1351-1390, and the lady chapel towards the close of

the 15th century. The fine tower, surmounted by four pinnacles of the most delicate workmanship, is of somewhat more recent date. The extreme length of the cathedral is 427 feet, the extreme breadth 154 feet. The tower is 223 feet in height. Among the numerous monuments in the interior are those of Robert, son of William the Conqueror, who, together with his brother Richard, was interred here; that of Edward II. in white alabaster; that of Robert Raikes, the founder of Sunday-schools; and a marble statue of Dr. Edward Jenner, the discoverer of vaccination. The cathedral has recently undergone considerable repairs and restoration. The College Library, formerly the abbey chapter-house, was appropriated for the reception of the library formed by Sir Matthew Hale and others. The College school-room is an apartment over the audit-room at the end of the north transept. The Episcopal palace adjoins the cathedral at the west end. In St. Mary's-square, a short distance from the cathedral, is a monument to Bishop Hooper, who suffered martyrdom here in the reign of Mary.

Of the Gloucester parish churches, that of St. Mary de Lode was enlarged and almost rebuilt in 1326; St. Michael's has a square tower at the west end; St. Mary de Crypt is cruciform, with nave, transept, and aisles, and a pinnacled and ornamented tower rising from the intersection of the cross; St. John's is a comparatively recent erection on the site of a church of very ancient date. The Independents, Baptists, Wesleyan Methodists, Countess of Huntingdon's Connexion, Quakers, Roman Catholics, Jews, and Unitarians have places of worship. There are three public schools, namely, the College school, the Blue-Coat, and the Free Grammar school of St. Mary de Crypt. The Crypt school, founded in 1639, has an income from endowment of 30*l.* a year, and has two exhibitions of 50*l.* a year each, tenable during 8 years, for the maintenance of two scholars at Pembroke College, Oxford. The number of scholars in 1853 was 26. The College school was founded in 1636, and has long enjoyed considerable reputation as a classical seminary. The number of scholars in 1853 was 76. The Blue-Coat school, in which 20 boys are supported and educated, was founded in 1666 by Sir Thomas Rich, and is under the superintendence of the corporation, who appoint a master and matron. There are also National and British schools. Several hospitals of ancient foundation are now under the management of trustees, with endowments amounting to upwards of 2000*l.* annually. There are also in Gloucester the county infirmary, supported by voluntary donations; a lunatic asylum; an eye institution; a house of industry, and a savings bank.

The county-hall, in Westgate-street, wherein the courts of sessions are held, is a fine building with a portico of Ionic columns, erected by Robert Smirke in 1814. The county jail occupies the site of the ancient castle, and consists of a penitentiary, bridewell, and sheriff's prison. The assizes for the county and a county court are held in Gloucester. A commodious cattle market has been recently erected at a cost of more than 10,000*l.* The market-days are Wednesday and Saturday; fairs are held on April 5th, July 5th, September 28th, and November 28th, for horses, cattle, &c., and particularly for cheese. There is a monthly market for live stock.

The streets are lighted with gas, and are well paved. Water is supplied to the city partly from the Severn, and partly from springs situated near Robin Hood's Hill, about two miles from Gloucester. There are two handsome stone bridges over the two channels of the Severn. These bridges are connected by a paved road called Over's Causeway, which extends through the rich pasture land of the island. Hot and cold baths have been established in the city. Soap is manufactured; cutlery goods are made, and there is a very old bell foundry.

The town is surrounded by a large and most fertile district. It has water communication with most parts of the kingdom, and improvements in the navigation of the Severn, with the completion of the Gloucester and Berkeley Canal, by which vessels of 500 tons burden can come up to the city, have added considerably to its foreign and domestic commerce. A quay, with wharfs for loading and discharging vessels, extends about 1000 feet along the left bank of the Severn. Much business is now done in foreign wheat, and many warehouses for the storage of grain, West Indian produce, and other merchandise, have been erected near the dock. Timber is largely imported. The custom-house receipts in 1827 amounted to 2,336*l.*; in 1851 the amount was 93,139*l.* The shipping returns for the port of Gloucester for the year 1853 are as follows:—Vessels registered under 50 tons, 275 of 7687 tons aggregate burden; above 50 tons, 74 of 11,200 tons; and 2 steam-vessels of 54 tons. The number and tonnage of vessels entering and clearing at the port during 1853 were as follows:—Coastwise, sailing-vessels, inwards, 1225, tonnage 50,351; outwards, 2355, tonnage 90,467; steam-vessels, inwards, 29, tonnage 1778; outwards, 57, tonnage 3214; Colonial, inwards, 86, tonnage 37,108; outwards, 31, tonnage 10,539; Foreign, British vessels, inwards, 107, tonnage 21,207; foreign vessels 247, tonnage 46,760; outwards, British vessels, 42, tonnage 11,056; foreign vessels, 94, tonnage 24,270.

Although suffragan bishops of Gloucester are mentioned as early as 1223, yet it does not appear that the city was erected into a bishopric, with dean and chapter, till 1541, in the reign of Henry VIII. The bishopric of Gloucester was united with that of Bristol in 1836. The diocese of Gloucester and Bristol is in the province of Canterbury;

it extends over Gloucestershire, the city and deanery of Bristol, and parts of Somersetshire and Wiltshire, and comprises 442 benefices. It is divided into two archdeaconries, Bristol and Gloucester. The chapter of Gloucester consists of a dean, archdeacon, 4 canons, 10 honorary canons, 3 minor canons, and a chancellor. The chapter of Bristol consists of a dean, archdeacon, 6 canons, 6 honorary canons, 3 minor canons, and a chancellor. The income of the bishop is fixed at 3700*l*.

(Gough's Camden, *Britannia; Description of the City of Gloucester; Parliamentary Papers.*)

GLOUCESTERSHIRE, an inland county of England, situated in the south-west part of the island. It is bounded E. by Oxfordshire, N. by Warwickshire and Worcestershire, W. by Herefordshire and Monmouthshire, and S. by Somersetshire and Wiltshire. Small detached pieces of land, which were formerly reckoned as part of Gloucestershire, were by the Act 7 and 8 Vict. cap. 61, annexed to the counties in which they are respectively situated. By the same Act small portions formerly reckoned as belonging to Wiltshire and Worcestershire, but situated in Gloucestershire, were declared to be portions of that county.

Gloucestershire lies between 51° 25' and 52° 11' N. lat., 1° 37' and 2° 41' W. long. Its greatest length from north-east to south-west is 60 miles, and its breadth from east to west is 43 miles. The area is about 1258 square miles, or 805,102 acres. The population in 1851 was 458,805.

Surface, Hydrography, and Communications.—The county is naturally divided into three distinct districts, of very different character, which may respectively be termed the Hill, the Vale, and the Forest districts. The hill district is formed by a range of high land running entirely through the county from north-east to the south and south-west. Its course is nearly parallel to the Avon and Severn, at a distance varying from 6 miles to 10 miles, and running in a line from Chipping Campden to Broadway Beacon (1086 feet high), Winchcombe, and Cleeve station (1184 feet), on to Cheltenham. This range, which is called the Cotswold Hills, divides the basin of the Severn from the basin of the Thames. The extensive vale which lies between the Hills and the Severn is divided into the upper and lower, or the Vales of Gloucester and Berkeley. The former extends from the north of the county to Gloucester, and is about 15 miles in length from north to south, and 7 or 8 miles from east to west. The boundary line of the Vale of Berkeley is nearly a segment of a circle, the curved part of which is formed on the south and east by the hills which terminate on the north in the Painswick and Matson Hills, and on the west the Severn forms the irregular chord-line: the extent of this vale from the foot of Matson Hill on the north to Aust Cliff on the south is 25 miles, and its medium breadth is not quite 4 miles. On the west of the Severn, and entirely divided by it from the rest of the county, is the Forest district, which has an irregular surface, and is chiefly occupied by the Forest of Dean, great part of which is still crown property. The forest is limited according to the perambulations made in the 12th of Henry III. and 10th of Edward I. Since that time many encroachments or grants of freehold property have been made on it, but the quantity of ground still retained by the crown is above 20,000 acres. The government of the forest is vested in a lord warden, who is constable of the castle of St. Briavel's, 6 deputy wardens, and other officers. The whole forest is extra-parochial, and its inhabitants are exempted from rates and taxes, have free liberty of pasturage, the privilege of sinking mines, and access to the woods and timber for their works. One-sixth of the produce of the mines is due to the king. The general appearance of the Forest of Dean is picturesque; and it abounds with apple orchards, the cider made from which is in considerable repute.

The principal rivers in Gloucestershire are the Severn, the Wye, the Lower and the Upper Avon, the Frome, the Thames, the Calne, the Windrush, and the Ledden. The Severn enters the county from the north a little to the west of Tewkesbury, where it is joined by the Upper Avon, and the united stream takes a winding south-south-west course to Gloucester and Newnham, below which it widens considerably, passes near Berkeley, and at length becomes a broad estuary, into which the Wye and the Lower Avon fall. From its entrance into the county to the mouth of the Avon, the Severn, following its windings, is 60 miles long. In the estuary of this river, opposite the mouth of the Lower Avon, the tide rises 42 feet. [SEVERN.] The Wye forms the boundary between Gloucestershire and Monmouthshire and a small part of Herefordshire, bounding the south-east of Herefordshire for 11 miles and the east of Monmouthshire for 21 miles of its course. At Chepstow, near the mouth of the Wye, the tide sometimes rises 60 feet. The Lower Avon forms the boundary on the south-west for about 18 miles between Gloucestershire and Somersetshire, passes through Bristol, and falls into the estuary of the Severn, after a course of about 7 miles north-west from that city. The Upper Avon divides a very small part of this county from Warwickshire on the north-east, and after a winding course through a small part of Warwickshire and Worcestershire, flows in this county for 5 miles, till it falls into the Severn near Tewkesbury. The North Frome, a small stream which rises a little south-west of Wickwar, passes near Iron Acton and Stapleton, enters Bristol on the north side of the city, and passing through its centre falls into the floating-dock of the Avon.

In its short course it supplies a number of mills and manufactories, and in its last half-mile is used as a dock and harbour. The Ledden, which has its source in Herefordshire, a few miles north of Ledbury, enters this county near Donnington, and after a south-east course, passing by Dymock, falls into the east branch of the Severn at Alney Island; its course through this county is about 16 miles. The Stroud rises near Brimpsfield, passes on to Stroud, and joins the Severn 7 miles south-west from Gloucester. The Windrush rises near Winchcombe, and taking a south-east and then an east course passes into Oxfordshire, a mile or two west of Burford. The Calne, or Colne, one of the principal streams which unite in forming the Thames, has its source a little to the east of Cheltenham, and, taking a winding course to the south-east, passes by Shipton, Withington, Colne, and Fairford, and joins the other streams which unite with the Thames at Lechlade. The Leach, another small tributary of the Thames at Lechlade, rises near North Leach.

One of the sources of the Thames, or (as it is frequently called in its upper part) the Isis, is at Thames Head, near the road from Cirencester to Tetbury. This stream immediately passes into Wiltshire, and soon joins the Swill brook, which, united with another stream from another source of the Thames, passes by Cricklade (in Wiltshire), near which place it joins the Churn, the head stream of the Thames, which rises at Seven Springs, 8 miles from Cheltenham, on the east side of the hills, and passes Cirencester. From Cricklade the Thames flows to Lechlade, and becomes for a few miles the boundary between Gloucestershire and Wiltshire. From the source of the Churn to Cricklade the stream is about 20 miles long, and from Cricklade to Lechlade it is 9½ miles: at Lechlade it becomes navigable. [THAMES.]

The Thames and Severn Canal connects the two great navigable rivers. It commences at Lechlade, and joins the Stroudwater Canal at Wallbridge, near Stroud. Its whole length from Lechlade to Wallbridge is 30 miles 7 chains. At Siddington St. Mary a branch about a mile in length runs to Cirencester from this canal; and at Latton it is joined by a branch of the Wilts and Berks Canal. The Stroudwater Canal commences at the Severn, near Framiload, about 7 miles from Gloucester, and thence runs in a south-east direction, terminating in the Thames and Severn Canal at Wallbridge. The length is rather more than 8 miles, with a rise of 102 feet 5 inches. The Hereford Canal, which was intended to connect the towns of Gloucester and Hereford, is not completed, reaching only from Gloucester to Ledbury, a distance of 18 miles. The Gloucester and Berkeley Canal, by which the navigation up to Gloucester is shortened 11¼ miles, was projected in 1793; but it was not completed till 1826. From the basin of this canal in Gloucester a railway for coals, &c., runs to Cheltenham, a distance of 9 miles.

The high road from London to Gloucester, and thence through Herefordshire and South Wales, enters this county at Latton, near Cricklade, and passing through Cirencester and Gloucester, leaves the county about 4 miles short of Ross. The road from London to Cheltenham and so on to Tewkesbury, thence branching through Warwickshire and Worcestershire, enters the county at Little Barrington, about 10 miles from North Leach. The London road to Bristol, and thence to the west of England, enters the county at Marshfield. The direct road between Bristol and Gloucester is continued with numerous branches to the north and to Liverpool. The road between Gloucester and Cheltenham leads also, with numerous branches in all directions, to the rest of the county. A road extends from Gloucester through the Forest of Dean to Chepstow, and the forest is likewise intersected by several other roads. The Bristol and Birmingham line of the Midland railway traverses the county in a northern direction from Bristol, past Gloucester to Bredon, 53 miles. The main line of the Great Western railway merely touches the county at Bristol, but the Cheltenham branch, which enters the county near Thames Head, runs past Stroud, and joins the Bristol and Birmingham line a few miles farther on. A short branch connects Cheltenham with the Bristol and Birmingham line. Another short branch connects Cirencester with the Cheltenham branch. The Oxford, Worcester, and Wolverhampton line intersects the county for a few miles, passing along the northern part of it by Moreton and Chipping Campden. The South Wales railway runs from Gloucester through a part of the western side of Gloucestershire.

Geology, Mineralogy, &c.—The whole range of the Cotswold Hills belongs to the lower division of the oolitic series. The great oolite forms a flat table-land on the summits; and on the western escarpment beds of fullers'-earth, inferior oolite, and marly sandstone occur. The summits of some few of the detached hills east of the great range are capped by the sandy beds of the inferior oolite. The whole of the Vale district rests on the lias formation. The south-west corner of the county is occupied by the coal-field, which commences near Wickwar on the north and continues into Somersetshire. The whole of the Forest of Dean is a coal-field, encircled by an elevated border of carboniferous limestone and old red-sandstone.

The fossils of this county are extremely numerous, and are found both in the hills and the vales. There are some beds near the bottom of the lias series which occur in the cliffs of Westbury and Aust, in which are numerous remains of vertebrated animals; they are well known to the collectors of that neighbourhood under the name of the

'bone-beds.' Asteris are abundant at Pyston in Lydney parish, and under the adjacent cliffs on the banks of the river: they are also found at Laington, Dursley, Sherbourne, and Robin Hood's Hill. Belemnites, ribbed nautili, bivalve shells, coralloids, anomia, cochleas, and other fossils have been found in various parts of the county. Coal-beds, alternating with ironstone, occupy the Forest of Dean and the neighbourhood of Bristol. Lead ore is found in many parts of the county, but not in large quantities. Pyrites, or sulphuret of iron, have been found in great abundance and in various forms of combination. Lapis calaminaris, or oxide of zinc, is found at Redland, Yate, and elsewhere. In the parish of Abstone, 7 miles from Bristol, the hills rise perpendicularly to the height of 200 feet and upwards, and consist of a series of beds of limestone and petrosilex, alternating with each other. Towards the west a vein of coral occurs, 14 inches thick, and another of lead (both formerly worked), with a mass of petrosilex on each side. The centre of the glen is occupied by a bed of limestone, nearly 600 yards broad, lying between two beds of petrosilex, all dipping to the north-west, at an angle of 60 feet with the plane of the horizon. In this are embedded lead-ore, spathous iron-ore, and barytes. A very superior limestone is obtained in great abundance a few miles north of Bristol; and the limestone rocks of Clifton are capable of receiving a good polish. Pellucid quartz crystals, hexagonal and terminated by detached pyramids, are found in the crevices of the strata at Clifton; these crystals were formerly in considerable request under the name of Bristol diamonds. A good compact limestone is found in the Forest of Dean. Freestone of excellent quality is quarried on the hills, more particularly at Painswick. Blue clay-stone for building is found at Aust Cliff, which is composed of two strata of clay, the upper of a blue, the lower of a red tinge, resting upon a gray-limestone rock; embedded in the lower stratum is a bed of gypsum, which furnishes a plentiful supply for stuccoing, &c., to the masons of Bristol and Bath. Paving stones and grits are obtained in the forest. At Dursley a stratum of tophus occurs.

Climate, Soil, Agriculture.—The climate of Gloucestershire varies according to the elevation of the land. In the valleys, especially those which are sheltered on the north and east, the temperature is mild. On the Cotswold Hills the air is sharp and bracing, and as the progress of tillage has brought higher lands into cultivation, farm-houses have been built in situations which require a hardy race to bear the keenness of the air. The children who can be reared there are strong and healthy, but those who are born with delicate frames have little chance of life if not removed to a milder air. The Vale of Gloucestershire is noted for the early maturity of every kind of agricultural produce, owing partly to the nature of the soil, but chiefly to the shelter afforded by the hills on the north and east. It is however occasionally subject to very violent storms from the Atlantic.

In an agricultural point of view Gloucestershire may be divided into the Cotswold, or hilly portion, the Vale, and the Forest including the Ryelands. The first district traverses the whole county from Chipping Campden to Bath, and is divided into the upper and lower Cotswold Hills. The vale runs from Stratford-upon-Avon to Bristol, and is divided into the vales of Evesham, Gloucester, and Berkeley. The Avon runs along the upper part of the vale, and the Severn in the lower. The Forest of Dean lies on the right bank of the Severn, extending to the river Wye, which bounds the county on the north-west. The Ryelands are a sandy district of the Forest, bordering on Worcestershire and Herefordshire. The soil on the Cotswolds is chiefly a calcareous sand, a few inches deep, resting on oolite, a calcareous freestone commonly called stonebrash. The poorest is only fit for sheep pasture; but the feed is very sweet, and sheep thrive well on it. Where it has been improved by cultivation and by the repeated folding of sheep, it bears tolerable crops of oats and barley, and where there is an admixture of clay in the loam, even of wheat. The lower parts of the hills, and the valleys which are between them, contain a better and deeper soil, evidently made by the washing down of the soil from the hills. Where the subsoil is impervious, the water is apt to accumulate; but by judicious draining some excellent arable and grass land is produced. The dairies in these situations are productive; and the cheese made there is similar to the North Wiltshire. Some parts of the Vale contain a very deep and rich soil, as at Walford and its immediate neighbourhood. At a greater distance from the rivers up to the foot of the hills, the soil is chiefly of a tenacious nature, which produces abundantly when well drained and cultivated. Siliceous sand and gravel are found in a few spots, but not in sufficient quantity to form any considerable portion of the soil of the county, except in the forest, where the soil is chiefly a decomposed red sandstone, scarcely fitted for the growth of anything but woods and coppice.

The cultivation of the soil varies according to its nature and fertility; and improvements have been gradually introduced of late years. Wheat, rye, barley, and other ordinary crops are raised. Flax is but little cultivated, it being generally prohibited in leases. Teasels (*Dipsacus fullonum*) are raised for the use of the manufacturers of woollen cloth; but not to such an extent as they were once. Potatoes and turnips are raised in considerable quantities. The meadows on the Ledden are particularly fertile, from the rich soil which this river brings down from Herefordshire; but they are also

subject to sudden floods in summer, by which the whole crop is sometimes spoiled or swept away. The rich upland meadows contain the best grasses.

Gloucestershire is essentially a dairy country, and has been always renowned for its butter and cheese, of which great quantities are made, and sold in every part of the kingdom. London alone consumes a large proportion of it. The Gloucester breed of cows, although now eclipsed in public estimation by the improved short-horns and the Devon, has qualities which still render them favourites with many experienced dairymen. The Durham short-horned breed of cows is however gaining ground for the dairy.

The sheep peculiar to this county are the Cotswold and the Ryeland breeds. The Cotswold are large in the carcass, and rather strong in the bone, and the wool is coarse. This breed has been successfully crossed with the improved Leicester, and also with the South-Down, in both cases with decided advantage. The Ryeland or Herefordshire sheep are bred in the Forest district. They are small in size, but larger than the common Forest sheep. They have white faces and no horns; the wool is very fine; and when they are fattened the flesh is of a very delicate flavour. This breed has been improved in size by crossing with the Leicester and black-faced Shropshire breeds, but always at the expense of fineness in the wool and flavour in the mutton. When crossed with the Merino, the Ryeland sheep produce a wool which bears a good price. There are not many horses bred in this county, although they are generally preferred to oxen for the purposes of husbandry. The chief supply comes from the northern counties.

There are fine orchards in different parts of the Vale and Forest districts, and the cider and perry made in the county are considered to be of good quality. The Forest of Dean anciently contained much valuable timber, chiefly chestnut, oak, and beech. It has been gradually much denuded of trees, so that large tracts of land are entirely bare. In the forest, and dispersed through the county, are many productive coppices, which are cut every ten, twelve, or fifteen years. Many wastes, commons, and common-fields have been inclosed and improved.

Divisions, Towns, &c.—Gloucestershire is divided into 28 hundreds, containing 351 parishes, one city, and part of another, and 28 market-towns. The hundreds are as follows:—Barton Regis, Berkeley, Biale, Bledialoe, Botloe, Bradley, St Briavel's, Brightwell's-Barrow, Cheltenham, Cleeve, Crowthorne, Deerhurst, Dudstone and King's Barton, Grumbald's Ash, Henbury, Kiftgate, Lancaster, Langley and Swineshead, Longtree, Puckle Church, Rapgate, Slaughter, Tewkesbury, Thornbury, Tibaldstone, Westbury, Westminster, and Whitstone, with Bristol, Gloucester (city and county), and Tewkesbury town.

The market-towns, excluding Gloucester, are—BERKELEY, BISLEY, Chipping Campden, CHIPPING SODBURY, CHELTENHAM, CIRENCESTER, Coleford, DUBBLEY, Fairford, Lechlade, Marshfield, MINCHINHAMPTON, Mitcheldean, Moreton-in-the-Marsh, NEWNEM, Newnham, NORTHLEACH, Painswick, Stanley St Leonard, STOW-ON-THE-WOLD, SROUD, TETBURY, TEWKESBURY, THORNBURY, Wickwar, WINGCOMBE, and WOTTON-UNDER-EDGE. Those marked with small capitals are noticed under their respective heads. A short account is subjoined of the less important towns:—

St. Briavel's, 21 miles S.W. from Gloucester, population of the parish 1194, was once a borough and market-town, the inhabitants of which had many rights and exemptions. The castle was erected in the reign of Henry I. by Milo Fitz-Walter, earl of Hereford, to curb the incursions of the Welsh. The site, surrounded by a moat, includes a considerable area. The north-west front is nearly all that remains entire. It is composed of two circular towers three stories high, separated by a narrow elliptical gateway; within the towers are several hexagonal apartments, the walls of which are 8 feet thick. One of the towers is used as a prison. The constable of the castle is appointed by the crown, and is also the lord-warden of the forest.

Chipping Campden, 28 miles N.E. from Gloucester, population of the parish 2351, near the border of Worcestershire, is a very ancient market-town and borough, situated in a fertile valley. In 689 the Saxon kings assembled here to consult on the mode of carrying on the war with the Britons. In the 14th century this town was the principal mart for wool, and the residence of many opulent merchants. The church stands on a gentle declivity above the town, in the hamlet of Berrington: it is a handsome ancient structure, having an ornamental tower at the west end, 120 feet high; at the east end of each aisle is a chapel. Campden has an hospital and several other institutions founded by Sir Baptiste Hicks early in the 17th century.

Coleford, 19 miles W.S.W. from Gloucester, population of the tithing 2310, is a small market-town, consisting principally of one street, situated near the left bank of the river Wye: the houses are in general well built. The chapel, which was destroyed in the civil wars, was rebuilt in the reign of Queen Anne. The Baptists have a place of worship. The market-house was rebuilt in 1679. The market is held on Friday: there are two annual fairs.

Fairford, 27 miles S.E. by E. from Gloucester, population 1859, is pleasantly situated on the banks of the Colne: the town consists of two streets neatly and regularly built. It has a Free school and several charities. Fairford is celebrated for the beauty of its church,

which was built in the reign of Henry VII. This church is cruciform, 120 feet long by 55 feet broad. It contains some curious painted glass, which is disposed in 28 windows with four or more compartments in each. The Baptists and Independents have places of worship. There are a Free school, two National schools, and several charities. The market is held on Thursday. Roman remains have been found in the vicinity.

Lechlade, 31 miles E.S.E. from Gloucester, population 1373, is a market-town situated near the point where the counties of Gloucester, Wilts, Oxford, and Berks have their junction. Here the Thames and Severn Canal commences, and the Thames first becomes navigable for barges of 80 tons burden. The town contains several well-built houses. The church is a handsome building in the pointed style, with a tower at the west end surmounted with a spire; the pulpit is of sculptured stone. The Baptists have a place of worship. There is a savings bank. A priory formerly existed here. The market is on Tuesday, and there are three annual fairs.

Marshfield, a small market-town 32 miles S. from Gloucester, population 1648, consists chiefly of one street of old buildings, nearly a mile long. It is a clothing town; a considerable quantity of malt is likewise made here for the supply of the Bath and Bristol brewers. Besides the parish church there are places of worship for Independents and Unitarians. There are an Endowed school and well-endowed almshouses. The market is held on Tuesday; there are fairs on May 24th and October 24th.

Mitcheldean, a small market-town situated in a deep dell in the Forest of Dean, 12 miles W. from Gloucester, population 662, has a market-house and an old church. The church consists of a nave and chancel, with a tower at the west end surmounted with an octagonal spire. There are an Independent chapel and two National schools. The market is on Monday; fairs are held on Easter Monday and October 10th. Tanning is carried on.

Moreton-in-the-Marsh, a small market-town 28 miles E.N.E. from Gloucester, population 1512, consists chiefly of one long street, and occupies a low situation on the Roman Fosse-way. Besides the parish church there are an Independent chapel and a National school. The market has been long disused. Two annual fairs are held. Some linen cloth is made here. A goods railway runs from Moreton to Stratford-on-Avon.

Newnham, 12 miles S.W. from Gloucester, population 1288, is pleasantly situated on an eminence rising from the right bank of the Severn, which is here nearly a mile across at high water. A ferry is established at this place. Newnham appears to have been in the Norman times a fortified town designed to repress the incursions of the Welsh; and in ancient records mention is often made of the castle here. In the contest between Charles I. and the Parliament the castle was besieged and taken by the Parliamentarians. A sword of state, presented by King John, is still preserved in the town. The houses are chiefly ranged in one long street; the church stands on a cliff near the river. There are an Independent chapel, an Endowed school, and a savings bank. Cider is made in the neighbourhood. There are several coal-pits. The market is on Friday; fairs are held on June 11th and October 18th. A small quay was built here about a century ago by one of the Pyrke family. Some trade is carried on with Bristol and London.

Painswick, 6 miles S.S.E. from Gloucester, population of the parish 3464, is a small and irregularly-built town on the southern acclivity of Sponebed Hill. The church is an ancient building, with a tower and spire at the west end rising to the height of 174 feet. There are chapels for Independents, Wesleyan Methodists, and Quakers, an Endowed school, and several minor charities. Freestone quarries are in the neighbourhood: some of the inhabitants are employed in the clothing manufacture. The market is on Tuesday. On the summit of Sponebed Hill is an ancient fortification called Kinsbury Castle. Roman coins and other antiquities have been found here; and it is supposed to have been once a place of great strength.

Wickwar, 23 miles S. by W. from Gloucester, population 966, is an ancient market-town. It is well watered by two streamlets, over one of which there is a handsome stone bridge. The church is large and has a lofty tower. There are an Independent chapel and a well-endowed Free school. The market is on Monday. A station of the Bristol and Birmingham railway is at Wickwar.

The following are some of the more important villages, with the population of the respective parishes in 1851, and a few other particulars:—

Arlingham, on the left bank of the Severn, 14 miles S.W. from Gloucester: population, 737. There are fisheries here of considerable importance. The church is a commodious building, with a tower at the west end. There are here an Endowed school, founded in 1765 by Mrs. Yate, two Infant schools, and some parochial charities. *Avening*, 16 miles S. by E. from Gloucester: population, 2321. The parish church is an ancient cruciform edifice with a low embattled tower. There are chapels for Baptists and Independents, a Free school, and several parochial charities. British antiquities have been found here, and there are several tumuli in the neighbourhood. *Bicknor, English*, 19 miles W. by S. from Gloucester, population 584, is situated near the left bank of the Wye, on the western border of the Forest of Dean. The church stands on the site of an ancient fortification.

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Coal and iron are wrought in the parish, which also contains some good orchards and meadow lands. *Bitton*, situated on the small river Boyd, which joins the Avon a short distance south of the village, is 42 miles S.S.W. from Gloucester: population of the hamlet of Bitton, 2395. Coal and iron are raised extensively in the neighbourhood. On the river Boyd are several flattening-mills. *Blakeney*, on the right bank of the Severn, 16 miles S.W. by W. from Gloucester: population of the parish of Awre, of which Blakeney is a chapelry, 1512. Blakeney is on the south-east border of the Forest of Dean. Besides the parochial chapel there are chapels for Independents and Baptists. *Bourton-on-the-Water*, 24 miles E. from Gloucester, population 1040, so called from its situation on the small river Windrush, is chiefly one long street of irregularly built houses. There was a church here previous to the Conquest. The present church is a neat structure in the Grecian style, with a tower at the west end. There are a Baptist chapel and an Endowed school. The Roman Fosse-way passes about half a mile W. from the village. A quadrangular encampment has been traced, and Roman coins and other antiquities have been found here. *Cam*, 14 miles S.S.W. from Gloucester: population, 1640. The village of Upper Cam is situated on the right, and Lower Cam on the left bank of the small rivulet Cam, a tributary of the Severn. The district is agricultural; good cheese is made here, and cider is also produced. Some corn-mills are in the vicinity. Cloth was formerly made here to some extent, but the manufacture has declined. The parish church consists of a nave and two aisles, with a lofty embattled tower at the west end. The Independents have two chapels. There is an Endowed school. *Chalford*, formerly *Chalkford*, 12 miles S.S.E. from Gloucester: population of the ecclesiastical district, 2000. The cloth trade has been long carried on here; this trade employs several mills on the river side. The village contains many good houses, and commands an interesting view of the valley of the Frome. The Thames and Severn Junction Canal passes Chalford on the south. The parochial chapel is a neat edifice erected by subscription in 1722. The Baptists and Independents have chapels. *Cleeve*, or *Bishop's Cleeve*, 11 miles N.E. from Gloucester: population of the township, 745. The village is situated a little to the westward of a ridge of hills called Cleeveclouds, the summit of which reaches the height of 1134 feet. In this locality have been traced tumuli and encampments, and other vestiges of ancient military works. The parish church is a commodious cruciform structure. From the centre of the building rises a handsome tower crowned with pinnacles, which was erected in 1700 to replace a spire which then fell. *Cromhall, Abbots*, 20 miles S.S.W. from Gloucester, population 766, is situated in a narrow valley. About a century ago a tesselated pavement was dug up in the neighbourhood. *Eastington*, chiefly on the left bank of the river Frome, 10 miles S.S.W. from Gloucester: population of the tithing, 790. The parish church is a commodious edifice, with a plain embattled tower at the west end. The Baptists and Wesleyan Methodists have chapels, and there are two National schools. Near the village are some woollen-mills. The Stroudwater Canal passes Eastington on the north-east. *Frampton-on-Severn*, 11 miles S.W. by S. from Gloucester, population 994; so called to distinguish it from Frampton near Bristol. The Severn, in high spring tides, sometimes inundates the lower parts of the village. The river Frome rises in the vicinity, and is supposed to have given name to the place, *Frome-Town*, or *Frampton*. The church, erected in 1315, is a spacious structure, with an embattled tower at the west end. The Independents have a place of worship. A fair, called *Frying-Pan Fair*, is held annually on February 3rd. The Gloucester and Berkeley Ship Canal passes between the village and the river Severn. *Iron Acton*, 25 miles S.S.W. from Gloucester, population 1265, so called from the iron found in the neighbourhood, is situated in a valley watered by a river which runs into the Avon at Bristol. Fairs are held here on April 25th and September 13th for horses, cattle, pigs, and cheese. *King's Stanley*, 10 miles S. by W. from Gloucester, population 2095, said to have been so called from one of the Mercian kings having resided here. Part of the village is called the borough. The cloth manufacture employs some of the inhabitants. Besides the parish church there are here a Baptist chapel and National and Infant schools. *Leckhampton*, 8 miles E. by N. from Gloucester, population 2149, is virtually a suburb of Cheltenham, from which it is about 2 miles distant. The parish church is a handsome structure, with a spire rising from the centre of the building. Many of the houses are of long standing. In the parish are some of the highest of the Cotswold Hills, which afford splendid views over Cheltenham and the surrounding country. *Lydney*, or *Lidney*, population 2577, situated in the Forest of Dean, 16½ miles S.W. by W. from Gloucester, near the right bank of the Severn. The church consists of a nave and two aisles, with a neat spire rising from the west end. The Baptists have a place of worship. Coal and iron are extensively wrought here; a mineral railway, with several branches, accommodates the district between Lydney and Monmouth on the river Wye. Lydney has a small market and two annual fairs. Roman remains have been found in the vicinity. *Nailsworth*, 14 miles S. by E. from Gloucester: population included in the parishes of Avening, Horsley, and Minchinhampton, in which the chapelry of Nailsworth is situated. There are here the parochial chapel, and chapels for Independents, Baptists, and Quakers. Woollen cloth is made to a small extent. In the

neighbourhood are some good country residences. *Oldbury-on-Severn*, 25 miles S.W. from Gloucester, population of the chapelry 724, is situated on the left bank of the Severn. Remains of two Roman encampments have been traced in the parish. *Pucklechurch*, near the southern border of the county, 35 miles S.S.W. from Gloucester, population 931, is chiefly remarkable as having been the residence of some of the Saxon kings. Coal is found in the vicinity. There is an Endowed Free school for boys and girls, founded in 1718. *Sherborne*, 24 miles E. by S. from Gloucester, population 674, on the right bank of a feeder of the Windrush, is pleasantly situated, and has several good mansions in its vicinity, including the seat of Lord Sherborne, which stands in a finely-wooded park. *Slimbridge*, 11 miles S.S.W. from Gloucester, population 859, is situated in the vicinity of fertile land, much of which has been reclaimed from the Severn. The Gloucester and Berkeley Ship Canal passes the village on the south-west. Besides the parish church there is here a Baptist chapel. *Stanley St. Leonards*, 11 miles S. from Gloucester: population, 861. The cloth manufacture formerly flourished here, and is still carried on to a small extent. Some remains of a Benedictine monastery are in the neighbourhood: there is a parochial Free school. *Stonehouse*, 9 miles S. by W. from Gloucester: population, 2589. Several woollen-mills are in the vicinity. Cloth-making employs some hand-loom weavers. Besides the parish church there are a chapel for Independents and two National schools. The Stroudwater Canal passes Stonehouse on the south. Three fairs are held annually. *Sudeley*, 18 miles E.N.E. from Gloucester: population, 77. In the church of Sudeley Manor, now in ruins, Queen Katherine Parr was buried. Some remains still exist of a strong castle erected here in the reign of Henry VI. About 3 miles N. from the village is *Toddington*, a spacious mansion, the seat of Lord Sudeley. *Uley*, 15 miles S. from Gloucester: population, 1327. The woollen manufacture which was formerly carried on here has been discontinued. Besides the parish church there are chapels for Baptists and Wesleyan Methodists. *Welford-on-Avon*, on the north-eastern border of the county (which is here separated by the Avon from Warwickshire), 35 miles N.E. from Gloucester: population, 659. The parish church is chiefly in the Norman style, and has at the west end a lofty tower with pinnacles. The Wesleyan Methodists have a chapel, and there is a National school. *Westbury-on-Trym*, 34 miles S.W. by S. from Gloucester, population of the township 1883, is situated near the foot of King's Weston Hill, about 4 miles N.N.W. from Bristol. A monastery formerly existed here. Besides the parish church, a commodious and handsome edifice, with a pinnacled tower at the west end, there are chapels for Baptists and Wesleyan Methodists. Roman remains have been found in the vicinity. A remarkable cavern of large extent, called Pen Park Hole, is in Pen Park estate, about a mile and a half from Westbury.

Ecclesiastical and Legal Jurisdiction.—The county is included within the diocese of Gloucester and Bristol. Gloucestershire is included in the Oxford circuit. Before the Reform Act Gloucestershire was represented by two members in Parliament. It is now formed into two divisions, eastern and western, each of which sends two representatives. The boroughs of Gloucester, Stroud, Cirencester, and Tewkesbury each return two members to Parliament, and the borough of Cheltenham one member. By the Poor-Law Commissioners the county is divided into 17 Poor-Law Unions, namely:—Bristol city, Cheltenham, Chipping Sodbury, Cirencester, Clifton, Dursley, Gloucester, Newent, Northleach, Stow-on-the-Wold, Stroud, Tetbury, Tewkesbury, Thornbury, Westbury-on-Severn, Wheatenhurst, and Winchcombe. These Unions comprise 360 parishes and townships, with an area of 688,711 acres, and a population in 1861 of 418,900. The boundaries of the Unions are less extensive than those of the county. The assizes are held at Gloucester. County courts are held at Cheltenham, Bristol, Chipping Sodbury, Cirencester, Dursley, Gloucester, Malmesbury, Newent, Newnham, Northleach, Stow, Stroud, Tewkesbury, Thornbury, and Winchcombe. Local Boards of Health have been established at Bristol, Cheltenham, Gloucester, and Tewkesbury.

Manufactures.—The manufactures carried on in Gloucestershire are numerous and important. The cloth manufacture is extensively carried on in a large district, of which Stroud may be regarded as the centre. At Frampton-Cotterell, Winterbourn, Bitton, and Westerleigh are considerable hat and felt manufactories, and some persons are also engaged in stocking-making. The stocking manufacture is extensively pursued at Tewkesbury, where frame-making gives employment to some of the inhabitants: some of them are likewise engaged in lace-making. In some parts of the county there are pin manufactories. At Newland and English Bicknor tin-plates are made. Edge-tools are made at Cooley. At Moreton and a few other places cheese-cloths and other articles of linen are made. The large commercial city of Bristol has several manufactories and works in brass, iron, glass, floor-cloths, lace, hats, soap, vinegar, &c.

Civil History and Antiquities.—The inhabitants of the most part of Gloucestershire and of Oxfordshire were at the time of the Roman invasion distinguished by the name of Dobuni. [BRITANNIA.] It appears that the Dobuni were subject to their neighbours the Catteuchlani before they were conquered by the Romans, A.D. 45, when they submitted to Aulus Plautius, the proprætor. On the division of the island into Britannia Prima and Secunda, that part of

Gloucestershire which lies south-east of the Severn was included in Britannia Prima; the other part in Britannia Secunda. After the subsequent division made under Constantine, the county, or the greater part of it, was included in the province named Flavia Cæsariensis. Cirencester was under the Romans the metropolis of the district, while Gloucester and the hills about the Severn were the great military positions. Gloucestershire formed part of the Mercian kingdom under the Saxon dynasty, and Winchcombe and King's-Stanley are mentioned as residences of the Anglo-Saxon monarchs. Under the Saxon kings it was much harassed by the Danes, and during the civil wars between Queen Maud and Stephen it also greatly suffered. The Welsh disturbed the peace of the county with many incursions during the reign of Henry II., and in the Barons' War the inhabitants took the side of the barons. In the contest between the houses of York and Lancaster it likewise became the scene of warfare; the result of the battle of Tewkesbury, fought at that time, is well known. In the civil wars between the parliament and the crown many struggles between the rival forces took place in different parts of this county.

The principal Roman roads in the county are the Fosse-way, Ermine-street, Ikenield-street, and the Via Julia. The Fosse-way enters Gloucestershire at Leamington, proceeds through Moreton-in-the-Marsh to Stow-on-the-Wold; passes on to Northleach, leaving Bourton-on-the-Water about half a mile to the east; then crossing the Calne at Fosse-bridge, it joins Ikenield-street about a mile north-east of Cirencester, at which place it crosses Ermine-street, and after a few miles passes into Wiltshire. Ermine-street enters the county at Latton, near Cricklade; passes through Cirencester, over Birdlip Hill, to Gloucester; and thence proceeds through the western part of the county into Monmouthshire. Ikenield-street crosses Oxfordshire, and entering Gloucestershire at Eastleach proceeds to Cirencester, and then to Aust—the Trajectus Augusta of the Romans. The Via Julia led from Bath across the Severn into Monmouthshire, whence its course was continued through Glamorganshire to Caermarthenshire and St. David's. There are several traces of Roman camps in this county. One of these occurs a short distance from the Fosse-way, near the village of Bourton-on-the-Water; it is quadrangular, inclosing about sixty acres, and on one side a paved aqueduct has been found. Numerous coins and other vestiges of the Romans have been discovered on this spot. Among these was a curious gold signet weighing nearly an ounce, having the representation of a Roman soldier, sitting on a tripod, with a spear in his left hand and the Roman eagle at his feet. In the parish of South Cerney, about three miles south from Cirencester, at Sydney Park, at Sapperton, at Frampton, at Uley, at Stanley, at Chedworth, at Combe-End, at Tetbury, and at various places in the Forest of Dean, numerous traces of the Roman occupation have been found in the shape of silver and brass coins, remains of baths, foundations and walls of buildings, fortifications, encampments, &c. Woodchester, a small village about two miles and a half south-west of Stroud, is much celebrated for the number and beauty of the Roman antiquities found there. A great tessellated pavement was discovered by the digging of graves in the churchyard of this village. It appears to have been a square of 48 feet 10 inches, and in its general design of much beauty. In 1795 and 1796 the ground-plot of a very large Roman building was almost completely ascertained, extending from the churchyard to an adjoining orchard and a field. The remains of two hypocausts were also discovered within a little distance of each other; several fragments of statues, of red glazed pottery and of glass, various pieces of stag's horns, and numerous coins have been found amongst the ruins of the buildings. Very extensive and beautiful remains have also been found at CIRENCESTER.

There are likewise many traces of British, Saxon, and Danish works in this county. At Beachley, a point of land formed by the confluence of the rivers Wye and Severn, extensive earth-works are still remaining, probably of British origin. Offa's dyke terminates here, and may be clearly traced crossing the road at Buttington Tump, and also near Brockweir. At Willersley, near Chipping Campden, is an ancient camp, about sixty acres in area, inclosed by banks in good preservation. Another ancient encampment occurs at Gravesend, about three miles nearly south of Thornbury, and near it an immense tumulus; at a little distance is a small square camp, with a single ditch and vallum. On the ridge of hills called Cleveclouds, about three miles nearly north of Cheltenham, there are also many vestiges of military occupation; the extremity of the ridge is fortified by a deep vallum extending 300 yards in the form of a crescent, and inaccessible on every side but the front. Near Little Sodbury is an ancient camp of a rectangular form, 320 yards long and 200 yards broad. In a field adjoining Gatcomb Park, near Minchinhampton, is an extensive oval tumulus which formerly had large erect stones at each end. On the summit stands a large fragment of rock known for ages by the name of Tingle Stone. In the common field near it are two large stones set upright in the ground. In Pen Park, in the parish of Westbury, there is a remarkable excavation called Pen Park Hole. It is supposed to be an exhausted lead-mine.

There are several fine old family seats in this county, some of which are of very ancient date; and there are also ruins of castles and abbeys. The ruins of Sudeley Castle, situated about a mile south-south-east of Winchcombe, are grand rather than picturesque. It was built in the

reign of Henry VI. by Ralph Lord Boteler, on the site of a more ancient castle. During the civil wars this castle was taken by the Parliamentarians, dismantled, and otherwise destroyed. A small side chapel or aisle is now used as the parish church of Sudeley. Badmington House, the family residence of the dukes of Beaufort, about five miles and a half east by north from Chipping Sodbury, was erected in 1682, and is enriched with many paintings of the old masters. Among other residences which are worthy of notice are Barnsley Park, and Oakley Grove, near Cirencester; Barrington Hall, near North-leach; Blaize Castle, near Bristol; Highham Court, near Gloucester; Miserden Park, near Bisley; and Southam House, near Cheltenham.

Statistics.—According to the 'Census of Religious Worship,' taken in 1851, it appears that there were then in the county 928 places of worship, of which 433 belonged to the Church of England, 214 to five sections of Methodists, 102 to Baptists, 96 to Independents, 14 to Roman Catholics, 12 to Quakers, 11 to the Countess of Huntingdon's Connexion; 9 to Mormons, 8 to 'Brethren,' 7 to Unitarians, and 22 to minor bodies. The total number of sittings provided was 280,746. In 1851 the number of day schools in the county was 1283, of which 459 were public schools with 41,295 scholars, and 794 were private schools with 14,923 scholars. There were 606 Sunday schools in the county, with 59,154 scholars on their books; of these Sunday schools 324 were supported by the Church of England, 117 by five sections of Methodists, 68 by Independents, 58 by Baptists, 8 by the Countess of Huntingdon's Connexion, and 31 by minor bodies. The number of evening schools for adults was 26, with 782 scholars; of literary and scientific institutions, mechanics institutes, &c., there were 16 in the county, with an aggregate membership of 2809, and upwards of 14,000 volumes of books in the libraries attached.

In 1852 the county possessed 15 savings banks at Bristol, Cainscross, Cheltenham, Cirencester, Dursley, Gloucester, Kingswood, Lechlade, Newnham, Stow-on-the-Wold, Tetbury, Tewkesbury, Thornbury, Winchcombe, and Wotton-under-Edge. The total amount owing to depositors on 20th November 1852 was 935,922*l.* 13*s.* 10*d.*

GLUCHOF. [CZERNIGOF.]

GLUCKSTADT. [HOLSTEIN.]

GMUND. [JAXT.]

GMUNDEN. [Ems.]

GNOSSUS, or CNOSSUS. [CANDIA.]

GOA, formerly capital of the Portuguese possessions in India, is situated in the province of Bejapore, on an island about 24 miles in circumference, formed by the river Mandova, and stands in about 15° 28' N. lat., 73° 51' E. long. The ancient city, which, being unhealthy, is now deserted except by about 4000 inhabitants, was once a splendid and populous place, containing many magnificent dwellings and a great number of elegant churches and monasteries. The architecture of its public buildings far surpasses anything attempted by Europeans in India. The palace church is built after the model of St. Peter's in Rome, the church of St. Dominic is, or was, ornamented with paintings by Italian masters; the cathedral would be an ornament to any city in Europe; and the Augustine monastery and church are noble structures. In the church of the Jesuits is the fine monument of St. Francis Xavier. Most of these edifices are now fast going to decay. Goa gives title to an archbishop and has a diocesan seminary. The new town, named Panjim, stands 5 miles nearer the sea than the ancient city. It is a handsome, well-built place, with 18,000 to 20,000 inhabitants. With the exception of the viceroy and the principal functionaries, who are natives of Portugal, the inhabitants are mostly a mixed race, the descendants of European and Indian women, and all of them are Roman Catholics.

GOAT ISLAND. [CANADA.]

GOBAIN, ST. [AISNE.]

Gobi, sometimes, but incorrectly, *Cobi*, is a Mongolian term signifying 'desert,' and employed to indicate the immense tract of desert country which extends from the neighbourhood of Yarkand and Khotan (80° E. long.) to the Kingkhan Oöla (120° E. long.). But a portion of this desert extends east of the Kingkhan Oöla to the northern boundary of the Chinese province of Leaotong, more than five degrees farther east. The Gobi lies between 35° and 45° N. lat. Its mean width may be between 350 and 400 miles, and its length perhaps not less than 1800 miles.

That portion of the desert which is partly included in the Chinese province of Kan-si seems to contain the least sterile part of it; and between the towns of Hami and Shat-shew (Sand-town) the desert probably is not much more than 200 miles across. West of the province of Kan-si its surface consists of loose sand, which is sometimes raised by the winds into the air, and moves along the ground like a body of water. This country is drained by the river Yarkand. That portion of the Gobi which extends east of the province of Kan-si is called Ta-Gobi (the Great Gobi), and is somewhat better known than the Western Gobi: its central part is a valley of uneven surface, extending east and west, and from 150 to 250 miles across. Its lowest part is from 2600 to 3000 feet above the sea-level, and is covered with gravel and small stones; whence it has received from the Chinese the name of Shamo (Sea of Sand). The soil is mostly impregnated with different kinds of salt, and the lakes, which are numerous, are brackish. To the north and south of this valley are mountainous tracts of country, which on an average may be from 100 to 150 miles across.

They are partly wooded, and contain in many places excellent pasture-ground.

The climate of the Gobi is extremely cold. The winter lasts more than nine months; and even in July and August snow falls, and it frequently freezes in the night.

(Du Halde, *History of China*.)

GODALMING, Surrey, a market-town and municipal borough in the parish of Godalming, is situated in a valley on the right bank of the river Wey, in 51° 11' N. lat., 0° 37' W. long., distant 4½ miles S. by W. from Guildford, 33 miles S.W. from London by road, and 34½ miles by the London and South-Western railway. The population of the town of Godalming in 1851 was 2218. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a vicarage in the archdeaconry of Surrey and diocese of Winchester.

Godalming consists chiefly of a main street, nearly a mile long; with which the suburb of Mead-row and the village of Ferncombe on the north-east are nearly united. The town is paved and lighted. The town-hall is a neat modern building. The parish church, situated between the High-street and the river, consists of a nave and chancel, with aisles, and is 132 feet long; the tower is early Norman, the rest of the church is early English, with later insertions. In the interior is a monumental tablet to the Rev. Owen Mauning, the historian of the county. There is a district church which was opened in 1849. The Independents, Wesleyan Methodists, Quakers, and Unitarians have places of worship. There are National and British schools; a savings bank; and a public reading-room. A county court is held in the town. Godalming was the original seat of the manufacture of fleecy hosiery, some of which is still made here. Paper-making, the hosiery manufacture, and the preparation of wash-leather employ many of the inhabitants. Hoops for butter-tubs are made in large quantities. The Wey is navigable up to Godalming, and there is here a spacious wharf. Some corn-mills, oil-mills, and fulling-mills are near the town. A market for corn is held on Wednesday, and fairs are held on February 13th and July 10th, for cattle, &c.

(Manning and Bray, *Surrey*; Brayley, *Surrey*; *Communication from Godalming*.)

GODAVERY. [HINDUSTAN.]

GODERICH. [CANADA.]

GODMANCHESTER. [HUNTINGDONSHIRE.]

GODSTONE, Surrey, a village and the seat of a Poor-Law Union in the parish of Godstone, is situated on the left side of Broadmead water, a feeder of the Medway, in 51° 15' N. lat., 0° 3' W. long., distant 26 miles E. from Guildford, and 18 miles S. by E. from London by road. Godstone station of the London and South-Eastern railway, which is 2 miles from the village, is 27 miles distant from London. The population of the parish of Godstone in 1851 was 1657. The living is a vicarage in the archdeaconry of Surrey and diocese of Winchester. Godstone Poor-Law Union contains 14 parishes, with an area of 40,211 acres, and a population in 1851 of 8871. The place is chiefly remarkable for its quarries of sandstone of a particularly durable description. The neighbourhood, which is picturesque and healthy, contains several good mansions.

GODSTOW. [OXFORDSHIRE.]

GOES, or TER-GOES. [BEVELAND.]

GOJAM. [ABYSSINIA.]

GOLCONDA. [HINDUSTAN.]

GOLD COAST COLONY. The Gold Coast is a part of Upper Guinea, but its boundary is not exactly determined. Geographers state that Cape Three Points (2° 30' W. long.) constitutes its western boundary; but our navigators extend it farther west to the small river Assinnee (about 5° W. long.), nearly 70 miles E. from Cape Laboo. On the east, the eastern mouth of the river Lagos (4° 20' E. long.) is generally considered as constituting its boundary towards Benin, though the most eastern districts are often distinguished by the name of the Slave Coast. In the interior are the powerful kingdoms of the Ashantees and Dahomey, on which most of the small states along the coast are dependent. According to Governor Hill, in his despatch to the Secretary of State for the Colonies, transmitting the 'Blue Book' for 1851, the territory under British protection is estimated to include about 8000 square miles of country, with a population of about 400,000. In a despatch of April 15th, 1853, however, Governor Hill states that he considers his previous estimate of the population to be exaggerated, and that it is probably not more than 300,000. The revenue of the colony is derived from a government grant of 4000*l.* per annum, a duty of half per cent. ad valorem on all imports, and certain small fees. The income for 1852 amounted to 6739*l.* 19*s.* 6½*d.*, the expenditure to 6402*l.* 5*s.* 8*d.* The value of the imports for the year 1852 amounted to 71,635*l.*; the value of the exports for the same year amounted to 159,250*l.*

Nearly in the centre of the coast is the fortress of Accra. The country west of Accra has an undulating surface, with a small proportion of level ground: the hills are covered with shrubs and timber of small growth. The coast, though rarely high, is rocky and bold. At Accra the low country begins, and extends a considerable way to the eastward. It is a fertile, open, and level plain, which contains extensive savannahs covered with high grass; but in some parts it is thickly wooded with fine trees. The shores here

are flat and sandy. There are no harbours along the coast; and as the surf is very violent, the trading vessels are obliged to anchor four or five miles from the beach. This coast was formerly much resorted to by European and American vessels for slaves. At present it is visited by a few vessels for palm-oil, gold, and ivory: they give in exchange fire-arms, iron and iron-ware, tobacco, rum, Manchester cottons, and some other articles.

The whole of this coast being near 5° N. lat., is considered one of the hottest countries on the globe; yet the mean temperature is only 78°, and in the cold season the thermometer sometimes falls to 73° or 74°. During the Hamattan season, from the middle of December to March, which is the driest and coolest part of the year, the wind blows from north-east. The great rainy season begins in March, and continues to the beginning of June. From June to the end of September is the warm season, which is the most unhealthy, especially the month of August, when the fogs are denser than at other times, and generate fevers. In October and November showers of rain are frequent. Except during the Hamattan season, the winds blow from the west in the middle of the day, from 11 to 3 o'clock, but in the evening from south-west, and in the morning from north-west. The climate is in general unhealthy, especially to Europeans on their arrival. Every person is attacked by a fever, which is called the seasoning. This fever in many instances proved fatal; but it is stated that of late years the administration of quinine has been found exceedingly useful in promoting the recovery of persons attacked by the fever.

Cape Coast Castle is the principal English fortress; it is situated in 5° 5' N. lat., 1° 12' W. long., and covers a considerable area. In it are apartments for the officers, and barracks for the private soldiers. There are some spacious warehouses. It is built on a rock close to the sea. Near it are the small outposts called Fort William and Fort Victoria. The town, which is behind the fortress, is of considerable extent; it has about 10,000 inhabitants, of whom about 20 are Europeans. The streets are regularly arranged, but the houses are of mud, and huddled together. Within Cape Coast Castle is a government-school, which in 1852 was attended by 153 boys.

The other forts are Accra, Annamaboe, and Dixcove. Fort St. James at Accra is occupied by a small garrison. The native population is stated to be about 8000. The fort is situated on the coast in 5° 32' N. lat., 0° 12' W. long., and the station is regarded as among the most healthy on the Gold Coast. In the vicinity of Cape Coast Castle is the Dutch fort of Elmina, and near Accra that of Crevecoeur. About 3 miles E. from Accra is the fort of Christiansborg, and about 30 miles N.E. from Accra is the fort of Fredensborg, both recently purchased from the Danes by the British government. The purchase of the Danish forts on this coast has added considerably to the area of territory under British protection. ANNAMABOE has been noticed separately. The population is said to be about 4500. The exports include the articles usually sent from this coast, namely, palm-oil, gold dust, ivory, and grains, and the imports include British manufactured goods of a useful description, besides arms, gunpowder, spirits, and wines. Annamaboe is an entrepôt of commerce for Ashantee and the interior. Dixcove is situated in 4° 48' N. lat., 1° 57' W. long. The bay affords accommodation for vessels of 100 tons to take in their cargoes. The native population inhabiting the town is about 1200.

The introduction of civilising influences to the native population of the Gold Coast, is chiefly owing to the labours of the Wesleyan missionaries. From the despatches of successive governors of the colony, addressed to the Secretary of State, it would appear that considerable progress has been made in communicating to the natives the benefits of an educational and industrial training. In the year 1852 the Wesleyan chapels were attended by upwards of 6000 persons, and about 1200 children were in attendance at the schools of the mission. Mr. Freeman, the missionary superintendent, established in 1851 an industrial school and garden at Beulah, about 8 miles from Cape Coast Castle. In February 1852 there were 23 native youths under training at this establishment. On December 31st 1852 Mr. Freeman, writing to Governor Hill, says, "We have now about 750 vines, and 5000 coffee plants. The lads in the establishment work willingly, and behave well." The Wesleyan Missionary Society expends above 5000*l.* a year on the Gold Coast Mission. Among other evidences of advancing civilisation may be noticed the erection by the natives of many neat cottages for the residence of their families, with some pretension to the conveniences and comforts of European dwellings, and the construction of several good roads to facilitate communication between the towns and villages in the interior. The roads have been constructed voluntarily by the natives under the direction of the missionaries. These encouraging features have been more particularly noticeable in the neighbourhood of Abakrampa, the capital, and Domonasi, the second town of the Abrah tribe and district, in the Cape Coast territory. In some of the principal towns of the interior chapels for Christian worship have been built by the chiefs at their own expense.

Governor Hill has endeavoured to enlist the sympathies and co-operation of the native chiefs, by forming them into a kind of legislative body, including the council, with the executive at its head. Each chief has agreed to pay a poll-tax of 1*s.* yearly for each person

belonging to his tribe: from the fund thus provided each chief is to receive a stipend to support the dignity of his position, and from it is to be defrayed the cost of such general measures of improvement as the legislative body may agree to undertake. Besides the school at Cape Coast Castle, already noticed, the Governor has recently established one in the interior, which in April 1853 had 24 scholars, and he proposes to establish schools at such places within the range of his government as have not been already supplied by the Wesleyan body. He has also employed the natives composing the Gold Coast corps, numbering 333 non-commissioned officers, rank and file, in executing works of public utility, giving them the opportunity of attending the regimental school when they can be spared from other service. In this way many members of the corps have made considerable progress in reading, writing, and a knowledge of the mechanical arts. By their labours 40 miles of a military road has been opened through the Assin country, directly into the interior towards the capital of Ashantee; and a fine carriage-road to Annamaboe was in process of construction in April 1853. On this road a handsome bridge had been constructed, at the entrance of the town, the granite for which had been first quarried by the soldiers from a deposit opened by them in the immediate neighbourhood.

(Robertson, *Notes on Africa*; Hutton, *Voyage to Africa*; Adams, *Remarks on the Countries extending from Cape Palmas to the River Congo*; Monrad, *Gemälde der Küste von Guinea*; *Parliamentary Papers*.)

GOLDBERG. [LEGNITZ.]

GOMBROON, called also *Bunder Abbas*, a sea-port town, situated at the entrance of the Gulf of Persia, opposite the far-famed island of Ormuz. The town was once flourishing, and carried on such an extensive trade that the English, French, and Dutch found it advantageous to maintain large factories here; but owing to some dispute among the natives, the factories were destroyed, and the place abandoned by Europeans, after which its trade was removed to Abushehr, or Bushira. Before that event the town is said to have contained 30,000 inhabitants; now the population is reduced to 3000 or 4000 Arabs. It is surrounded by a mud-wall, about three-quarters of a mile in circumference. The houses are flat-roofed, but rather commodiously built; the streets, as in most oriental towns, are narrow and dirty. The best building in the town is the palace of the sheikh, which was formerly the Dutch factory, and has been converted into the residence of the Arabian chief. There is a good anchorage off the town, where a vessel may be perfectly sheltered. The sheikh of Gombroon is dependent on the Sultan of Muscat, in Arabia.

GOMERA. [CANARIES.]

GONDAR, a city of Abyssinia, and the residence of the Negus, or nominal emperor of that country, is situated on hilly ground at the north-eastern extremity of the plain of Dembea, 30 miles N.E. from the lake of Dembea, or Zana, at an elevation of 7420 feet above the level of the sea. It is irregularly built, the houses or huts are all of one story high and thatched. The emperor's palace, a square stone building flanked with towers, is the only building of any pretensions in the town. There are no shops or bazaars, goods and merchandise of whatever sort being exposed for sale on mats in the open market-place. The town has greatly declined from its condition before the emperors had lost their authority; it then contained from 50 to 100 churches (but Abyssinian churches are not imposing structures), and above 50,000 inhabitants. The town has some manufactures, which comprise fire-arms, sword-blades, knives, scissors, razors, shields, coarse pottery, &c. There is some trade by means of kafilas through Gondar between the southern parts of Abyssinia and Massowa: the chief articles of this transit trade are slaves, musk, wax, elephants' tusks, coffee, honey, some gold, and a kind of spice called khéif. Most of the inhabitants of Gondar (with the exception of the priests and the slaves) are engaged in this trade. There are caravan roads from Gondar to Baso on the Nile. Gondar is also the capital of the kingdom of Amhara, one of the states into which Abyssinia is divided. [ABYSSINIA.] A great quantity of rain falls at Gondar, but the temperature is warm; the mean temperature, according to Rüppell, of seven months from October to April inclusive, being 69°. The lowest temperature observed during the interval was 53°09", which was one morning in December. Gondar is situated in about 12° 36' N. lat., 37° 30' E. long.

GOOD HOPE, CAPE OF. [CAPE OF GOOD HOPE.]

GOODWIN SANDS. [KENT.]

GOOLE, West Riding of Yorkshire, a market-town, river-port, and the seat of a Poor-Law Union, in the parish of Snaithe, is situated on the right bank of the river Ouse at its junction with the river Dutch, in 53° 42' N. lat., 0° 50' W. long., distant 30 miles E.S.E. from York, 180 miles N.N.W. from London by road, and 196 miles by the Great Northern and Goole Pontefract and Wakefield railways. The population of the town in 1851 was 4722. The livings are perpetual curacies in the archdeaconry and diocese of York. Goole Poor-Law Union contains 17 parishes and townships, with an area of 36,914 acres, and a population in 1851 of 13,545.

Goole has only recently risen into importance. The opening of the canal from Goole to Ferrybridge, the establishment of Goole as a bonding port in 1829, the subsequent erection of docks, and the completion of the Goole, Pontefract, and Wakefield railway have greatly promoted the prosperity of the town. The ship-dock is 600 feet long

and 20 feet wide, with 18 feet depth of water, and will contain 54 square-rigged ships; at the quays there is sufficient accommodation for 17 ships. The barge dock, or dock for country vessels, is 900 feet long by 150 feet wide, and will contain 200 vessels averaging 50 or 60 tons each. There is a commodious dock for large steam-vessels, a dock called the railway dock, a dry dock of large dimensions, and a patent slip for repairing vessels. The basin or entrance harbour is 250 feet long by 200 feet wide, with 9 feet depth of water. The custom-house is a neat building. There are extensive warehouses for the bonding of grain and merchandise of every description. For the reception of timber under bond there are ponds capable of receiving upwards of 300 loads. Coal is largely exported coastwise, and a good deal is sent to London. The number and tonnage of vessels registered as belonging to the port on December 31st 1853 were as follows:—Sailing-vessels, under 50 tons, 116, tonnage 8824; above 50 tons, 396, tonnage 25,041; steam-vessels, under 50 tons, 2, tonnage 27; above 50 tons, 7, tonnage 680. During the year 1853 there entered and cleared at the port in the coasting trade, inwards, 1852 sailing-vessels, tonnage 106,172; outwards, 1888 sailing-vessels, tonnage 100,658, and 51 steam-vessels, tonnage 7319. In the colonial and foreign trade there entered 83 British vessels, tonnage 7658, and 156 foreign vessels, tonnage 15,176; with 72 British steam-vessels, tonnage 12,743, and 43 foreign steam-vessels, tonnage 7568; and there cleared 30 British sailing-vessels, tonnage 2386, and 75 foreign, tonnage 7542; with 72 British steam-vessels, tonnage 12,675, and 42 foreign, tonnage 7392.

The gross amount of customs duties received at the port in 1851 was 39,812*l*. Ship- and boat-building, sail-making, iron-founding, and agricultural machine-making employ many of the inhabitants. Several corn-mills, some of them worked by steam, are in the neighbourhood. There are in Goola a chapel of ease; a handsome church with a lofty tower, erected a few years ago at a cost of 8000*l*., of which the Aire and Calder Navigation Company contributed 4500*l*.; chapels for Independents and Wesleyan Methodists; National and Infant schools; a Wesleyan day school; a literary and scientific institution; a savings bank, and several charitable societies. A weekly market is held on Wednesday. The town is lighted with gas. A county court is held in Goola.

GOORIA. [GEORGIA.]

GORAM ISLANDS. [CERAM.]

GORBALS. [GLASGOW.]

GOREE is a small island near the west coast of Africa, to the south of Cape Verd. It is separated from the continent by the Strait of Dakar, which is about 3000 yards across. The island, which is about 3 miles round and has a bold coast on all sides except the north, consists of volcanic rocks, partly covered with sand, with which has been mixed vegetable mould, brought from the continent. At the north-east extremity of the island there is a roadstead which affords good shelter for shipping for eight months in the year. Goree belongs to the French, who have erected some fortifications and a town upon it. The town of Goree is an entrepôt for the gum, ivory, gold dust, oil, and other products of the neighbouring parts of the continent of Africa. The island is deficient in wood and water, although part of it is swampy. The total population is about 5000, all liberated or free Africans, except about a score of Frenchmen who fill official or mercantile situations on the island.

GOREE. [GEORGIA, Asiatic.]

GOREY, county of Wexford, Ireland, a market-town and the seat of a Poor-Law Union in the parish and barony of Gorey, is situated about 28 miles N. by E. from Wexford, and 60 miles S. from Dublin. The population of the town in 1851 was 2973, besides 1420 inmates of the Union workhouse. Gorey Poor-Law Union comprises 25 electoral divisions, with an area of 129,704 acres, and a population in 1851 of 31,281.

The town of Gorey was incorporated by charter of James I. when it was called Newborough, but this name has not been in general use. The town consists of one street nearly a mile long, a shorter street crossing it about the middle, and clusters of houses around the point of intersection. There are a court-house and a market-place. Besides the Episcopal church, there are a Roman Catholic chapel, with a nunnery attached, a National school, and a savings bank. Near the town is a fever hospital. The market on Saturday for agricultural produce and poultry is well attended; seven fairs are held in the course of the year. Several fine mansions are in the vicinity.

GORKUM. [HOLLAND.]

GÖRLITZ. [LIEGNITZ.]

GORT, county of Galway, Ireland, a market-town and the seat of a Poor-Law Union in the parishes of Beagh, Kiltartan, and Kilmacduagh, is situated in 53° 4' N. lat., 8° 50' W. long., distant about 18 miles S.E. by S. from Galway, and 125 miles W. by S. from Dublin. The population of the town in 1851 was 2405, besides 2637 in the Union workhouse. Gort Poor-Law Union comprises 20 electoral divisions, with an area of 107,919 acres, and a population in 1851 of 26,287.

The town of Gort is neat and tolerably regular. It is situated in a plain, which is nearly surrounded by a mountainous country, abounding with wood and water. Being remote from other market-towns it has a considerable retail trade. The principal public buildings are the parish church, a Roman Catholic chapel, a district bridewell,

and an infantry barrack. Three annual fairs are held. A stream from Loughcooter runs through the town of Gort to the Bay of Galway. In its course from the lough, both before and after reaching Gort, the stream several times disappears, and finds its way for considerable distances by subterraneous channels. Before reaching Gort it takes the name of the Blackwater.

GORTIN, county of Tyrone, Ireland, a village and the seat of a Poor-Law Union in the parish of Lower Badony, is situated on the Owenreagh rivulet in 54° 43' N. lat., 7° 18' W. long., distant 8 miles N.N.E. from Omagh, and 118 miles N.N.W. from Dublin. The population of the village in 1851 was 372, besides 241 in the Union workhouse. Gortin Poor-Law Union comprises 18 electoral divisions, with an area of 111,319 acres, and a population in 1851 of 17,248. Gortin is situated in the midst of secluded and very picturesque mountain scenery. Besides the parish church, there are here a dispensary, a distillery, and the Union workhouse.

GÖRTZ (*Goritz, Gorizia*), a large circle in the Küstenland, or Illyrian Littoral, in Austria, was comprised in the former government of Trieste. Its area is 1124 square miles. The population, according to the census of the empire in 1850-51, was 192,511. The circle is traversed by chains of the Alps in the north, which are of calcareous formation and well wooded, but a great part of the surface is level. It is watered by the Isonzo and Idriza; and produces wine, silk, flax, hemp, fruit, timber, and a small quantity of corn.

GÖRTZ, the chief town of the circle, is situated on the left bank of the Isonzo, about 25 miles N.N.W. from Trieste, and contains about 10,000 inhabitants. The older part of the town is built on a hill, part of which is occupied by an old castle, once the residence of the counts of Görtz, now a prison; this part is surrounded by walls. The lower part of the town is modern and well built. Görtz is the seat of a bishop, and has four churches besides the cathedral, an episcopal palace, and seminary; a college, town-hall, a theatre, a philosophical academy, Piarist college, and several other schools, including one for Jews. The barrack in the great square at the foot of the castle rock was originally a Jesuits' college. The Attems family possesses the well-known 'Roman Stone,' which affords evidence that the ancient Norica stood in the vicinity of this town. Görtz has large silk factories, dye-works, sugar-refineries, tan-yards, bleach-grounds for wax, &c. Rosoglio is also one of its industrial products. There is a brisk general trade. Charles X., ex-king of France died in 1836 in the castle of Grafenburg, and is buried in the chapel of the convent of Castagnovizza above the town. There is a good road from Görtz to Trieste.

GOSFORTH. [CUMBERLAND.]

GOSPORT, Hampshire, a market-town, sea-port, and fortified town in the parish of Alverstoke, is situated on the western side of Portsmouth harbour, near its mouth, in 50° 48' N. lat., 1° 7' W. long., distant 14 miles S.E. from Southampton, 77 miles S.W. from London by road, and 89 miles by the London and South-Western railway. The population of the town of Gosport in 1851 was 7414. The livings are perpetual curacies in the archdeaconry and diocese of Winchester. The town is governed by trustees, under an old Act of Parliament, vacancies, when they occur, being filled up from the general body of the inhabitants by vote of the surviving trustees.

Gosport in the reign of Henry VIII. was a mere village, inhabited by fishermen. It is now a place of considerable importance. The town is well lighted with gas. Gosport has two churches, Holy Trinity church, erected about 1680, a neat and spacious edifice, in the south part of the town, and St. Matthew's church, erected in 1846. The Independents, Wesleyan Methodists, and Roman Catholics have places of worship; there are National and British schools, two Young Men's societies for religious and mental improvement, a savings bank, an almshouse, and several charitable associations. A floating bridge affords constant communication with Portsmouth, and a floating pier enables passengers to embark on the Isle of Wight packets at all times of the tide. The coasting trade is considerable. There are several distilleries, and an extensive iron-foundry where chain-cables and anchors are made. Saturday is the principal market-day; secondary markets are held on Tuesday and Thursday. Fairs are held on May 4th and October 10th.

About fifty years since Gosport was fortified by a line of bastions extending from Weovil to Alverstoke. Within the lines is the Royal Clarence Yard at Weovil, containing the brewery, the victualling department, the establishment for baking biscuit by machinery, and storehouses for provisions for the Royal Navy. Near the extremity of the point of land which forms the west side of Portsmouth harbour is situated the Royal Hospital of Haslar, erected between 1750 and 1762. At the northern extremity of the point of land on which Haslar Hospital is built, an extremely strong fort and barracks have been lately constructed for the protection of the entrance of Portsmouth harbour. A deep creek, which intervenes between Haslar and Gosport, is spanned by a bridge. Bingham town is a populous suburb of Gosport, containing many genteel residences; and Anglesea, about 2 miles from Gosport, on Stoke's Bay, is a fashionable watering-place. (*Parliamentary Papers*; Warner, *Hampshire*; *Land We Live In*, vol. i.; *Communication from Gosport*.)

GOSSELIES. [HAINAULT.]

GOTHA, the capital of the duchy of Saxe-Gotha, which upon the

extinction of the direct line in 1825 came to the Duke of Saxe-Coburg. Gotha is situated at an elevation of about 750 feet above the sea, near the Leine, a feeder of the Nesse, in 50° 57' N. lat., 10° 42' E. long., and has about 15,000 inhabitants. It is a station on the Thuringian railway, by which it is 8 miles W. from Erfurt and E. from Eisenach. It is a handsome town, and since the ramparts have been taken down and laid out in public walks, presents an open cheerful appearance. Its form is a long irregular quadrilateral; it has 4 gate-entrances, 5 public squares, and 16 principal streets. The streets are well paved and lighted.

The principal public buildings are the ducal palace of Friedenstein, which stands on the summit of a high hill, and is surrounded by a terrace, gardens, and pleasure-grounds. It contains a library of 150,000 volumes and 5000 manuscripts, among which are 14 folio volumes of St. Bernard's Correspondence, and 500 Arabic manuscripts. In the palace are also one of the most celebrated collections of coins in Europe, comprising 10,000 ancient and 52,000 modern coins; a library of works on Numismatics of 6000 volumes; an Oriental museum; a gallery of above 1500 paintings; collections of antiquities, the fine arts, natural history, &c. The other buildings of note are—the arsenal, the old and new town-hall, house of assembly of the States, and seven churches (the principal of which are St. Margaret's, with the ducal vaults, and the church of the Orphan Asylum), all of which belong to the Lutherans. The Gymnasium, founded in 1524, is one of the best in Germany. Gotha has a training school for teachers, various other schools, and several charitable institutions. The 'Almanac de Gotha' has been published here annually since 1774.

The manufactures comprise muslins and cottons, porcelain, paper, cloth, linen, thread, yarn, camlets, tobacco, beer, sausages, musical and surgical instruments, toys, pewter and japan goods, furniture, gunpowder, saddlery, &c. The large geographical establishment of Justus Perthes employs several hundred designers, engravers, printers, and colourers of maps, which have a vast circulation. Near the town is the observatory of Seeberg.

GÖTALAND. [SWEDEN.]

GOTHARD, ST. [ALPS.]

GOTHENBURG (Gottenburg, in Swedish Göteborg), a town in Sweden, is situated on the river Göta, about 5 miles from the Cattagat, and has about 30,000 inhabitants. Opposite the town the river widens to nearly one mile and forms an excellent harbour. The town, which is built on the southern banks of the harbour, is traversed by numerous canals, which are supplied with water by a small river called the Ländal; these canals are crossed by 21 bridges. The houses are mostly built of stone or bricks well stuccoed. The streets are regular, and intersect one another at right angles; they are well-paved, but without foot-pavements. The canals running through them being planted with trees, give to Gothenburg a great similarity to many of the towns in the Netherlands. The town has few interesting buildings, and is far from being picturesque, but from the rocky hills in the neighbourhood many lovely views may be obtained. Among the most important structures in the town are the new exchange, the cathedral, the Swedish church, the arsenal, the town-hall, the theatre, &c. The town is in a very thriving state. Its commerce is extensive. Its exports consist chiefly of iron and steel, deals, tar, pitch, copper, bark, &c. The imports comprise colonial produce, salt, wine, rice, fish, &c. Many vessels are built here. The manufactures are numerous, and the town is the most important trading place after Stockholm in all Sweden. Among its industrial products are plain and printed cottons, woollen-cloth, sail-cloth, tobacco, refined sugar, snuff, glass, paper, porter, leather, &c. Gothenburg is the seat of the governor of Gotheborg-Län, and of a bishop. It has a college and public library, public baths, a society of arts, two free schools, two orphan asylums, a chamber of commerce, and several other useful institutions. The harbour is defended by three forts, and has about 17 feet water. Steamers ply between the Göta River and the line of the Göta Canal to Stockholm. [SWEDEN.] In 1849 there arrived from foreign ports 1018 vessels; the departures for foreign ports numbered 1011: this is exclusive of steamers, of which the number that entered and cleared out was 83. In the coasting trade there were 718 arrivals and 1462 departures. The population of the town at the commencement of this century was only about 14,000.

GOTHLAND (Gottland), an island in the Baltic, extends between 56° 55' and 58° N. lat., 18° 10' and 19° 10' E. long. Its greatest length from north to south is about 80 miles, from east to west about 33 miles. The southern part of the island is a peninsula about 10 miles in length, connected with the northern part by a narrow isthmus a little more than a mile across. Gothland, with the adjacent islets of Färö, Gottska Sandö, and a few others, forms the Län of Wisby, the total area of which is 1211 square miles, with a population of 43,268 in 1845.

The island of Gothland is of limestone formation; the surface rises from 80 to 150 feet above the sea; the coasts are indented by numerous bays.

The surface of this island is hilly, and mostly covered with wood: in a few places swamps occur, but they are not of great extent. The coasts are generally low. The climate is comparatively very temperate; the walnut, mulberry, and grape ripen in the open air

in favourable situations. The principal articles of exportation are timber, wood, sandstone, marble, and lime. Many districts of the island are fertile and well cultivated; rye, barley, and hops are grown. Its horses and black cattle are of small size, but its sheep have lately been much improved. The roads throughout the island are good, and the farmhouses well built. Game is abundant. There are ruins of above 100 churches on the island, dating from the 11th and 12th centuries. The island of Gothland is separated from Färö by Färö-Sund, which is hardly two miles wide.

Wisby, the capital, and the seat of a bishop, is situated on the western coast, and contains about 4000 inhabitants. It is an ancient place; but the date of its foundation is unknown. In the 10th and 11th centuries it was a great trading city; and to judge by the Anglo-Saxon, Arabic, Persian, and other coins found here, it must at one time have been a famous centre of commerce. The town never recovered its prosperity after its capture and plunder by Valdemar III. of Denmark in 1361. In the middle ages it was the centre of an extensive trade with all the countries round the Baltic Sea, and the commercial usages established by its merchants (known under the name of the Ordinances of Wisby) were long in force in all the northern countries. The town during this period was very considerable, and there still exist ruins of large buildings in its neighbourhood. There are no less than 18 ruined churches; the feudal walls and towers of the town still exist entire as they stood in the 13th century. St. Mary's church, the only one now kept up for the use of the inhabitants, is a gothic structure dating from A.D. 1190. There are the ruins of a castle also, and of several convents. These ruins, and many of the houses of the town, which were constructed by the wealthy merchants of Wisby in times long gone by, are highly interesting to the lover of gothic architecture. Steamers ply regularly between Wisby and Westervik on the coast of Sweden, and also to Stockholm. The commerce of the present town is confined to the produce of its forests and quarries, and to the exportation of rye, but it is rather active and thriving. It has a good grammar-school.

GÖTTINGEN, a town in Hanover, is situated in a broad and fertile valley interspersed with gentle eminences, at the foot of the Hainberg, a naked mountain, in 51° 31' N. lat., 9° 56' E. lon., at a distance of 60 miles S. from Hanover, to which a railway in part completed is being made through Göttingen to Cassel. It is built on both sides of the New Leine, an artificial arm of the Leine; at an elevation of about 470 feet above the level of the sea, and has about 11,000 inhabitants. The name of Göttingen first occurs in a record of the times of the emperor Otho I. About the year 1360, it became a member of the Hanseatic league; but it owes its modern celebrity to the university instituted by George II., king of England and elector of Hanover, in the year 1734. The town is surrounded by ramparts, which have been laid out in agreeable plantations and avenues of lime-trees. It is divided into the Old Town, New Town, and the quarter of Masch; has four gates, and some inconsiderable suburbs. It is in general well-built, and the streets are mostly broad, straight, and paved with basalt. There are three squares or open spaces, the chief of which are the market-place with a fountain and basin, and a handsome esplanade. There are three Lutheran churches, a Calvinist church, and a Roman Catholic chapel. The other edifices of note are the guildhall, hospital, observatory, and the university buildings.

The university, entitled the 'Georgia Augusta,' was opened in 1737. The number of students between 1822 and 1826 averaged 1481 annually; between 1831 and 1837 the average fell to 868, and the dismissal of some of its ablest professors by the King of Hanover for political reasons, reduced the number still lower. In 1845 the students numbered only 633; in 1850 the number rose to 715. It has four faculties: protestant theology, law, medicine, and philosophy. The library contains upwards of 400,000 volumes, and 3800 manuscripts. Connected with the university are a museum containing valuable collections of paintings, models, instruments, coins, &c.; an observatory, lying-in-hospital, chemical laboratory, and a botanic garden. A new hall was finished in 1837. Göttingen has also a royal society of sciences, a protestant gymnasium attended by above 200 pupils, several printing establishments, a female high-school, a house of correction, &c. The university is the main support of the town: but it has also considerable manufactures of woollens, leather, soap, and candles, musical and scientific instruments, stockings, &c. The linen trade is also extensive. Tobacco, sausages, books, and tobacco-pipes are important articles of trade. Under the French empire Göttingen was the capital of the department of the Leine.

GOTTORP. [SCHLESWIG.]

GOUDA. [HOLLAND.]

GOVAN. [LANARKSHIRE.]

GOYAZ. [BRAZIL.]

GOZZO ISLANDS. [MALTA.]

GRAAF or GRAAFF REYNET, the chief town of the district of Graaf Reynet, Cape of Good Hope, is situated on the Sunday River, in 32° 5' S. lat., 24° 57' E. long., distant about 140 miles N.N.W. from Port Elizabeth, and 120 miles N.W. from Graham's Town. The town stands at the foot of the Great Sneeuw Bergen, or Snow Mountain. In the month of February 1854 considerable excitement was caused in the town and district of Graaf Reynet by the report that gold had

been discovered near the town of Smithfield, on the Caledon River, about 160 miles N.E. by N. from Graaf Reynet town. The quality of the gold found was pronounced to be fine, and the quantity promised to be abundant. The gold was found imbedded in quartz. One nugget picked up within the first week weighed 83 grains: the pursuit however has not been very vigorously followed out, probably because the gold district itself is within what was called the Sovereignty, and which no longer forms a part of the colony of the Cape of Good Hope.

GRACIOSA. [AZORES; CANARIES.]

GRADISKA. [BOSNIA.]

GRÆCIA MAGNA. [MAGNA GRÆCIA.]

GRAHAM'S TOWN. [ALBANY; CAPE OF GOOD HOPE.]

GRAMMONT. [FLANDERS, EAST.]

GRAMPIAN MOUNTAINS. [GREAT BRITAIN.]

GRAMPOUND. [CORNWALL.]

GRAN, a town in Hungary, is situated on a hill on the right bank of the Danube, nearly opposite the mouth of the Gran, in 47° 47' N. lat., 18° 45' E. long., and has about 12,000 inhabitants. It is a royal free town, and gives title to an archbishop, who is primate of Hungary. It has a strong castle on a rocky island in the Danube, which has undergone several sieges, and at the foot of which are warm baths. Among other public buildings are the cathedral and chapter-house, the house of assembly and town-hall, a gymnasium conducted by Benedictines, which has about 350 scholars, three Roman Catholic churches, a Greek church, an abbey, an hospital, and a Franciscan monastery. The cathedral was commenced in 1821, and though unfinished is, it is said, the most magnificent modern building in Hungary: it is built in the Italian style, on a height the site of a former fortress, and forms a conspicuous object from the Danube. Gran has seven suburbs, of which the 'Water-town,' at the foot of the castle, which is connected with the town by a flying bridge, belongs to the archbishop. The weaving and dyeing of woollen cloths is the chief employment of the inhabitants. Gran is supposed by many to have been founded by the Romans. It is the birthplace of St. Stephen, king and patron of Hungary, and was long the residence of Hungarian kings. The Turks held it for 70 years preceding 1683, when they were finally driven out of it by John Sobieski, king of Poland.

GRAN CANARIA. [CANARIES.]

GRANADA, an ancient kingdom and province of Spain, included in the territorial division of Andalucia, is bounded N. by the province of Jaen, N. and N.E. by that of Murcia, N.E. and E. by those of Sevilla and Cordova, and S. and E. by the Mediterranean Sea. It is situated between 36° 16' and 38° 4' N. lat., 1° 38' and 5° 30' W. long. The greatest length east to west is about 200 miles; the greatest width north to south is about 140 miles; but the greater part is much narrower. The area is 8622 square miles: the population in 1849 was 1,157,584. It is now divided into three modern provinces, as follows:—

Provinces.	Square Miles.	Population in 1849.
Granada	8622	427,250
Almeria		292,334
Malaga		438,000
Total	8622	1,157,584

A general description of the provinces comprised in Andalucia is given under that head. [ANDALUCIA.] The province of Granada is almost entirely mountainous. It includes the lofty mountains of the Sierra Nevada, the Sierra de Ronda, and other ranges connected with them. The Montes de Granada divide it from the province of Jaen. The Sierra de Sagra and Sierra de Aguaderas separate it from the province of Murcia. The only plain of great extent is the beautiful Vega of Granada. The Rio Jenil (Xenil) passes by the city of Granada, below which it receives the Darro, and then flows north-westward to the Guadalquivir. Most of the other rivers flow southward to the Mediterranean Sea. The largest of these are the Rio de Almeria, the Rio Adra, the Rio Guadalfeo, the Rio de Velez, and the Rio Guadaljorce.

Towns.—The city of Granada is the capital of the province. [GRANADA.] Adra, 65 miles S.E. from Granada, stands at the mouth of the Rio Adra, where there is a small port. The inhabitants of the town are chiefly employed in the neighbouring lead and silver mines: population, 7400. Alhama, 30 miles S.S.W. from Granada, is situated on the northern slope of the Sierra Tejada, at a great elevation above the level of the sea. Alhama (the Bath) is frequented for its warm sulphureous baths, which are about a mile from the town. The principal bath is in a Moorish edifice, which remains unaltered. It is from 30 to 40 feet long, and the greater part of it is filled by the water which issues from the main spring. The temperature at the source is 104° Fahrenheit. Another large building has been erected by the present proprietor to accommodate all classes of visitors, and the whole seems to be very well conducted. The old town stands on a sort of peninsula nearly surrounded by a deep ravine in which the river flows, and is only connected with the new town by a narrow neck of rocky land, which is now a public walk, and across which

water is conducted by an aqueduct. In the Moorish times it formed a strong position. The modern town is tolerably well built. The old town is becoming ruinous: population of the two towns, 6280. Almeria, 83 miles E.S.E. from Granada, is the capital of the modern province of Almeria. It has a convenient harbour, at the mouth of the Rio de Almeria, in a well-sheltered bay. The town stands at the bottom of the bay, at the foot of an eminence on which is a fortified castle. The bay is extensive, and the harbour was formerly of importance. The houses of the town are all flat-roofed. Cotton and sugar are cultivated in the plain, which extends some distance eastward towards the Cabo de Gata: the population in 1845 was 17,800. Baza, 60 miles E.N.E. from Granada, occupies a hollow in the midst of its fertile hoyas, or basins. In summer the heat is intense and oppressive in the highest degree. Baza is a bishop's see, and has a cathedral: the population, including military, is 11,485. Berja, 63 miles E.S.E. from Granada, is a busy, flourishing, and increasing town, at the foot of the Sierra de Gador, and in the centre of the lead-mines, which are very numerous in the vicinity. Smelting and flattening machinery have been erected on the coast, whence asses and mules carry the ore to be exported from the port of Adra, which is 7 miles distant from Berja: population, 9840. Guadix, 32 miles E. by N. from Granada, stands on the western bank of the Guadiana Menor. Like Baza, it lies in a hollow, and the first objects beheld on approaching it are the gray roofs of the houses in the midst of fruit-trees and foliage. It is inclosed by old walls, and surrounded by mulberry plantations, and contains a cathedral and an old castle: population, 1051. Huescar, 75 miles N.E. from Granada, contains a population of about 6000, who manufacture some woollen cloths, and weave woollen and linen fabrics. Loja, 30 miles W.S.W. from Granada, occupies the mouth of a gorge in which the Jenil traverses a narrow valley between high and rugged hills. The greater part of the town is built on the western slopes, the houses rising above each other so as often to have the floor of one nearly on a level with the roof of another. A suburb occupies the slopes of the opposite sierra, and communicates with the town by a bridge. The town contains three churches and two hospitals, and there are manufactures of coarse woollens and paper: population, 15,000. Malaga, 55 miles S.W. from Granada, is the capital of the province of Malaga. The city is encircled by an amphitheatre of hills, and is built at the bottom of a wide bay with deep water and sheltering promontories, while inland it is surrounded by a narrow but fruitful plain backed by vine-clad hills. The harbour is formed by a mole 700 feet long (on which is a lighthouse); it is large enough for about 450 merchant-ships, and may be entered with any wind. The town is spread irregularly along the margin of the bay, and consists mostly of narrow, ill-paved, and dirty streets. The cathedral occupies an elevation in the centre. It is unfinished, of a mixed Spanish and Italian architecture, and with a spire 302 feet high. The city contains also a bishop's palace, four parish churches, five hospitals, an opera-house, theatre, bull-arena, custom-house, and convict-depôt. The old Moorish dock-yard is used as a store-house. On the eastern side of the bay a rocky height is covered with remains of fortifications, the summit being crowned by the Gibralfaro, a fortified castle, formerly surmounted by a pharos, or lighthouse. Malaga has an active trade in raisins, grapes, wines, olive-oil, figs, almonds, oranges, and lemons. The imports are mostly salt-fish, iron-manufactures, and colonial produce. The chief manufactures are cloth, ropes, leather, paper, and soap. There are two iron-foundries actively wrought by English capitalists, and there is a royal cigar-manufactory. The Alameda, or public walk, is a noble promenade adorned with trees and fountains, and bordered by a long range of stately dwellings: the population of the city in 1845 was 65,865. Malaga was the Malaca of the Romans, who had a flourishing colony here. Marbella, 32 miles S.W. from Malaga, stands on the Mediterranean Sea, and has a small port fit for fishing purposes. Sugar-refining and tanning are the other chief occupations of the population, who amount to about 6000. Motril, 48 miles S.S.E. from Granada, is situated in a fertile plain near the coast of the Mediterranean Sea, but is not a sea-port. Sugar, cotton, silk, and fruits are cultivated in the vicinity: population, 12,700. Ronda, 80 miles W.S.W. from Granada, and 42 miles W.N.W. from Malaga, stands at a great elevation, and is the capital of the Serrania de Ronda. It consists of two towns, separated from each other by a deep chasm, the bottom of which is the bed of the Guadiaro. An ancient bridge of great strength spans the chasm by a single arch of 110 feet. The old town, encircled by Moorish walls, stands on the top of a precipitous rock, and contains a ruined Moorish palace. The modern town is regularly laid out. The principal streets are long and wide, and the houses are whitewashed, and look very clean. They are all furnished with balconies, which are decked with flowers. The Plaza de Toros (bull-arena) is one of the largest in Spain, and there is also a theatre. There are several churches. Ronda is a very gay place, and is much resorted to by contrabandistas for smuggling purposes. There is a great annual fair held here, chiefly for the purpose of buying and selling horses. It is attended by English merchants from Gibraltar. There are manufactures of woollens, leather, flannel, silk-stuffs, and numerous water-mills driven by the stream of the Guadiaro: the population in 1845 was 15,948. Ujijar, 58 miles W.N.W. from Granada, stands on the

north bank of the Rio Adra. It is an old Moorish village, with flat roofs and latticed windows, and green plots of garden attached to each dwelling. It is the capital of the Alpujarras. Grapes grow on terraces, and in such declivities that the peasants are let down by ropes to gather them: population, 3000. *Velez-Málaga*, 18 miles E. from Málaga, is a poor but populous town in a very fertile district. It is crowned by a Moorish castle in ruins, and backed by a rugged sierra. It was formerly a port, but the sea has receded. Fine jaspers are found in the neighbourhood: population, 16,000. *Vera*, 42 miles N.W. from Almería, stands near the shore of the Mediterranean Sea, and has a small harbour, whence an active fishery is carried on. Nitre is manufactured, and there is a small import and export trade: population, 8470.

(Ford, *Handbook of Spain*; Madoz, *Diccionario de España*.)

GRANADA, a city of Spain, capital of the ancient kingdom and province of Granada, and of the modern province of the same name. It is the see of an archbishop, and the residence of a captain-general. It is situated in 37° 17' N. lat., 3° 50' W. long. The population in 1845 was 70,000. It is 2445 feet above the level of the sea, an elevation which renders it a delightful summer residence. It is built partly on the slopes and partly in the valleys between two hills overlooking the extensive and fertile plain called the Vega de Granada. One of the two hills is surmounted by the Moorish palace and fortress called the Alhambra. The other hill is occupied by the suburb called the Albaycín. The suburb called the Antequerula is built in the plain. The city itself is encircled by high walls in ruins, flanked by strong towers. The small river Darro flows through it; the Jenil flows outside the south wall, and receives the Darro a little lower down. The streets are for the most part narrow and irregular. The houses, tolerably well built, exhibit the Moorish taste, the exteriors being heavy and gloomy, with projecting balconies and flat roofs; the interiors convenient, and suitable to the climate. There are several good squares, of which the three principal are—El Campo, La Plaza Mayor, and La Bivarambla, the last containing a handsome fountain of jasper. There are many other fountains and jets-d'eau, which refresh the air as well as supply water to the inhabitants. The great object of attraction to those who visit Granada is the Alhambra. [ALHAMBRA.] The cathedral, though irregular, is a splendid structure, profusely ornamented with jasper and coloured marbles from the quarries of the neighbourhood. Beneath its fine dome, which rests on twelve arches, supported by as many pilasters, stands the high altar, on the decoration of which the wealth of the kingdom was lavished. Annexed to it is the Capilla de los Reyes, where the bodies of Ferdinand and Isabella are deposited. The figures and ornaments of these sepulchral monuments are greatly admired. Besides the cathedral there are 23 parish churches. Many of the numerous convents have been converted to educational and other secular purposes, and others have been taken down to make room for architectural improvements. The other public buildings are—the archbishop's palace, the university, 6 colleges, 10 hospitals, 2 prisons, a theatre, and many schools. The chief manufacture is that of sewing silk. The public walks on the banks of the Jenil and the Darro are delightful. The Vega of Granada has an extent of about 70 miles in length by 20 miles in width.

The city of Granada was founded by the Moors in the 10th century, and was at first subject to the khalifs, or kings of Cordova. In 1235 it became the capital of the new kingdom of Granada, and was soon distinguished for its riches and power, the splendour of its edifices, and its progress in arts and industry. It offered a long resistance to the Christian kings of Spain. In 1492 it was taken by Fernando and Isabel after a siege of twelve months. It is said to have then contained 400,000 inhabitants.

GRANADA, NEW. [NEW GRANADA.]

GRANARD, county of Longford, Ireland, a market-town, and the seat of a Poor-Law Union, in the parish of Granard, is situated in 53° 47' N. lat., 7° 25' W. long., distant about 17 miles E.N.E. from Longford, and 70 miles W.N.W. from Dublin. The population of the town in 1851 was 1805, besides 1855 in the Union workhouse. Granard Poor-Law Union comprises 36 electoral divisions, with an area of 134,004 acres, and a population in 1851 of 41,473.

Besides the parish church, there are in Granard a Roman Catholic chapel, National schools, a sessions house, a market-house, and a dispensary. A market for agricultural produce is held weekly, and fairs are held on January 15th, May 3rd, August 15th, and October 1st. Some coarse linen is manufactured. On the top of a high artificial mound are vestiges of an encampment.

GRAND BAHAMA. [BAHAMAS.]

GRAND or GREAT BANK. [NEWFOUNDLAND.]

GRAND ISLAND. [CANADA.]

GRAND SERRE. [DRÔME.]

GRANGEMOUTH. [STIRLINGSHIRE.]

GRANTHAM, Lincolnshire, a municipal and parliamentary borough, market-town, and the seat of a Poor-Law Union, in the parish of Grantham, is situated on the right bank of the river Witham, in 52° 55' N. lat., 0° 37' W. long., distant 30 miles S. by W. from Lincoln, 110 miles N.N.W. from London by road, and 105 miles by the Great Northern railway. The population of the municipal borough in 1851 was 5375; that of the parliamentary borough was 10,873. The

borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a vicarage, with the vicarage of Braceby annexed, in the archdeaconry and diocese of Lincoln. Grantham Poor-Law Union contains 52 parishes and townships, with an area of 99,219 acres, and a population in 1851 of 29,851.

Grantham is situated a short distance westward of the ancient Ermine-street. The first charter of incorporation is that of Henry VI. in 1463. The borough was first represented in Parliament in the 7th Edward IV., since which time it has continued to return two members. The town consists chiefly of four streets, called respectively Castle-gate, Westgate, Watergate, and Swingate-street; it is well paved, cleaned, and lighted with gas. The public buildings are the guildhall, and the borough jail. The parish church, a beautiful specimen of the style of the 13th century, has an elegant spire, 273 feet high. The Independents, Wesleyan Methodists, Countess of Huntingdon's Connexion, and Roman Catholics have places of worship. The Free-Grammar school of Grantham was founded by Richard Fox, bishop of Winchester, in 1528, and subsequently endowed by Edward VI.; it has an income from endowment of 800*l.* a year, and provides eight exhibitions to either university, two scholarships of 20*l.* per annum at St. John's College, Cambridge, and two of 40*l.* each at Sidney Sussex College, Cambridge. The school had 72 scholars in 1852. At this school Newton received his classical education previous to entering Trinity College, Cambridge. Woolsthorpe, about 8 miles from Grantham, was his birthplace.

In Grantham are National, British, Infant, and Charity schools; a literary and scientific institution; a savings bank; a dispensary; almshouses; and several minor charities. In the town are some remains of religious houses. An ancient conduit still supplies excellent water. Grantham is connected with the Trent by a canal 30 miles long, which is supplied with water by means of large reservoirs. The trade consists principally in malt, corn, and coal; there is a paper-mill, and at Spittlegate, near the town, is a manufactory of agricultural implements. The market-day is Saturday: five fairs are held in the year for sheep and cattle.

(*History of the County of Lincoln*; Turnor, *Collection*; *Parliamentary Papers*; *Communication from Grantham*.)

GRANTON. [EDINBURGHSHIRE.]

GRANVILLE. [MANCHE.]

GRASLITZ. [EGER.]

GRASMERE. [WESTMORLAND.]

GRASSE. [VAR.]

GRÄTZ, an episcopal city in Austria, capital of the crownland of Styria and of the circle of Grätz, is beautifully situated on the Mur, about 1040 feet above the level of the sea, in 47° 4' N. lat., 15° 28' E. long., and has about 40,000 inhabitants, or, including the garrison, 50,000. It consists of the Inner Town, which lies between the eastern bank of the Mur and the Castle-hill (Schlossberg), and four suburbs, namely, the Murstadt, on the western bank of the Mur, connected with the town by two bridges, and the Jakomini, Müntzgraben, and Leonhardt suburbs, on the eastern bank. The village of Geidorf is also reckoned as part of Grätz. The whole circuit is about 7 miles. The Inner Town covers less than a sixth part of the area; it is separated by high ramparts and by a glacis from the suburbs. The glacis is planted with avenues of chestnut-trees, upon which six gates open towards the river and suburbs. The city is in the old style of building; the streets are narrow and irregular. It contains an open triangular space, the Place of the Corps de Garde, and the Carmelites-square; St. Agidi's cathedral church, a gothic structure built by the emperor Frederick IV. in the middle of the 15th century, all the altars in which are finely sculptured in marble; and near it, St. Catherine's chapel, the handsomest specimen of architecture in the town, built as a mausoleum by Ferdinand II., who lies interred here with his consort, mother, and eldest son; the Imperial Burg, with its tower, opposite the cathedral, where the princes of Styria formerly resided, and in which there are a number of Roman antiquities; the Landhaus, where the nobility hold their sittings, which contains an ancient armoury, many archives, &c.; the town-hall; the university buildings, containing a library of 44,000 volumes, a museum, &c.; the arsenal, a theatre, several palaces of the Styrian nobility, &c. Between two of the gates on the east side of the Inner Town, the Castle-hill, a mass of limestone, which rises 300 feet above the town, has the ruins of the castle on its summit, and is laid out in plantations and gardens, from the walks in which are presented fine views of the valley of the Mur and the surrounding country.

The Murstadt is the finest and most extensive of the suburbs of Grätz, being embellished with several handsome buildings and gardens. The Jakomini suburb has handsome and mostly regular streets, an equestrian riding-house, &c.; and the Leonhardt suburb, to the north and north-east of the Castle-hill, occupies a large space of ground at the foot of several hills, and is embellished with agreeable villas and gardens.

Grätz contains altogether 22 churches and chapels, five monasteries, and two nunneries, an Ursuline seminary for females, an institution called the Johanneum, founded by the archduke Johann in 1811, and comprising a cabinet of minerals, museum of botany, a library of 32,000 volumes, collections in geology, experimental philosophy, and

numismatics, and a reading-room; a botanical garden, with three conservatories; lunatic, orphan, and foundling asylums; a theatre, an hospital, and a lying-in institution, &c.

The university was founded by Charles, duke of Styria, in the year 1558, and entrusted to the management of the Jesuits, who though often expelled have been recently once more placed at the head of the institution. It has faculties of theology, law, medicine, and philosophy, which are taught by 28 professors. The number of students in 1835 was between 300 and 350, in 1842 it was 942, and in 1850 it was 866. The Convict, formerly a college of the Jesuits, is the largest building in the town; it is now used as a school in connection with the university. Grätz has also a gymnasium which is under the Benedictines, and had 24 professors with 644 pupils in 1850; an episcopal seminary, six hospitals, a gaol, a lunatic asylum, &c.

Grätz is the seat of administration and of the supreme tribunal of justice for the crownland of Styria, and the residence of the bishop of Seckau. It has flourishing manufactures of steel and ironware, cottons, printed cottons and linens, woollens and woollen stuffs, silks, ribands, furs, leather, paper, saltpetre, hats, potters'-ware, &c.

Grätz is a first-class station of the railway from Vienna to Trieste, by which it is 118 miles S.S.W. from Vienna. [STYRIA.]

GRAUBÜNDTEN (*Grisons* in French), a canton of Switzerland, is bounded N. by St. Gall, E. by the Tyrol and Vorarlberg, S. by Italy, and W. by the cantons of Ticino, Uri, and Glarus. It is surrounded on every side by lofty mountains, except on one point on the north, where the Rhine issues out of it through a narrow valley, along which runs the carriage-road from Coire to St. Gall and Zürich. A large offset of the Lepontian Alps detaches itself from the group of the St. Gothard, and running in a north-eastern direction marks the western boundary of the canton: dividing the waters of the Rhine from those of the Reuss and the Linth, it forms many high summits covered with perpetual snow, such as the Badus and the Crispalt, on the frontiers of Uri; the Dödißberg and Piz Rossin, on the borders of Glarus; and the Scheibe, on those of St. Gall. Another lofty range, which under the name of the Rhetian Alps forms part of the great central chain, runs east from the St. Gothard, dividing the waters which flow northward into the Rhine from those which flow southward into the Ticino; the high summits called Piz Val Rhein (above 10,800 feet), Moschelhorn, and Adula are in this range, over which the Bernhardin and the Splügen roads lead from the Grisons into Italy. East of the Splügen, at the mountain called Maloya, on the east slope of which are the sources of the Inn, the chain divides into two; one, continuing along the southern boundary of the Grisons, divides the waters that flow into the Adda from those of the Inn; and the other, running north-east, under the name of Julian Alps, Albula, &c., bounds the valley of the Inn to the north, and divides the waters of that river from those of the Rhine.

The inclination of the surface of the canton is therefore threefold: the largest part slopes towards the north along the course of the Rhine; another part, namely the Engadin, slopes towards the east along the course of the Inn; and lastly, there are several valleys belonging to the Grisons situated on the south or Italian side of the great central chain, and the waters of which run into the Adda and the Ticino, both affluents of the Po. No less than 241 glaciers are reckoned within the limits of the Grisons country, 150 of which send their water to the Rhine, 66 to the Danube by means of the Inn, and 25 to the Po, by the Adda and the Ticino.

The area of the canton is 2962 square miles; its greatest length is about 80 miles from east to west, and 55 miles from north to south. The surface presents numerous valleys, separated by alpine ridges and traversed by numerous rapid streams. Into the principal valleys many smaller transverse valleys open, some of them between 5000 and 6000 feet above the sea.

The population of the canton amounted in March 1850 to 89,840, of whom 38,039 were Catholics. About one-third of the population speak German, and the rest speak the Romansch dialect, except those of the valleys south of the Alps, who speak a Lombard dialect of the Italian. The climate is severe in the upper valleys, where the snow lies for seven months in the year. The scenery in many parts is magnificent. The productions of the soil are extremely varied, according to the elevation of the ground and the aspect of the respective valleys. Some enjoy almost an Italian climate, and the vine, wheat, maize, the fig, and the almond thrive in them; whilst others produce with difficulty scanty crops of barley and rye. Hemp and flax are largely cultivated, as well as potatoes, turnips, carrots, and other roots. A considerable part of the canton is occupied by pastures and forests. Cattle, sheep, goats, and pigs are numerous. Cattle and cheese are exported to the Italian markets. Iron, lead, and zinc are among the mineral products, but few mines are worked. There are some linen and cotton manufactures, but chiefly for domestic use. The transit trade across the passes of the Alps with Italy is considerable. Timber and cattle are the principal exports; corn, salt, oil, woven goods, colonial produce, and iron are imported. The mountains are inhabited by a vast quantity of game, besides bears, wolves, lynxes, and wild cats. Trout and salmon are found in the rivers.

The canton of the Grisons is a confederation of little republics, a Switzerland in miniature. It is divided into 25 jurisdictions; each jurisdiction appoints its own magistrates, and makes its own laws and

local regulations, by the consent of three-fourths of its citizens, that is to say, of all men above seventeen years of age, and appoints two or more deputies to the Great Council. The Little Council of three members is entrusted with the execution of the laws, and with the measures for general security. There is an upper court for the whole canton, which hears appeals from the local courts.

The principal town of the canton is COIRE.

The origin of the Confederacy of the Grisons dates from the beginning of the 15th century, when the chief inhabitants of various communes in the valleys of the Upper Rhine, weary of the cruelties and oppressions of their feudal lords, assembled in a forest near the village of Trons, and there entered into a solemn compact to defend each other's property and persons, and to oblige their lords to respect the same. The abbot of Disentis willingly agreed to the compact; the counts of Werdenberg, Sax, and the baron of Rhaßuna, followed his example; and in the month of May 1424 they all repaired to the village of Trons, and there under a large maple-tree swore, in the name of the Holy Trinity, to observe the conditions of the league, which was called Graubund (Gray League), from their being dressed in gray smock-frocks. The valleys of Lower Rhetia, near Coire, also formed themselves into another league with the consent of the Bishop of Coire, and this league was called Cadde ('Casa Dei,' the House of God), because those communes mostly belonged to the episcopal see. A third league was formed in 1436 in the valleys of the Albula and the Lanquart, and this was called the League of the Ten Jurisdictions, of which Davos was the chief place. The three leagues entered into a federal compact, and also formed an alliance with the Swiss cantons. They bravely defended their liberties against the emperor Maximilian I., and afterwards, in the 17th century, against Ferdinand II. with the assistance of Louis XIII. of France. When, in 1798, the French armies invaded Switzerland, and overturned its ancient confederation, the Grisons kept aloof, and being threatened by the French with an invasion they rose in a mass, and called in the Austrians from the Tyrol to their assistance. In 1799 their country was devastated by the French, who drove away the Austrians, and were themselves driven away again by the Russians under Suwarow. At length, by the Act of Mediation, under Bonaparte, in 1803, the Grisons became a canton of the new Helvetic Confederation, which they have continued to be ever since. The canton returns 4 members to the National Council of Switzerland.

GRAUDENZ. [MARIENWERDER.]

GRAVE, or GRAAF. [BRABANT, NORTH.]

GRAVE-EN-OYSANS, LA. [ALPES, HAUTES.]

GRAVELINES. [NORD.]

GRAVESEND, Kent, a market-town, port, and, with Milton, a Poor-Law Union, in the parishes of Gravesend and Milton, is situated on the right bank of the Thames, in 51° 26' N. lat., 0° 21' E. long., distant 32 miles N.W. by W. from Canterbury, 22 miles E. by S. from London by road, and 24 miles by the North Kent railway. The population of the municipal borough in 1851 was 16,633. The town is governed by 6 aldermen and 18 councillors, one of whom is mayor. The living is a rectory in the archdeaconry and diocese of Rochester. Gravesend and Milton Poor-Law Union consists of the two parishes, with an area of 1271 acres, and a population in 1851 of 16,210.

Gravesend occurs in the Domesday Survey as Graveham; it was however written Gravesend in the succeeding century. Its early history is unimportant. In the reign of Richard II. the town was attacked by a squadron of French galleys, and burned, and most of the inhabitants were carried into captivity. When Henry VIII. built Tilbury Fort, on the Essex coast, opposite Gravesend, he raised two platforms at Gravesend to protect the town and command the mouth of the river. The Board of Ordnance has replaced these by some modern works. Gravesend forms the limit of the port of London. For centuries past the prosperity of the town has been dependant on its intercourse with the metropolis. For the conveyance of passengers passage-boats, which with the progressive changes in the habits and manners of the people gradually increased in size and speed, have been maintained on the river, from the passenger barge of the 14th century, charging the legal fare of twopence each, and occupying a day in the voyage, to the swift river steamer of the present day, making the passage in two hours, and charging its passengers tenpence a head. The greater part of the present extensive passenger traffic has arisen since the commencement of steam navigation. As a place of residence during the bathing season, and for holiday trips, the town has been much frequented of late years, and the permanent population has been largely increased. The streets in the older part of the town are narrow and inconvenient. The new town, which is chiefly in the parish of Milton, has some handsome streets, squares, and terraces. Considerable improvement has been effected in the rebuilding of houses consumed in fires which have on several occasions occurred. The town-hall, in High-street, erected in 1836, has a massive Doric portico. The parish church, a brick edifice, situated near the centre of the town, has been considerably altered in the course of successive repairs: a church at Milton, erected by subscription in 1845, is a handsome structure in the decorated style; and there is another new church of neat appearance. There are two Independent, one Baptist, and some other places of worship, a Free Grammar school, National schools, a

literary institution, a savings bank, and various benevolent associations. From Windmill Hill, close to the town, once a very favourite resort of visitors, extensive prospects over the Thames, its shipping and scenery, may be obtained. Rosherville Gardens, to the west of the town, which have been within these few years laid out in a very picturesque manner, are now the principal resort of visitors. The town pier is substantial and well built; it is supported on cast-iron arches, and is 127 feet long and 40 feet wide; at the end is a transverse head 76 feet by 80 feet. The terrace pier, at the eastern end of the town, is a later structure, 190 feet long, built entirely of iron, and is supported upon massive columns. In the neighbourhood of Gravesend are extensive market gardens, much of the produce of which finds its way to the London markets. Fishing employs many of the inhabitants. Markets are held on Wednesday and Saturday, and fairs on May 4th and October 24th. The Thames and Medway Canal enters the Thames at Gravesend.

(Cruden, *History of Gravesend*; *Communication from Gravesend*.)

GRAVINA. [BARI, TERRA DL.]

GRAY'S THURROCK. [ESSX.]

GREAT BELT. [BELG.]

GREAT BRITAIN has been the legal name of the island containing England and Scotland, and of the kingdom, or part of a kingdom, which they compose since the legislative union of these two countries (1st May, 1707). The first article of the treaty of Union enacts that the two kingdoms of England and Scotland shall, from the above day, and ever after, be united into one kingdom by the name of Great Britain; and in subsequent articles the kingdom is called the United Kingdom of Great Britain.

Great Britain, the largest island in Europe, and one of the largest in the world, is divided from the mainland of Europe by a narrow arm of the sea called the English Channel, which extends along the southern shores of the island and separates it from France [ENGLISH CHANNEL], and by a portion of the Atlantic, which is separated from the main body of the ocean by the island of Great Britain itself. This sea, called the North or German Sea [NORTH SEA], separates Great Britain from Belgium, the Netherlands, Germany, Denmark, and Norway. The English Channel and the North Sea are united by the Straits of Dover. To the north of Great Britain lies the wide expanse of the Atlantic Ocean. On the west side of the island, and at no great distance from it, are numerous small islands, and a large one, Ireland, which is separated from Great Britain by St. George's Channel.

The Lizard Point, the most southern part of Great Britain, is in 49° 58' N. lat.; and Dunnet Head, in Caithness, the most northern point, is in 58° 42' N. lat. The most eastern point is Lowestoft, on the coast of Suffolk, 1° 44' E. long.; and the most western, Ardnamurchan Point, in Argyll, 6° 14' W. long. The distance in a straight line between the Lizard Point and Dunnet Head is about 608 miles. "The figure of Great Britain has been compared to an irregular triangle, the apex of which is at Dunnet Head, and the base is the long line of the southern coast from the North Foreland in Kent to the Land's End in Cornwall. The direct distance from Dunnet Head to the North Foreland is about 540 miles, and to the Land's End about 600 miles; the direct distance between the North Foreland lighthouse and the Land's End is about 820 miles." ('*Geography of Great Britain*,' published by the Society for the Diffusion of Useful Knowledge.) These distances give an outline of 1460 miles; but as the coast, especially on the western side, is a succession of projecting promontories and deeply-penetrating bays, the real coast-line probably exceeds three times that amount. The surface of the island is about 89,844 square miles, of which the northern part, called Scotland, contains 81,824; and the southern, or England and Wales, contains 58,820, namely—England, 50,922; and Wales, 7398. In statute acres the area is given thus:—England, 82,530,940; Wales, 4,793,975; Scotland, 90,047,462; islands in the British seas, 259,000: total, 87,624,377 acres. The line by which England and Scotland are separated begins on the west at the north-eastern angle of Solway Frith, and runs along the Esk, Liddel, and Kershope rivers to a range of mountains which successively bear the names of the Lauriston Hills, Peel Fell, Carter Fell, and the Cheviot Hills. Up to the last-mentioned mountains the boundary-line runs north-east, but at the Cheviot Hills it turns north-north-west, and continues in that direction to the banks of the Tweed, a few miles above Coldstream. The remainder of the boundary-line is formed by the course of the Tweed to its mouth, with the exception of the town of Berwick, which, though on the northern bank of the river, belongs to England.

General Survey of its Surface and Soil.—Though Great Britain does not contain such elevated mountain ranges as many parts of Continental Europe, it probably exhibits a greater variety in surface and soil than any other European country of equal extent. We shall endeavour to present a general view of the surface of this island, referring the reader for fuller details to the headings—'Surface,' 'Hydrography,' &c., in the notices of the several counties.

1. *Scotland, north and west of Glenmore.*—Glenmore is a long but comparatively narrow valley, which extends south-west and north-east in a straight line across the island. On the south-west it begins at the island of Mull, from whose eastern shores a wide gulf or sea-loch, called Loch Linaha, runs north-east, penetrates deeply into the mainland, and is continued north-eastward in Loch Eil. At the point

where Loch Eil makes a sharp turn to the west the valley of Glenmore properly begins; it terminates at Inverness, on the Moray Frith. The country north and west of Glenmore, which includes the counties of Sutherland, Caithness, Ross, and part of Inverness, is the most sterile portion of the island. Nearly the whole of it constitutes one enormous mass of rock, whose upper surface frequently extends in plains, but more usually is covered with rocks many hundred feet above the general level of the mountain plain, which varies between 500 and 1500 feet above the sea.

The northern part of the plain, extending from a line joining Loch Broom on the west and Dornoch Frith on the east to the northern shores and Cape Wrath, is an extensive moor, an open undulating land of rocks and bogs, on which a few hills rise at great distances from one another. The highest summits occur on the western side of the plain, where Ben Mhor attains 3220 feet above the sea. The mountain plain and the ridges which constitute its boundary do not extend over the north-eastern part of the island. Nearly four-fifths of the county of Caithness form a plain, with an undulating surface, which may vary between 50 and 200 feet above the sea-level. To the west of this comparatively low and level land rises Ben Wyvis, an extensive mass of lofty irregular rocks, 3720 feet above the sea. The region to the westward, extending to the Atlantic shore, is bare of trees, and in some parts, especially about Loch Torridon, almost destitute of vegetation. The greater part of this extensive moorland affords pasture for sheep, and contains a few habitations of shepherds. Along the western shores, at the innermost recesses of the numerous sea-lochs, are the huts of some fishermen. Towards the western coast are several high summits, as Kea Cloch, 3600 feet, and Ben Lair, 3000 feet above the sea-level.

2. *Scotland between Glenmore and the Grampians* is divided into two different regions by the high ridge of the Cairn Gorm Mountains, or Northern Grampians. The country west of that range, belonging to the counties of Inverness, Nairn, and Elgin, maintains generally the character of a mountain plain, and comprehends the valleys of the Spey, Findhorn, Nairn, and Spean. On the plain rise the Monagh Leagh Mountains, which traverse it in its length from south-west to north. They are sterile and of considerable breadth, but none of the summits probably exceed 2000 feet in height. The plain itself is partly covered with moor or heath, but extensive tracts produce fine grass, and make excellent sheep-walks. The comparatively level country which divides the mountain plain from the German Ocean contains several extensive moors, of which Culloeden Moor is the principal.

The country east of the Northern Grampians, or of the Cairn Gorm range, belonging to the counties of Banff and Aberdeen, is partly mountainous and partly hilly, and contains a considerable extent of arable land. Very few spots in the mountain region are fit for cultivation. The narrow valleys of this region are used as sheep-walks. Towards the sea are plains which in some places extend from ten to twelve miles inland.

3. *Scotland between the Central Grampians and the Plain between the Forth and the Clyde.*—This portion of Scotland is traversed by a mountain range running south to north. It begins on both sides of Loch Long on the south, and terminates on the north at the western extremity of Loch Rannoch. It includes parts of the counties of Argyll, Dumbarton, and Perth. In the northern district, bordering south on Loch Etive, Awe Water, Loch Awe, and Glenorchy, a few spots of arable land are found along the shore of the sea and the margins of the sea-lochs. High and rugged mountain masses occupy the country between Loch Leven and Loch Etive, and farther north; they extend also along Loch Awe, at the northern extremity of which Ben Cruachan rises 3390 feet above the sea-level. East of this mountain mass, as far as Loch Rannoch, extends the barren Moor of Rannoch, which on the south and north respectively reaches to Glenorchy and Loch Leven. Another mountainous desert of about equal extent, bounded by the valley of the Spean on the north, is much grander and more interesting in its features. The peninsula of Cantire extends for nearly 50 miles southward to the Mull of Cantire, a cape rising about 1000 feet above the sea.

On the eastern side of the district now under review extends a mountain region which occupies nearly half the surface of the entire district. Its eastern border runs in an oblique line over the whole breadth of the island, beginning at Loch Lomond, and passing through Aberfoil on the Forth, Callander on the Teith, Crief on the Earn, Dunkeld on the Tay, and Blair Gowrie on the Isla, whence it proceeds to the eastern extremity of the Central Grampians near Stonehaven. It is chiefly included within the counties of Perth, Forfar, and Kincairdine. This immense tract of country is covered by ridges of mountains containing several high summits; yet the valleys between the ridges are frequently wide, and contain extensive tracts of arable land, especially along the Earn and the Tay. East and south of this mountain region extends Strathmore, the Great Vale, which begins on the banks of the river Forth opposite Stirling, and extends to Stonehaven, occupying a space of at least 80 miles in length, and from 16 miles to 1 mile in breadth. This fertile and well-cultivated plain belongs chiefly to the counties of Perth and Forfar. Between Strathmore and the German Ocean lie the Sidlaw Hills to the northward, and the Ochill Hills to the southward. The higher portion of the Sidlaw Hills skirts the banks of the Tay, and their highest summit,

Craig Owl, not far from Lundie, attains an elevation of 1600 feet. Towards the sea these hills gradually form a succession of terraces, which become lower as they approach the sea. At the southern extremity of this region, along the Frith of Tay, between the towns of Perth and Dundee, lies the Carse of Gowrie, one of the most fertile tracts in Scotland. Its breadth averages between 2 and 3 miles. The region of the Ochill Hills and Strathmore is bounded on the south by the river Forth. South of this river lies a hilly country, extending westward to the banks of the Frith of Clyde. [CAMPSIE HILLS.]

4. *Scotland south of the Plain between the rivers Clyde and Forth, or Southern Scotland.*—This portion of Great Britain contains an extensive mountain region. On the west it advances to the sea, extending over the whole of Ayrshire south of the river Ayr. Its northern boundary follows the course of that river to the Haughshaw Hills, whence it extends to Lanark on the Clyde, and from Lanark to the Leven Seat. Nearly the whole of the county of Edinburgh is included in it. On the east it proceeds first southward along the boundary of that county, but afterwards enters the county of Berwick, of which it occupies the most western part, along both sides of the river Lauder, an affluent of the Tweed. From Melrose, near the mouth of the Lauder, it runs south by west to the Wisp Hill, in the boundary range between Roxburgh and Dumfries. Here the southern boundary-line begins, and stretches in a south-western direction across the county of Dumfries to Cross Michael, on the Dea River, in Kirkcudbright. It then follows the course of this river to Kirkcudbright Bay, where it again comes close to the sea, forming the high and very bold coast on the eastern shores of Wigton Bay as far as Creetown. From the innermost corner of this bay it runs along the Cree River to the boundary line of Ayrshire, so that only the county of Wigton is in this part excluded from it. The most extensive depression in this mountain region extends east and west, comprehending the valley of the Tweed from Melrose to Peebles and Lyne, and the valley of the Clyde from Covington to Lanark. In the western district of Kirkcudbright the Cairn Muir rises 2600 feet high; and situated about 6 miles north from Creetown is the Blacklurg, 1970 feet high. The Lowthers, between the beds of the rivers Nith and Clyde, attain an elevation of 3150 feet.

In the northern portion of the mountain region the land extends in spacious flats or inclined planes, which are mostly covered with bogs and mosses, and in some parts clothed with heath. Between the rivers which fall into the Tweed and into the Frith of Forth its elevation may be between 800 and 1000 feet. The Muirfoot Hills, between the sources of the Gala Water, an affluent of the Tweed, and of the Esk, which falls into the Frith of Forth, rise to 1860 feet, and the Leven Seat reaches about 1200 feet. On the northern declivity are situated the Pentland Hills. On the west of the mountain region, between the lower course of the river Clyde and the Frith of Clyde, lies a country, which may rather be called a plain, though it contains some ranges of hills. The highest part of the hilly tract is the Mistie Law, 1558 feet above the sea.

The county of Wigton constitutes a separate natural division, being on the north surrounded by mountains, and on all other sides by the sea. It contains no mountains, except on the boundary-line on the side of Ayrshire. The remainder is occupied by hills, intersected here and there by wide valleys and plains of moderate extent.

The counties east and south-east of the mountain region are separated from one another by a range of mountains running west and east. This range may be considered as beginning on the west, on the eastern border of the mountain region, with Wisp Hill (1940 feet), whence it continues to the boundary-line of England, which it attains between Peel Fell and Carter Fell. Hence it extends north-east along the boundary-line between England and Scotland to the Cheviot Hills, a name by which the whole range is generally designated. The highest portion of this range is either bare rock or covered with stones; but the declivities, though rather steep, are generally clothed with a rich close greensward, which affords excellent pasture for the breed of sheep called the Cheviots. The tract of country between this range and the Frith of Forth, east of the mountain region, is traversed by another range of high hills called the Lammermuir, which stretches eastward to the German Ocean, terminating in Lumsden Hill, 730 feet high, and the rocky promontory of St. Abb's Head. North of the Lammermuir Hills is the fertile vale of the Tyne. From St. Abb's Head a low ridge of hills extends along the shores of Berwickshire to the neighbourhood of the town of Berwick-upon-Tweed. These hills and the Lammermuir Hills inclose on the north and east the Merse of Berwickshire, a plain with a slightly undulating surface, which extends to the banks of the Tweed, between Coldstream and Berwick.

The country south of the mountain region contains a plain, which extends along the Solway Frith from the borders of England to the river Annan, about 20 miles in length, with an average width of about 8 miles. Solway Moss is included in Cumberland. The country west of the Annan, as far as Dumfries, is much more hilly, and contains a still smaller portion of cultivable ground. North of these districts the hills are generally covered with heath and moor; but many of them afford sheep-pasture. The south-eastern portion of Kirkcudbright, which is not included in the mountain region, is occupied by high hills along the Solway Frith, between the mouth of the Nith and Kirkcudbright Bay.

5. *England north of a line drawn from the mouth of the Mersey to Weaver Hill in Derbyshire (53° N. lat.), and thence to the junction of the Trent and Ouse.*—This is the only part of England which can be called mountainous. The general direction of the mountain range which traverses it is from north to south. This range belongs chiefly to Northumberland, Cumberland, Westmoreland, and Yorkshire, but extends into Lancashire, Durham, Derbyshire, and Staffordshire. At its most northern point it is connected with the south-western extremity of the Cheviot Hills, whence it extends southward, mostly along the boundary-line between Cumberland and Northumberland to Cross-Fell, 54° 42' N. lat., near the junction of the three counties of Cumberland, Westmoreland, and Durham. This portion of the chain is of comparatively small elevation and width. From Cross-Fell, which is 2901 feet above the sea, the range runs nearly south-east to the sources of the Eden River, but afterwards its course is nearly due south. In its course southward the range varies considerably in width. At the southern extremity of the Derbyshire Mountains, a little west of Ashborns in Derbyshire, stands Weaver Hill (1154 feet), which may be considered as the last link of this extensive range. The entire range extends from the Cheviots to the banks of the Trent, and is sometimes called the Pennine Mountains. West of the Pennine Mountains, and contiguous to the boundary of Scotland, the Cumbrian Plain, which is said to cover a surface of 300,000 acres, extends along Solway Frith from Solway Moss to the inlet of Abbey Holme, and eastward to the hills of Brompton and Croglin. At its southern extremity the Vale of the Eden extends to the south-east.

South of this plain lies the extensive group of the Cumbrian Mountains, which contain the highest summits in England. Opposite Morecambe and Lancaster bays the offsets of the Pennine range approach the sea within a distance varying from 6 to 12 miles. The intervening space is covered with heath along the foot of the ridge and its offsets, and only a narrow strip of fertile level land extends along the coast grows wider. This tract, which lies to the west of the road running from Lancaster through Garstang to Preston-on-the-Ribble, is from 8 to 10 miles in width, and is called the Fylde. Between the Ribble and the Mersey, and west of the Pennine chain, extends a high tract, which is encircled by a broad belt of low and level country. The soil is a loam of various quality, in some parts very light and sandy. South of the Mersey the moorlands, which skirt the mountains of Derbyshire on the west and divide them from the Plain of Cheshire, are not extensive; but at the south-western extremity of the Derbyshire Mountains occur the moorlands of Staffordshire, which occupy the whole of that county north of a line drawn from Newcastle-under-Lyne to Uttoxeter.

We pass to the east of the Pennine range. The most northern angle of England, as far south as the Coquet River, is a very hilly country, and some of the eminences are of considerable height. Towards the Coquet the high ground extends in elevated plains (Alnwick Moor, &c.), which are probably 800 feet above the sea-level, and are covered with heath. The Vale of the Coquet is wide, and contains considerable tracts of fertile land. South of the Coquet begin the extensive moorlands which occupy nearly one-third of Northumberland and portions of Durham and Yorkshire. The width of these moorlands varies between 10 and 30 miles; and they are said to be between 500 and 1000 feet above the sea-level. They are in general extensive, open, solitary wastes, producing little except heath, and affording only a scanty subsistence to flocks of sheep. In Yorkshire the moorlands are intersected by extensive valleys, containing considerable tracts of arable land.

The country which extends from the moorland to the German Ocean has in general a hilly character, with intervening tracts of good soil. Along the northern side of the Vale of Tyne the high land rises only to a moderate elevation. The country south of the Vale of Tyne is hilly. The valley of the Tees is the most extensive valley in that part of England which is north of the Plain of York. The Plain of York extends from the valley of the Tees southward to the confluence of the Ouse and Trent, and to Doncaster on the Don, a distance of 70 or 80 miles. It is separated from the Western Moorlands by a narrow hilly tract. The eastern boundary of the Vale of the Tees is formed by the Eastern Moors and the Wolds of York. South of the Eastern Moorlands is the Vale of the Upper Derwent, or of Pickering. Its form is an imperfect oval, being 35 miles from west to east, and 10 miles from south to north where widest. It is everywhere surrounded by heights of considerable elevation, and has all the appearance of a dried lake. The York Wolds, which form the southern border of this vale, occupy nearly half of the surface of the country between the Derwent and the German Ocean. To the east of the Wolds extends Holderness, a fertile plain with a low but undulating surface.

6. *England south of a line drawn from the mouth of the Mersey to Weaver Hill, and thence to the confluence of the Ouse and Trent on the north, and the Thames River on the south.*—The western boundary of this extensive region is formed by what may properly be called the Great Western Vale. It extends from the wide estuary of the river Mersey southward, and chiefly along the Severn to the estuary of that river and the neighbourhood of Bristol, comprehending the plain of Cheshire and Shropshire and the vales of Worcester, Eves-

Gloucester, and Berkeley. Its length may be about 120 miles in a straight line. Its northern portion, or the plain of Cheshire and Shropshire, extends about 50 miles from north to south, and its breadth varies between 25 and 30 miles. A ridge of low hills traverses this plain from north to south in the western districts of Cheshire. In this plain also is the elevated ground which unites the mountain system of Wales to the central part of England, and forms the watershed between the waters which fall into the Dee and Mersey, and the Severn. Though several tracts covered with heath and moor occur on this plain, the greatest part of it has a good soil, and is well cultivated. South of Wenlock Edge begins what is properly called the Vale of the Severn. It extends on both sides of the river for about 70 miles, and except at those places where the valleys of the tributary rivers of the Severn open into it, it never exceeds 12 miles in width, and is often narrowed to 5 or 6 miles. This vale is one of the most fertile and best cultivated districts of England.

Along the eastern border of this vale extends the highest ground of Central England. It is connected with the Derbyshire Mountains by the high land which extends along the borders of Cheshire and Staffordshire, and rises at its lowest point, where it is traversed by the Grand Trunk Canal, to 419 feet, and afterwards runs between Newcastle-under-Lyne and Drayton to the hill called the Wrekin, about 6 miles E.S.E. from Shrewsbury, which is 1320 feet above the sea. South of the Avon, near Pershore, rises the Bredon Hill, which has about the same elevation, and is connected with the Cotswold Hills, which terminate in the neighbourhood of Bristol and Bath.

On the east of this high land lies the Central Region of England, which on its eastern border is contiguous to the Great Eastern Plain, and on the south terminates on the banks of the Thames. Its surface rises and sinks in gentle undulations, between which there are wide valleys, which in some parts spread out into plains. None of the hills attain an elevation of 1000 feet above the sea-level. This extensive district is in general well and profitably cultivated.

The Great Eastern Plain extends from the river Humber to the mouth of the Thames, and is by nature divided into three different portions, a lower and two higher ones. The lower portion lies round that arm of the sea which is called the Wash, and extends to the south-west. This low and marshy country, called the Fens, extends 50 miles from north to south, and 30 miles in its greatest breadth from Market Deeping to Lynn, at the mouth of the Ouse. The rivers not having the necessary fall to carry off the water, this tract is exposed to floods from sudden falls of rain, and also to inundations of the sea. Dykes, canals, and other works have been constructed to prevent such accidents, and also to promote the general drainage of this extensive level.

That portion of the great plain which lies to the north of the Fens comprehends Lincolnshire north of a line drawn from Wainfleet to Sleaford. This tract is considerably higher than the fen region south of it, which is called Holland. On the north the high ground forms the banks of the Humber, from Winterringham on the west, to Great Grimsby on the east. From the last mentioned place a low belt of fertile marshes extends along the shores of the German Ocean. The marshes advance inland to Louth and Burgh, and vary in width from 3 to 7 miles. Along this coast is a submarine forest, visible as far as the limits of low water, or about a mile and a half from the land.

East of the Fens, and comprehending the counties of Norfolk, Suffolk, and Essex, extends a plain, which in its northern district is in the highest parts between 160 and 200 feet above the level of the sea. Its surface is gently undulating, but becomes more broken as we advance farther north. The small streams which drain this plain generally lie several feet below the general level of the surface. Its fertility, which towards the north is but moderate, increases to the south, and the soil in Essex is unrivalled in England for its rich crops of wheat. The southern boundary of this plain is marked by the high ground which extends from Epping Forest eastward to Brentwood and Langdon Hill, and then north-east, terminating between Chelmsford and Maldon.

7. *England south of the River Thames and the Bristol Channel.*—Towards the eastern extremity of this region is an extensive tract of high land, a transverse section of which forms the lofty chalk cliffs along the Straits of Dover, between the South Foreland and Folkestone. From the shores of the Straits it extends in a north-north-west direction to the estuary of the Thames, where it terminates in a moderately high coast between Reculver and the outlet of the East Swale; the high land of the Isle of Thanet may be considered as an eastern prolongation of it. The surface of this elevated tract may, on an average, be in its higher parts about 300 feet above the sea. Though the soil is chalky and dry, it has in parts a considerable degree of fertility, and is well cultivated.

The high land continues to the west of the valley of the Stour, and is several miles wide, with a longitudinal depression in the middle, so as to have the appearance of two parallel ridges. The northern ridge, which is a continuation of the chalk, is the higher, and contains Hollingbourn Station, 616 feet above the sea. This high ground runs first north-west, and in its depression lie the towns of Ashford, Charing, and Maidstone. At Maidstone the high lands are interrupted by the valley of the Medway, but west of it they appear again

in the same form, running nearly due west. Farther west there are few considerable elevations.

The country between the high lands north-east of Maidstone and the East Swale is a gently inclined plain, containing small depressions; but before it reaches the water's edge the high land entirely subsides, and is skirted by a low and level tract. The country farther west, between the high lands and the lower course of the Thames, is more diversified in its surface.

The country between the North Downs and the English Channel is divided into two very unequal portions by the South Downs, which begin on the shores of the English Channel in the high promontory of Beachy Head (564 feet), and run as far as Bramber, a distance of 28 miles, in a general direction parallel and close to the coast, which, as far west as Brighton, presents a line of cliffs formed by a longitudinal section of this chalk range. Their breadth from north to south is in some parts 6 miles. Ditchling Beacon, about 6 miles north from Brighton, is 858 feet high. North-west of Chichester is Butser Hill, which attains an elevation of 917 feet; and here the South Downs may be considered to terminate. Of the Alton Hills, which form a junction between the North and South Downs between Petersfield and Farnham, the highest summit, Hind Head, is 923 feet above the sea. The South Downs afford excellent sheep-walks, and the plain of Chichester, or the low tract along the sea-shore, is characterised by a high degree of fertility.

Between the North and South Downs, and bounded by the Alton Hills on the west, extends the Weald of Kent, Surrey, and Sussex. This tract may be considered as a plain, though there are undulating tracts in several places, and a few hills of considerable elevation. The highest summits are Leith Hill, south-west of Dorking, 993 feet high, and Crowborough Beacon in Ashdown Forest, 804 feet high. At the eastern extremity of the Weald, and nearly at an equal distance from the South Foreland and Beachy Head, is Romney Marsh, a low and level tract, containing nearly 50,000 acres. It has been wrested from the sea, from which it is protected by an embankment.

The Alton Hills, which extend, as already observed, from Butser Hill, south-west of Petersfield, to Farnham and the Hog's Back, may be considered as the eastern boundary of a more elevated terrace, which occupies the greater portion of the country south of the Thames, between 0° 40' and 2° 10' W. long. It begins south of Windsor with Bagshot Heath, and extends westward to the Salisbury Plain, which constitutes the highest portion of the whole tract. The southern boundary of this region runs from Butser Hill to Winchester, and thence to Salisbury and Shaftesbury; the western from Shaftesbury to Westbury. The northern boundary is not distinctly marked. Bagshot Heath rises in its highest point to 463 feet, and the lowest tracts of the whole region are probably not much less than 300 feet above the sea-level. Its surface is mostly level, though there are several hills, but they do not rise to a great elevation, except Highclere Hill (900 feet), and the Inkpen (1011 feet), near the place where Hampshire, Berkshire, and Wiltshire meet. Salisbury Plain, the most elevated district of this region, extends 22 miles east and west, and 15 miles north and south, and constitutes a kind of table-land, which at a distance has the appearance of a plain, but on a closer inspection is found to be traversed by numerous depressions. The Marlborough Downs, which are divided from Salisbury Plain by the river Kennet and the Kennet and Avon Canal, are in all respects similar to the plain, except that their surface is more uneven. From the northern side of the Marlborough Downs a tract of high land runs from Swindon westward past Malmesbury to Tetbury, where it joins the Cotswold Hills.

The country south of the elevated tracts just described, and extending from the plain of Chichester to Southampton Water, is tolerably level, and though inferior in fertility to the country about Chichester, it contains a considerable portion of good and well-cultivated land. But west of Southampton Water begin the extensive heaths of Hants and Dorset, which extend from the river Avon to near Dorchester, including the New Forest. The Purbeck Hills commence at Studland Bay on the east, and the high land continues in a westerly direction along the coast: it is united to Salisbury Plain by the elevated ground which runs from Beaminster to Shaftesbury, and contains Bulbarrow Hill (927 feet) and Wingreen Hill (941 feet).

The elevated tract of country which extends from Bagshot Heath to Westbury Down, and of which the heaths of Hants and Dorset may be considered as an appendage, forms the central region of England south of the Thames. Farther west the face of the country changes considerably, and presents a greater variety in its surface. The northern portion, or that tract which extends from the Vale of Berkeley, the southern part of the Great Western Vale, to the Mendip Hills, has a more broken surface than perhaps any other part of England. Some high summits occur, as Farley Hill, east-north-east of Bath, 700 feet; Lansdown Hill, north of Bath, 813 feet; and Dundry Hill, south-west of Bristol, 790 feet above the sea.

From the western edge of Salisbury Plain, near Warminster, a range of hills, or rather high land, commences, which continues westward to Shepton Mallet, where it assumes the character of a distinct range, and is called the Mendip Hills. On the southern side of the Mendip Hills lies an extensive level tract of low land, which is known by the name of the Brent Marsh. From the Bristol Channel this

low tract extends eastward to the towns of Wells and Glastonbury. South of this high tract is another plain, whose southern and more elevated portion is mostly covered with mosses and moors, and in general is barren. The northern part belongs to the Vale of Taunton, or of the Tone, which covers an area of about 100 square miles, with an undulating surface. The soil is of great fertility, and produces the finest crops, fruits, and herbage.

The Quantock Hills begin at some distance from the mouth of the river Parret, on the southern shore of Bridgewater Bay, and run westward along the coast and at a short distance from it; in some places they press close upon the sea. The widest portion of this tract, called the Brendon Hills, is also called Exmoor; and Dunkerry Hill, which may be considered as its eastern extremity, is stated to be 1668 feet above the sea. The Blackdown Hills, which form the southern boundary of the Vale of the Tone, extend westward to the mouth of the Exe.

To the west of the Blackdown Hills and the Vale of Taunton lies the Vale of the Exe, or of Exeter, whose northern extremity reaches the borders of Exmoor, and in that part is separated only by a hilly tract from the Vale of Taunton. Its surface is mostly strongly undulating, and in some parts even hilly. Contiguous to the Vale of the Exe on the west is Dartmoor, a high plateau of irregular surface, in some places covered with huge masses of granite, in others with swamps, or a thin and poor soil. Dartmoor is separated from the mountains of Cornwall by the comparatively narrow valley of the river Tamar. The high lands of Cornwall extend in one continuous mass to the most western point of England, the Land's End.

8. *England west of the Great Western Vale, including Wales.*—This region, the most rugged and mountainous part of England, is intersected, near its central parts, by two deep valleys, the upper extremities of which are separated by some high lands not more than 15 miles across. These are, the valley of the small river Dyfi from Machynlleth to Cardigan Bay, and the valley of the Upper Severn from above Llanidloes to Melverley, where the river enters the Great Western Vale.

North Wales, or the country north of this natural line, contains in its central district a very extensive mass of high land, which occupies more than one-third of the whole. The lowest tracts of this high land are probably not much less than 800 feet above the sea, and the cold climate, which is the consequence of such an elevation, renders the whole tract unfit for cultivation, except in a few sheltered places along the banks of the rivers.

Along the north-western edge of this elevated tract extends the Snowdon range, which contains the highest summits in Wales. It begins near the mouth of the river Conway, whence it runs south-west to the north-eastern corner of Cardigan Bay, a distance of 24 miles in a straight line. The width of the range varies from 5 to 7 miles. From both extremities it rises gradually towards the centre, where it contains several summits more than 3000 feet high; the highest is the extensive mountain mass known under the name of Snowdon, whose highest pinnacle, called Wyddfa, attains an elevation of 3571 feet. A range of high hills branches off from this range south of the highest part, and runs to Caernarvon Bay, where it terminates south of Clynnog in the Rivell, which is 1886 feet high. Between the Snowdon range and the Strait of Menai is an extensive and tolerably level plain, but it is not low, the shores of the strait being generally rocky and bold. The highest portion of the elevated mountain region extends south of the Snowdon range, comprehending the central part and more than half of Merionethshire. Several summits attain upwards of 2000 feet: the Arennig, between Llyn Arennig and Llyn Tryverin, is 2809 feet high. The country inclosed by these ranges contains some fine picturesque valleys, among which are those of Festiniog and Dolgellau. The Berwyn range, which constitutes the south-south-east boundary of the high mountain region, traverses the country from the Great Western Vale to Cardigan Bay. The highest summits are Arran Mowddwy and Cader Idris.

The country between the tributaries of the Upper Dee does not differ in its general description from the elevated mountain region, except that the hills decrease in height and in steepness as they advance farther north. Several of these however attain the height of 1500 feet and upwards. The country extending from the Berwyn range as far south as the valley of the Severn is rather hilly than mountainous; only a few of its summits exceed 1000 feet in elevation, except near the Berwyn Mountains.

The Plinlimmon range, which, beginning from the Plinlimmon Mountain at the source of the Severn runs along the southern side of the valley of that river in the form of an arc, and terminates on the west of the plain of Shropshire with the Breiddin Hills, forms a natural boundary between North and South Wales. Plinlimmon Mountain is a mass of rocks of great extent, whose highest summit rises to 2463 feet. This range presents a great regularity in its outline, its surface consisting of a succession of gradual slopes and rounded summits.

Contiguous to the Plinlimmon range, and on its southern side, extends a vast mountain tract of very desolate character. The towns of Tregaron and Lampeter on the Teify, of Llandovery on the Towey, and of Llyswen on the Wye, lie on its edge and mark its extent on the west and south, while the Wye River bounds it on the east from

Llyswen to Llangerrig. This is the most extensive waste of any in England or Wales, and resembles the high lands in Sutherland and Ross-shire. The country between this mountain tract and Cardigan Bay is extremely rugged north of the river Ystwith, and is noted for its beautiful scenery, especially along the small river Rheidol, where the Devil's Bridge attracts many travellers.

From the Bettws Hills, which occupy the centre of the Plinlimmon range, and lie south of Newtown on the Severn, a range issues, running due south, not far from the boundary-line between England and Wales, but still within the latter country. It terminates near Crickhowell on the Usk, and is divided into two parts by the wide valley in which the Wye flows from Llyswen and Whitney. That portion which lies north of the Wye is called Radnor Forest, and one of its summits attains 2163 feet. South of the Wye is the Black Forest, or Mynydd y Cader, whose highest summit, the Cradle Mountain, or Pen y Cader Fawr, is higher than Plinlimmon, being 2545 feet above the sea. The eastern offsets of this range enter Herefordshire, where they terminate, and are followed by the undulating Plain of Hereford, a country of great fertility, and one of the gardens of England. It extends north and south about 30 miles, and east and west perhaps 20 miles; it is divided from the Great Western Vale by the Malvern Hills, which extend along the boundary-line between Worcester and Hereford in an uninterrupted range for about 9 miles north and south; but their greatest breadth east and west does not exceed two miles. The Malvern Hills are separated by the wide valley of the river Ledbury, an affluent of the Wye, from another range of hills, which are much lower and run southward until they terminate not far from the place where the Wye enters the Severn. The southern and higher portion of this range, which is called Dean Forest, rises to an average elevation of 900 feet.

The highest land in South Wales begins in the eastern districts of Caermarthenshire, traverses the southern part of Brecknock, and enters the northern portion of Monmouthshire. This range is called, at least through a considerable part of its extent, the Black Mountains, or Forest Fawr. Its highest summits are the Caermarthenshire Beacons, on the boundary-line between Caermarthen and Brecknock, which rise to 2596 feet, and the Brecknockshire Beacons, about 5 miles S.W. from the town of Brecknock, which attain an elevation of 2862 feet, and are the highest mountains in South Wales.

Some miles south of the Forest Fawr, and nearly opposite to its centre, are the mountains of Glamorgan. This mountain system is upwards of 36 miles long, and extends nearly 15 miles in width, from Merthyr Tydvil on the north, to Llantrissant on the south. Along the southern declivity of this mountain-system is the Plain of Glamorgan, which extends over the southern district of that county. Its surface is undulating and intersected by numerous hills and ridges of small elevation. This is the most fertile tract in South Wales; its soil being excellent and productive both in corn and grass. At the western termination of the Forest Fawr begins the Vale of the Towy, which extends on both sides of that river with an average breadth of 2 miles to its mouth, a distance of about 30 miles. The most western promontory of South Wales is traversed by a range of high hills, which are connected with the high lands south of Lampeter on the Teify. The country south of this range, to Caermarthen Bay, Milford Haven, and St. Bride's Bay, presents the appearance of an uneven plain, intersected by numerous detached hills, or rocky eminences, of an irregular and conical shape.

Climate.—Being situated nearly in the middle of the temperate zone, Great Britain enjoys the advantages arising from such a geographical position; and in addition to this it has, in common with the greatest part of Western Europe, the mildness of climate peculiar to this portion of the globe. The difference between the climate of Great Britain and the neighbouring continent is chiefly due to its insular position, and its being exposed to the winds which blow across the wide expanse of the Atlantic Ocean. Great Britain is not subject to the same degree of heat in summer, or of cold in winter, as the continental countries lying in the same parallel. Differences in latitude of course cause considerable variety of temperature throughout the island. London is probably about the same elevation above the sea as Wick in Caithness is. In London the mean temperature of the whole year is 50°39'; in summer 62°32', in autumn 51°35', in winter 39°12', and in spring 48°76'. At Wick the mean annual temperature is 46°7'; in summer 53°77', in autumn 48°35', in winter 40°35', and in spring 44°41'. The south-western part of England, especially the peninsula between the English and Bristol Channels, has a much milder climate than the districts farther east. Thus the mean annual temperature of Plymouth is 52°1'. But this observation cannot be extended to the whole western coast. At Glasgow the mean temperature of the year is 47°75'. The highest mean range of the thermometer throughout Great Britain may be fixed at about 80°, and the lowest about 10°; the cases being rare in which it exceeds the former and falls below the latter; but on the continent of Europe, within the latitudes of Great Britain, it nearly every year attains 90°, and sinks as low as zero.

The air of Great Britain contains a greater quantity of moisture than that of most other countries, which shows itself in the frequency and duration of fogs; and it appears to be a fact that Great Britain has a greater number of rainy days than the countries of continental

Europe; but at the same time it must be observed that the quantity of rain does not differ materially from that in other parts of Europe. This apparent contradiction is explained by observing, that during the latter months of the year a drizzling rain is very common in this island, and that it is nearly impossible to form a true estimate of the whole quantity which fertilises the soil and imparts to vegetation the freshness and lustre which are admired by travellers.

Population.—Since 1801 there has been a decennial Census of the population. The result of the different enumerations is given in the subjoined table:—

Date of Census.	England.	Wales.	Scotland.	Islands in the British Seas.	Total.	Decennial Rate of Increase.
1801	8,350,859	541,677	1,808,420	78,000	10,578,956	
1811	9,553,021	611,235	1,805,864	80,000	12,950,120	14 per cent.
1821	11,281,883	718,353	2,091,521	89,508	14,181,265	16 "
1831	13,090,523	806,274	2,364,336	103,710	16,364,893	15 "
1841	14,997,427	911,705	2,620,184	124,049	18,653,356	13 1/2 "
1851	16,931,898	1,008,721	2,888,742	143,126	20,959,477	12 1/2 "

In 1851 the proportion between the sexes was—males, 10,928,558; females, 10,785,918.

In the columns which follow are given the area of the different counties of England, Wales, and Scotland, with the population of each in 1801, 1821, 1841, and 1851; also the estimated area of the Islands in the British Seas, with the population of each in 1821, 1831, 1841, and 1851.

	Area in Statute Acres.	Population.			
		1801.	1821.	1841.	1851.
England:—					
Bedford	295,582	63,393	84,052	107,936	134,478
Berks	450,359	110,480	132,639	161,759	170,065
Buckingham	494,930	108,132	135,133	156,439	163,723
Cambridge	522,661	89,346	122,387	164,459	185,405
Cheshire	707,078	108,895	170,098	395,860	455,725
Cornwall	873,600	192,381	261,045	348,159	355,558
Cumberland	1,001,278	117,230	156,134	178,088	185,492
Derby	448,803	161,567	218,661	372,202	398,084
Devon	1,057,180	340,308	428,417	542,949	667,000
Dorset	632,025	114,452	144,930	175,054	184,307
Durham	622,476	149,384	193,511	307,963	390,997
Essex	1,060,549	227,682	289,424	344,979	389,318
Gloucester	803,102	250,723	336,190	431,495	458,805
Hereford	534,928	88,488	102,669	113,272	115,489
Hertford	391,141	97,893	129,731	156,660	167,298
Huntingdon	230,865	37,568	48,946	58,540	64,183
Kent	1,041,479	308,667	427,224	549,343	615,766
Leicester	1,219,321	678,486	1,052,948	1,607,054	2,031,266
Lincoln	514,164	180,983	174,571	218,667	299,308
Lincoln	1,776,738	208,625	293,048	362,692	407,322
Middlesex	180,198	818,129	1,145,087	1,576,936	1,886,576
Monmouth	368,399	45,568	75,801	134,369	157,418
Norfolk	1,354,301	273,479	344,368	412,664	442,714
Northampton	630,358	181,525	163,097	199,228	212,380
Northumberland	1,240,299	168,078	212,589	268,020	303,508
Nottingham	526,676	140,350	166,678	249,919	270,427
Oxford	472,687	111,977	138,284	163,127	170,439
Rutland	88,804	16,300	18,487	21,802	22,983
Salop	426,055	169,348	198,311	234,820	239,341
Somerset	1,047,220	273,577	355,789	434,599	448,916
Southampton	1,070,218	219,290	282,897	354,682	408,370
Stafford	728,468	242,693	345,972	509,472	608,718
Suffolk	947,681	214,404	271,541	315,073	337,215
Surrey	478,792	268,233	399,417	584,038	683,082
Sussex	984,951	159,471	233,328	300,075	336,844
Warwick	668,946	206,798	274,488	401,703	475,013
Westmoreland	484,438	40,805	51,850	56,454	58,287
Wiltshire	865,092	183,889	219,874	286,280	284,321
Worcesters	478,165	146,441	194,074	248,460	276,096
York, East Riding	768,419	111,103	164,648	194,888	220,983
York, City	3,780	16,846	31,711	38,342	46,368
York, North Riding	1,350,121	158,927	188,178	204,791	215,214
York, West Riding	1,708,026	572,148	809,363	1,163,880	1,325,495
Wales:—					
Anglesey	192,453	33,808	45,068	60,891	67,327
Brecon	460,158	32,325	43,429	54,604	61,474
Cardigan	443,367	42,959	57,784	68,766	70,796
Caernarvon	606,331	67,317	90,339	106,329	110,632
Caernarvon	370,273	41,521	58,089	81,093	87,870
Denbigh	386,052	60,299	76,428	86,478	92,583
Flint	184,905	39,469	53,898	66,919	68,156
Glamorgan	547,494	70,379	108,073	171,188	231,849
Merioneth	388,291	29,599	34,382	40,322	43,843
Montgomery	483,328	48,184	60,345	68,607	67,385
Pembroke	491,991	56,280	78,788	84,944	94,149
Radnor	372,129	19,134	22,483	24,458	24,716
Scotland:—					
Aberdeen	1,260,635	121,066	155,049	192,387	212,082
Argyle	3,088,136	81,377	97,316	97,371	89,298

	Area in Statute Acres.	Population.			
		1801.	1821.	1841.	1851.
Scotland—Continued.					
Ayr	650,186	84,207	137,299	164,356	189,858
Bunf	439,219	37,216	43,663	49,679	54,171
Berwick	309,375	30,206	33,385	34,438	36,297
Bute	109,375	11,791	12,797	13,740	16,608
Caithness	485,708	23,809	29,181	36,343	38,709
Caekmannan	29,744	10,868	12,268	19,155	22,981
Dumbarion	189,444	30,710	37,317	44,296	45,103
Dumfriesshire	722,813	54,597	70,878	72,880	78,123
Edinburgh	254,800	122,597	191,514	225,454	259,435
Elgin or Moray	340,000	27,760	31,398	35,012	38,959
Fife	322,031	93,743	114,556	140,140	153,516
Forfar	568,750	99,053	113,353	170,453	191,264
Haddington	185,937	29,986	35,127	35,886	36,586
Inverness	2,728,591	72,672	89,981	87,799	96,500
Kincardine	262,250	26,349	30,118	33,075	34,598
Kinross	49,681	6,735	7,762	8,768	9,224
Kirkcubright	619,734	28,211	38,903	41,119	43,121
Leamark	631,719	147,692	244,367	428,972	580,169
Linlithgow	64,375	17,844	22,685	26,872	30,135
Nairn	137,500	8,322	9,269	9,217	9,256
Orkney and Shetland	988,873	46,824	48,124	61,088	62,533
Peebles	226,489	8,735	10,046	10,499	10,738
Perth	1,814,083	125,583	138,247	137,457	138,060
Perthshire	150,000	78,591	112,175	153,072	161,091
Ross and Cromarty	2,016,278	66,318	68,762	78,665	82,707
Rothesay	460,988	32,721	40,892	46,025	51,842
Selkirk	170,818	8,888	6,837	7,980	9,909
Stirling	295,875	59,895	63,478	82,037	86,237
Sutherland	1,207,188	23,117	23,840	24,782	25,793
Wigton	326,736	22,918	32,240	39,195	43,389
Islands in the British Seas:—					
Isle of Man	180,000	40,081	41,000	47,973	52,337
Island of Jersey	40,000	28,600	36,582	47,644	57,099
Island of Guernsey	—	20,802	24,349	28,649	29,757
Islands adjacent to Guernsey:—					
Alderney	32,000	—	1,044	1,088	3,323
Herm	—	38	177	38	46
Jethou	—	9	14	6	3
Le Marchant	—	—	—	5	—
Great and Little Berk	—	488	543	785	889

The statistics relating to Ireland will be given in the article IRELAND.

Colonies.—The colonies and foreign possessions of Great Britain, with their area, date of accession, annual revenue, and population (as far as known) are given in the following table:—

Colony.	Date of Accession.	Area in Sq. Miles.	Annual Revenue.	Population.	Date of Census (when known)
Europe:—					
Gibraltar	1704	3	30,000	15,823	1850
Malta, Gozo, and Comino	1800	122	127,728	124,864	1849
Ionian Islands	1815	1,097	92,031	239,499	1851
Heligoland	1807	5	—	2,215	1851
Asia:—					
Ceylon	1798	34,664	411,806	1,637,349	1841
Hong Kong	1842	30	31,341	37,958	1842
Labuan	1846	40	1,798	1,580	1851
Singapore	1819	330	40,091	59,043	1859
Aden	—	—	—	22,000	1850
Territories of East India Company	1811	1,900,000	10,927,000	159,940,000	—
Africa:—					
Cape of Good Hope	1806	293,000	233,544	300,446	1848
Natal	1845	20,000	—	115,000	1850
Mauritius	1810	700	311,684	180,823	1851
Gambia	1681	12	8,414	6,693	1851
Gold Coast	1750	8,000	67,395	200,000	1852
Sierra Leone	1787	25,000	19,366	44,601	1851
St. Helena	1654	47	17,177	8,400	1851
Anacostia	1815	38	—	—	—
Fernando Po	—	—	—	—	—
Seychelles	1810	80	—	7,000	—

Colony.	Date of Accession.	Area in Sq. Miles.	Annual Revenue.	Population.	Date of Census (when known)
America:—					
Hudson's Bay Company's Territories	1668	2,500,000	—	—	—
Canada	1763	848,468	783,714	1,822,888	1851
New Brunswick	1784	27,704	136,000	198,809	1851
Nova Scotia	1621	19,897	98,039	276,117	1851
Cape Breton	1748	2,125	—	27,680	1851
Prince Edward Island	1771	2,124	20,855	90,000	1853
Newfoundland	1623	60,000	60,396	106,000	1853
Vancouver Island	1846	12,500	—	—	—
Falkland Islands	1841	6,000	442	550	—
West India					
Antigua	1632	400	25,165	37,757	1851
Barbadoes	1605	166	54,096	185,939	1851
Dominica	1763	260	12,901	22,200	1844
Grenada	1763	250	17,366	32,671	1851
Guyana	1803	50,000	192,510	134,693	1851
Jamaica	1655	4,258	180,870	377,458	1844
Montserrat	1632	48	2,288	7,053	1851
Nevis	1628	20	1,966	10,200	1851
St. Christopher, or St. Kitts	1623	70	13,266	23,177	1844
St. Lucia	1698	—	12,909	24,850	1853
St. Vincent	1763	131	14,390	20,128	1851
Tobago	1763	97	7,792	14,378	1851
Trinidad	1797	2,000	107,310	68,800	1851
Virgin Islands	1666	83	1,675	7,000	1853
Bahamas	1629	—	26,104	27,519	1851
Turks Islands	—	8	—	4,520	1846
Bermudas	1609	—	12,060	11,092	1851
Honduras	1670	10,870	—	—	—
Australasia:—					
New South Wales	1787	335,800	676,895	208,254	1853
Victoria	—	98,000	1,577,181	181,127	1852
South Australia	1836	300,000	102,328	70,000	1853
Western Australia	1829	100,000	37,922	8,711	1852
Tasmania, or Van Diemen's Land	1803	22,830	129,545	70,194	1850
New Zealand	1840	95,000	57,743	26,656	1851
Auckland Islands	1806	200	—	151	1851

Revenue, Debt, &c.—The following table exhibits the total revenue of the United Kingdom of Great Britain and Ireland, with the principal items specified, for the years 1848, 1848, and 1853:—

	1848.	1848.	1853.
Total Revenue	£32,582,817	£33,368,717	£34,430,344
Customs	21,033,717	20,999,152	20,903,734
Excise	12,877,529	14,184,035	15,397,724
Stamps	6,948,187	6,643,772	6,978,416
Taxes	4,190,486	4,314,704	3,153,867
Property and Income Tax	5,249,261	5,347,365	5,588,173
Post-office	395,000	815,000	1,104,000

For the years 1848, 1848, and 1853, the total expenditure, with the principal items stated, is here set forth:—

	1843.	1848.	1853.
Total Expenditure	£31,139,515	£34,185,136	£31,174,839
Interest and Management of National Debt	29,269,160	28,563,517	27,804,845
Civil List	290,307	292,245	299,573
Army	3,997,156	6,647,384	7,028,488
Navy	6,806,037	7,922,287	6,640,696
Ordnance	1,910,704	3,076,124	2,661,591

The capital of the National Debt amounted in 1843 to 790,576,392*l.*, in 1848 to 791,809,388*l.*; in 1853 it was 770,923,001*l.*

Poor Rates, &c.—In the year 1852 the local rates (for England and Wales) amounted to 10,674,962*l.*, of which the Poor's Rate, including Police Rate, was 6,552,298*l.*; the Highway Rate, 1,662,575*l.*; County and County Police Rates, 820,134*l.*; Borough, Borough Watch, and Lighting and Watching Rate, 509,038*l.*; and the Land Tax, 1,130,917*l.* The amount expended in relief of the poor in England and Wales in the year 1854 was 6,317,255*l.*; in 1853 it was 4,939,064*l.* The number of paupers relieved on 1st January 1849 was 940,851; on 1st January 1854 the number was 806,506.

Exports.—The total declared value of British and Irish produce exported from ports in the United Kingdom in 1842, 1847, 1852, and 1853 is as follows:—

	Exported to Foreign Countries.	To British Possessions.	Total.
1842	£34,019,203	£13,261,820	£47,281,023
1847	43,916,296	14,926,081	58,842,377
1852	58,579,898	19,496,959	78,076,854
1853	—	—	93,357,306

The value of foreign merchandise transhipped at ports in the United Kingdom to foreign countries and British possessions amounted in 1851 to 2,965,335*l.*, in 1852 to 3,706,662*l.*, in 1853 to 5,278,074*l.*

Shipping.—The total amount of tonnage entered and cleared with cargoes at the ports of the United Kingdom in the years 1843, 1848, and 1853 is given in the following table:—

	Entered.			Cleared.		
	British.	Foreign.	Total.	British.	Foreign.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1843	2,919,828	1,005,894	3,925,722	2,727,306	1,050,063	3,777,369
1848	4,020,416	1,559,046	5,579,461	3,553,777	1,497,460	5,051,237
1853	4,512,207	2,284,843	7,797,050	4,551,493	3,242,118	7,793,611

The number and tonnage of sailing and steam-vessels (exclusive of river steamers) belonging to the United Kingdom in 1853, were:—17,567 sailing-vessels, tonnage 3,511,327, employing 156,006 men, exclusive of masters; and 639 steam-vessels, tonnage 218,260, employing 17,519 men, exclusive of masters. The number of vessels built and registered in the United Kingdom during 1853 was 645 sailing-vessels of 154,956 tons, and 153 steam-vessels of 48,215 tons.

Education and Religious Worship.—According to the Census Returns of 1851, the number of places of worship and of Sunday schools is as follows, namely:—

	England.	Wales.	Islands in the British Seas.	Scotland.
Places of Worship—				
Established Church	14,077	979	75	1,183
Others	16,918	2,498	178	9,212
Totals	30,995	3,477	253	10,395
Sittings provided				
Established Church	5,317,915	264,546	37,463	767,088
Others	4,027,223	802,877	44,521	1,067,717
Totals	9,345,138	1,067,423	82,084	1,834,805
Sunday Schools—				
Established Church	9,997	430	56	1,095
Others	10,369	2,341	106	3,708
Totals	20,366	2,771	162	4,803
Sunday Scholars—				
Established Church	901,828	34,064	6,804	76,233
Others	1,197,833	239,314	8,673	216,316
Totals	2,099,661	283,378	15,477	292,549
Day Schools				
Scholars	43,152	1,684	340	5,242
Evening Schools	2,010,500	98,092	15,732	868,517
Scholars	1,500	39	—	433
Scholars	38,875	908	—	13,071

The proportion of day scholars to the population in 1851 for the whole of England and Wales was 12.0 per cent. (or 1 in 8); the districts or counties which were under 10 per cent. being South Wales, 8.6; North Wales, 9.0; Monmouth, 9.0; and Hereford, 9.9. The proportion for Bedfordshire was 10.4; Lancaster, 10.6; Middlesex, 10.6; Durham, 12.6; Cumberland, 13.0; Cambridgeshire, 13.1; Oxfordshire, 13.8; Hertfordshire, 14; Westmoreland, 15.4.

The proportion of day scholars to the whole population in Scotland was 12.76 per cent. As the returns were not furnished so freely in Scotland as in England, Mr. Horace Mann reports to the Registrar-General: "Making a fair allowance for deficient returns, it seems probable that about 14 per cent. (or 1 in 7) of the people of Scotland are at school. For the islands in the British Seas the proportion is 11 per cent. (or 1 in 9) of the population." In the above table the term Established Church as applied to Scotland, means of course the Presbyterian Established Church.

History.—In the article BRITANNIA will be found an account of Britain under the Romans; under ENGLAND a notice of the Anglo-Saxon period; historical notices respecting SCOTLAND and WALES are given under these heads, as well as in the articles on the different countries. We here insert a list of the sovereigns of England from William the Norman; separate notices of each of the sovereigns and of the more prominent events of their reign will be found in the Biographical Division of the English Cyclopædia.

Norman Line:—

1066	William the Conqueror.	1100	Henry I.
1087	William Rufus.	1155	Stephen.

Line of Plantagenet:—

1154	Henry II.	1272	Edward I.
1169	Richard I.	1307	Edward II.
1199	John.	1327	Edward III.
1216	Henry III.	1377	Richard II.

House of Lancaster:—

1399	Henry IV.	1422	Henry VI.
1413	Henry V.		

House of York:—

1461	Edward IV.	1483	Richard III.
1483	Edward V.		

House of Tudor:—

1485	Henry VII.	1553	Jane Grey.
1509	Henry VIII.	1553	Mary.
1547	Edward VI.	1558	Elizabeth.

House of Stuart:—

1603	James I.	1625	Charles I.
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Commonwealth, from the Execution of Charles I. in 1649:—

1653	Oliver Cromwell, Protector.
1660	Richard Cromwell, ditto.

House of Stuart, restored:—

1660.	Charles II.	1685	James II.
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House of Orange:—

1689	William III., with Mary II., till 1695.
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House of Stuart, restored:—

1702	Anne.
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House of Hanover:—

1714	George I.	1820	George IV.
1727	George II.	1830	William IV.
1760	George III.	1837	Victoria.

Government and Administration.—The English form of government is generally called a limited or constitutional hereditary monarchy; but this is an imperfect and inaccurate description. The sovereign power may be considered as residing in three bodies or estates—King, Lords, and Commons. These three estates constitute the Parliament, and the concurrence of these three limbs or members of the sovereign power is necessary for enacting, annulling, or altering any law. The House of Lords consists of the temporal peers of England, the elective peers of Scotland and Ireland, the bishops of England, and four Irish lords spiritual, who sit by rotation of sessions. The House of Lords is also the Supreme Court of Appeal for Great Britain and Ireland.

Since the Union with Ireland in 1801 the House of Commons has comprised 658 members, of whom there are—

For England,—County Members	143
Universities	4
Cities and Boroughs	324
Wales,—County Members	15
Cities and Boroughs	14
Scotland,—County Members	30
Cities and Boroughs	23
Ireland,—County Members	64
University	2
Cities and Boroughs	39
	— 105
	658

The administration is entrusted by the sovereign to certain great officers of state, usually from 12 to 14 in number, who together form what is called the Cabinet. The First Lord of the Treasury is generally considered the Prime Minister. The usual members of the Cabinet are, besides the Prime Minister, the Chancellor of the Exchequer, the Lord President of the Council, the Lord High Chancellor of England, the Lord Privy Seal, the Secretaries of State, the First Lord of the Admiralty, the President of the Board of Trade, the President of the Board of Control for the Affairs of India, the Secretary at War, and the Chancellor of the Duchy of Lancaster. In June 1854, in consequence of the pressure of the necessary arrangements for carrying on the war with Russia, a Secretary of State for the War Department was appointed, making in all four principal Secretaries of State—Home, Foreign, Colonies, and War.

The superior courts for the administration of justice are the High Court of Chancery; the Court of Exchequer; the Court of Queen's Bench, which is the highest Common-Law and Criminal Court in the kingdom; and the Court of Common Pleas. Besides these there are many inferior courts with local jurisdiction. Courts of assize are held by the judges in every county of England and Wales, for which purpose the country is divided into eight circuits. The judges of the superior courts are in all cases appointed by the crown for life, and are removable only upon an address from Parliament to the crown.

England and Wales are ecclesiastically divided into two provinces—York and Canterbury—containing 25 bishoprics or dioceses, besides that of the Isle of Man. Every parish is under the spiritual charge of a clergyman, who is either rector, vicar, or perpetual curate. Each parish has the management of various matters relating to its own concerns, the inhabitants meeting together in a body, or by a certain number selected from the general body, for the purpose of levying rates for the support of the poor and for other local purposes. Certain officers are chosen annually by the ratepayers to superintend the distribution of these funds. The government of the northern part of the island will be noticed in the article SCOTLAND.

Language.—1. The Irish language. This is generally admitted to be the purest form of the Celtic speech, which appears to have at one time been common to all the inhabitants of both islands. The Irish, as is well known, is still a spoken language. The oldest Irish manuscript, a collection of bardic legends called the 'Psalter of Cashel,' compiled by Cormac M'Culinan, bishop of Cashel and king of Munster, is believed to be no older than the latter part of the 9th century; but some of the bardic compositions that have been preserved in this and other records are supposed to be of much higher antiquity; though doubtless, if they are so, they must have been greatly altered from their original form before being committed to writing. The national chronicles pretend to furnish a list of the names of the bards from about the first century of the Christian era; and some of the fragments of their compositions that have come down to us are assigned to so early a date as the 5th century. Of the remains of the ancient Irish literature, however, by far the most valuable are the prose records of Tigernach and the other annalists, which appear to have been written in the 11th and 12th centuries, but profess to be compiled from documents of much earlier date. The natives of Ireland who in modern times have written either in Latin or in English, and among whom are some of the most distinguished names of which our literature has to boast, must be considered, in their literary capacity at least, as Englishmen.

2. The Gaelic, or Celtic of Scotland. This is also still a spoken language. It is a sister dialect of the Irish, which it so much resembles that the Bible and a few other books in Irish were, till very recently, the only printed literature which the Gael of Scotland possessed. It is believed that not even a manuscript in Gaelic exists which is older than the 15th century, although some of the compositions in verse which have been preserved in the language may be of greater antiquity. The celebrated Poems of Ossian appear to be founded upon the compositions of Irish bards who lived in the 11th and 12th centuries. The Gaelic originals, so far as they exist, of the productions published by Macpherson under this title, have been printed with a literal Latin translation by the Highland Society of Scotland; and besides a few grammars and dictionaries, there now also exist in a printed form Gaelic translations of the Bible, of the Psalms in verse, and of a very few English works, mostly religious.

3. The Manks, or language of the Isle of Man. This is another dialect of the Celtic. Formerly, at least, the language of the northern half of the island more resembled the Scottish Gaelic; that of the south, the Irish. (See Letter from John Meryk, bishop of the see, in Camden's 'Britannia.') The Bible, the English Prayer-Book, and a few religious tracts are almost the only works that have been printed in the Manks.

4. The Welsh. The remains which we possess of the ancient Welsh literature are very considerable, both in quantity and value. They consist chiefly of the poems of the bards, of the collections of verses called Triads, of the Bruts, or Chronicles, and of some early laws. The four principal and most ancient Welsh bards are Aneurin, Taliesin, Llywarch Hen, and Merlin, or Merdhin, the Caledonian, who are all believed to have flourished in the 6th century. The other ancient bardic remains extend over the five following centuries. The Triads are collections of metrical triplets, for the most part commemorative of historical events, which appear in their present form to be a compilation of the 13th century, though founded on earlier records now lost. The remains of the ancient Welsh laws, the most important of which are those enacted by Howel Dha, prince of South Wales, in the early part of the 10th century, have been printed by Wotton in his 'Leges Wallice,' folio, London, 1730. The Bible and some religious works have been translated into Welsh in modern times.

5. The Cornish. The Cornish was a spoken language little more than a century ago, but is believed to be now altogether lost, with the exception of the Lord's Prayer and the Creed (which are given by Camden), and a short vocabulary collected by Dr. Borlase in his 'Antiquities of Cornwall,' folio, 1754 and 1769. From these specimens it appears to have been a sister dialect of the Welsh. If any literary compositions ever existed in Cornish they have wholly perished.

6. The Norse. This is the name given to the tongue that used to be spoken by the people of the Orkneys, and that perhaps is not yet altogether extinct there. It is, or was, a Gothic dialect; but we are not aware that any composition in it exists, with the exception of a version of the Lord's Prayer, first given by the Rev. Dr. James Wallace, a clergyman of these islands, in his 'Account of the Orkneys,' 8vo., London, 1700.

7. The Anglo-Saxon. If we disregard the opinion which supposes

a Teutonic tongue, identical with or nearly resembling the Anglo-Saxon, to have been brought over to the south of Britain by the Belgic colonists that had settled in the country before the arrival of Cæsar (ENGLAND), the period during which the Anglo-Saxon was the spoken language of that part of the island, or rather indeed of the whole island from the Channel to the Forth, with the exception of the strips along the west coast, which continued to be occupied by the Welsh and other apparently cognate tribes, may be rudely defined as extending from the settlement of the Angles and Saxons about the beginning of the 6th century to the close of the 12th century. We possess a series of Anglo-Saxon literary compositions in prose and verse, from at least the latter part of the 7th century; and although the earlier specimens are both scanty and, in all probability, considerably corrupted, those of later times have come down to us in ample quantity, and to a great extent in perfect preservation.

8. The English language. We cannot here attempt any detailed account of the formation and progress of the English language; but we may note the great epochs of its history, from its rise out of the Saxon in the 12th century to its settlement into the form in which it now exists.

For the first century after the Conquest, as already observed, the language of the body of the nation continued to be Saxon, substantially of the same character with that which had for ages before been spoken by their ancestors. The transmutation of the Saxon into English appears to have been principally effected by the intermixture of the conquered people and their conquerors, which began to take place in the 12th century. Had the English been left to themselves, there seems to be no reason to suppose that they would ever have either abandoned or corrupted the tongue of their forefathers. The corruption of the Saxon, a language of a pure Teutonic lineage and character, and refined to a high degree of grammatical complication and artifice, into the inarticulate chaotic jumble which about this time began to take its place, must have been the work, not of those to whom it was vernacular, but of the foreigners who, in endeavouring to speak it, naturally mixed it with the vocables, and metamorphosed it by the imposition of the grammatical forms of their native tongue. In other words, it must have been the Normans that broke down the Saxon into English. This view is confirmed by three remarkable facts: first, that the change took place at the very time when, according to the testimony of contemporary writers, the two races that had till now had little association with each other, began to intermix; secondly, that one of the accompaniments or characteristics of the change was the infusion into the old Saxon of many Norman or French vocables; thirdly, that its other characteristic or constituting circumstance was the substitution of the very grammatical forms which were already in use in the French language, namely, the method of separate particles and auxiliaries, for that of inflection. No reason can be assigned why the Saxons themselves should have adopted either of these innovations; they could only have come from the Normans. To them therefore we must attribute the creation of our modern English tongue, which, although to a great extent founded upon the Saxon, and also retaining much of its genius and character, yet wholly differs from it in two important respects; first, that in its vocabulary it is a very mixed instead of a comparatively pure language; secondly, that its grammatical structure proceeds, as just explained, upon a wholly opposite principle to that which prevailed in the Saxon. The ancient forms of the language however were by no means at once thrown off, and in some respects what may be called its transition-state from Saxon to English may be said to have lasted till the middle of the 15th century; but although down to that comparatively recent date it still retained in its general structure various Saxonisms which are now obsolete, these remnants of its pre-existing shape and constitution had been gradually dropping off for at least a hundred years preceding. Dating then the dissolution of the Saxon and the birth of the English from the middle of the 12th century, we may say that the language continued still as much Saxon as English to the middle of the 14th century. It was nearly two centuries more before the Saxon peculiarities that refused to assimilate with the new forms had altogether disappeared. Before the middle of the 16th century, however, the language had assumed throughout very nearly the structural character which it still retains; it has been constantly indeed receiving accessions to its vocabulary down to the present hour, but in other respects the variations it has undergone from that date amount properly only to changes of style, not of structure. It was in all its essential characteristics the same language in the reign of Henry VIII. that it is now.

The details of English literature will be found in the biographies of the principal writers. [ENG. CYC., BIOG. DIV.]

GREAT MARLOW. [MARLOW.]

GREAT MISSENDEN. [BUCKINGHAMSHIRE.]

GREATHAM. [DURHAM.]

GREECE, ANCIENT, lay between 35° and 40° N. lat., and was bounded N. by Illyria and Macedonia, from which countries it was separated by an extensive range of mountains, which extend from Mount Olympus, in the north-eastern corner of Thessaly, to the Acroceraunian Mountains, in the north-western corner of Epirus. This country was divided into a number of independent states, the history and description of which are given in separate articles, as

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ATTICA, ARCADIA, ACHÆA, BEOTIA, CORINTH, &c. It was called Greece by the Romans, whence the name has descended to us. The Græci however were only one of the ancient tribes of Epirus (Aristot., 'Meteor.' i. 14), and never became of any historical importance, though their name must at some period have been extensively spread on the western coast, since the inhabitants of Italy appear to have known the country at first under this name. In the Greek authors the country comprehended within the above limits is called Hellas, though it must be remarked that Hellas had a more extensive signification than we attach to the word, and was used in general to denote the country of the Hellenes wherever they might happen to be settled; thus the Grecian colonies of Cyrene in Africa, of Miletus in Asia, and of Syracuse in Sicily, formed as essential parts of Hellas as Attica, Arcadia, or Bœotia. Thus Herodotus tells us (ii. 182) that Amasis, king of Egypt, sent many presents to Hellas; and the places enumerated are Cyrene, Lindus in Rhodes, and the island Samus.

Greece is usually divided by geographers into two parts, which are united by the isthmus of Corinth. The northern part contained THESSALY; EPIRUS; ACARNANIA; ÆTOLIA; LOCRIS, divided into Opuntian and Epicnemidian Locris, and Ozolian Locris; DORIS; PHOCIS; BEOTIA; MEGARIS; and ATTICA. The southern part, called Peloponnesus, contained LACONIA; MESSENIA; ARCADIA; ELIS; ARGOLIS; ACHÆA; SICYONIA; and CORINTH. In addition to these states, we must reckon the numerous islands on the eastern and western coasts, which were all inhabited by the Greek race.

Greece, in the flourishing periods of its history, was in all probability densely populated. According to a calculation of Mr. Clinton ('Fasti Hellenici,' vol. ii., p. 386), in which he includes the population of the islands of Eubœa, Corcyra, Leucadia, Ithaca, Cephallenia, Zacynthus, Cythera, Ægina, and Salamis, it contained a population of more than 3,500,000 inhabitants, from the time of the Persian wars to the death of Alexander the Great. Greece, including the islands already named, contains about 22,121 square miles; consequently there were rather more than 158 persons to the square mile, a rate of population very little inferior to that of Great Britain in 1821, which contained 165 persons to the square mile. But it must be remarked, that Mr. Clinton's calculation of positive numbers rests on a basis which, for any country or age, cannot be depended on as giving trustworthy results.

History. First Period.—From the earliest times to the Trojan war.—The people whom we call Greeks (the Hellenes) were not the earliest inhabitants of the country. Among the names of the many tribes which are said to have occupied the land previous to the Hellenes, the most celebrated is that of the Pelasgi, who appear to have been settled in most parts of Greece, and from whom a considerable part of the Greek population was probably descended. The Caucones, Leleges, and other barbarous tribes, who also inhabited Greece, have all been regarded by some modern writers as parts of the Pelasgic nation. All these tribes however were obliged to submit to the power of the Hellenes, who eventually spread over the greater part of Greece. Their original seat was, according to Aristotle ('Meteor,' i. 14), near Dodona, in Epirus, but they first appeared in the south of Thessaly about B.C. 1384, according to the common chronology. In accordance with the common method of the Greeks, of inventing names to account for the origin of nations, the Hellenes are represented as descended from Hellen, who had three sons, Dorus, Xuthus, and Æolus. Achæus and Ion are represented as the sons of Xuthus; and from these four—Dorus, Æolus, Achæus, and Ion, the Dorians, Æolians, Achæans, and Ionians were descended, who formed the four tribes into which the Hellenic nation was for many centuries divided, and who were distinguished from each other by many peculiarities in language and institutions. At the same time that the Hellenic race was spreading itself over the whole land, numerous colonies from the east are said to have settled in Greece, and to their influence many writers have attributed the civilisation of the inhabitants. Thus we read of Egyptian colonies in Argos and Attica, of a Phœnician colony at Thebes in Bœotia, and of a Mysian colony led by Pelops, from whom the southern part of Greece derived its name of Peloponnesus. The very existence of these colonies has been doubted by some writers; and though the evidence for each one individually is perhaps not sufficient to satisfy the critical inquirer, yet the uniform tradition of the Greeks authorises us in the belief that Greece did in early times receive colonies from the East—a supposition which is not in itself improbable, considering the proximity of the Asiatic coast.

The time which elapsed from the appearance of the Hellenes in Thessaly to the siege of Troy is usually known by the name of the 'heroic age.' Whatever opinion we may form of the Homeric poems, it can hardly be doubted that they present a correct picture of the manners and customs of the age in which the poet lived, which in all probability differed little from the manners and customs of the heroic age. The state of society described by Homer very much resembles that which existed in Europe in the feudal ages. No great power had yet arisen in Greece; it was divided into a number of small states, governed by hereditary chiefs, whose power was limited by a martial aristocracy. Piracy was an honourable occupation, and war the delight of noble souls. Thucydides informs us (i. 4) that the commencement of Grecian civilisation is to be dated

from the reign of Minos of Crete, who acquired a naval power and cleared the Ægean Sea of pirates. Among the most celebrated heroes of this period were Bellerophon and Perseus, whose adventures were laid in the East; Theseus, the king of Athens; and Hercules. Tradition also preserved the account of expeditions undertaken by several chiefs united together, such as that of the Argonauts, of the Seven against Thebes, and of the siege of Troy, B.C. 1184.

Second Period:—From the Siege of Troy to the commencement of the Persian Wars, B.C. 500.—We learn from Thucydides (i. 12) that the population of Greece was in a very unsettled state for some time after the Trojan war. Of the various migrations which appear to have taken place, the most important in their consequences were those of the Boeotians from Thessaly into the country afterwards called Bœotia, and of the Dorians into Peloponnesus, the former in the 60th and the latter in the 80th year after the Trojan war. About the same period the western coast of Asia Minor was colonised by the Greeks. The ancient inhabitants of Bœotia, who had been driven out of their homes by the invasion of the Boeotians, together with some Æolians, whence it has acquired the name of the Æolian migration, left Bœotia, B.C. 1124, and settled in Lesbos and the north-western corner of Asia Minor. They were followed by the Ionians in B.C. 1040, who, having been driven by the Achæans from their abode on the Corinthian Gulf, had taken refuge in Attica, whence they emigrated to Asia Minor and settled on the Lydian coast. The south-western part of the coast of Asia Minor was also colonised about the same period by Dorians. The number of Greek colonies, considering the extent of the mother country, was very great; and the readiness with which the Greeks left their homes to settle in foreign parts forms a characteristic feature in their national character. In the 7th century B.C. the Greek colonies took another direction: Cyrene, in Africa, was founded by the inhabitants of Thera; and the coasts of Sicily and the southern part of Italy became studded with so many Greek cities, that it acquired the surname of the Great, or Greater Greece.

The two states of Greece which attained the greatest historical celebrity were SPARTA and ATHENS. The power of Athens was of later growth; but Sparta had from the time of the Dorian conquest taken the lead among the Peloponnesian states, a position which she maintained by the conquest of the fertile country of Messenia, B.C. 688. Her superiority was probably owing to the nature of her political institutions, which are said to have been fixed on a firm basis by her celebrated lawgiver Lycurgus, B.C. 684. Athens only rose to importance in the century preceding the Persian wars; but even in this period her power was not more than a match for the little states of Megaris and Ægina.

We have already seen that the kingly form of government was prevalent in the heroic age. But during the period that elapsed between the Trojan war and the Persian invasion hereditary political power was abolished in almost all the Greek states, with the exception of Sparta, and a republican form of government established in its stead. In studying the history of the Greeks we must bear in mind that almost every city formed an independent state, and that, with the exception of Athens and Sparta, which exacted obedience from the other towns of Attica and Laconia respectively, there was hardly any state which possessed more than a few miles of territory. Frequent wars between each other were the almost unavoidable consequence of the existence of so many small states nearly equal in power. The evils which arose from this state of things were partly remedied by the influence of the Amphictyonic council, and by the religious games and festivals which were held at stated periods in different parts of Greece, and during the celebration of which no wars were carried on.

In the 6th century before the Christian era Greece rapidly advanced in knowledge and civilisation. Literature and the fine arts were already cultivated in Athens under the auspices of Pisistratus and his sons; and the products of remote countries were introduced into Greece by the merchants of Corinth and Ægina.

Third Period:—From the commencement of the Persian wars to the death of Philip of Macedon, B.C. 336.—This was the most splendid period of Grecian history. The assistance which the Athenians gave to the Asiatic Greeks in their resistance to the Persians, and the part which they took in the burning of Sardis, B.C. 499, drew upon them the vengeance of Darius. After the reduction of the Asiatic Greeks, a Persian army was sent into Attica, but was entirely defeated at Marathon, B.C. 490, by the Athenians under Miltiades. Ten years afterwards the whole power of the Persian empire was directed against Greece; an immense army, led in person by Xerxes, advanced as far as Attica, and received the submission of almost all the Grecian states, with the exception of Athens and Sparta. But this expedition also failed; the Persian fleet was destroyed by the battles of Artemisium and Salamis; and the land forces were entirely defeated in the following year, B.C. 479, at Plataea in Bœotia. Sparta had, previous to the Persian invasion, been regarded by the other Greeks as the first power in Greece, and accordingly she obtained the supreme command of the army and fleet in the Persian war. But during the course of this war the Athenians had made greater sacrifices, and had shown a greater degree of patriotism and courage. After the battle of Plataea a confederacy was formed by the Grecian states for the

purpose of carrying on the war against the Persians. Sparta was at first placed at the head of it; but the allies, disgusted with the tyranny of Pausanias, the Spartan commander, gave the supremacy to Athens. The allies, who consisted of the inhabitants of the islands and coasts of the Ægean Sea, were to furnish contributions in money and ships, and the delicate task of assessing the amount which each state was to pay was assigned to Aristides. The yearly contribution was settled at 460 talents, about 115,000*l.*, and Delos was chosen as the common treasury. The Athenians, under the command of Cimon, carried on the war vigorously, defeated the Persian fleets, and plundered the maritime provinces of the Persian empire. During this period the power of Athens rapidly increased; she possessed a succession of distinguished statesmen, Themistocles, Aristides, Cimon, and Pericles, who all contributed to the advancement of her power, though differing in their political views. Her maritime greatness was founded by Themistocles, her revenues were increased by Pericles, and her general prosperity, in connection with other causes, tended to produce a greater degree of refinement than existed in any other part of Greece. Literature was cultivated, and the arts of architecture and sculpture, which were employed to ornament the city, were carried to a degree of excellence that has never since been surpassed. While Athens was advancing in power, Sparta had to maintain a war against the Messenians, who again revolted, and were joined by a great number of the Spartan slaves (B.C. 464-455). The Athenians after awhile began to treat the allied states with great tyranny, and to regard them as subjects, and not as independent states in alliance. The dependent states, anxious to throw off the Athenian dominion, entreated the assistance of Sparta, and thus, in conjunction with other causes, arose the war between Sparta and Athens, which lasted for twenty-seven years (B.C. 431-404), and is usually known by the name of the Peloponnesian War. It terminated by again placing Sparta at the head of the Grecian states. Soon after the conclusion of this war Sparta engaged in a contest with the Persian empire, which lasted from B.C. 400 to 394. The splendid successes which Agesilaus, the Spartan king, obtained over the Persian troops in Asia Minor, and the manifest weakness of the Persian empire, which had been already shown by the retreat of the 10,000 Greeks from the heart of the Persian empire, appear to have induced Agesilaus to entertain the design of overthrowing the Persian monarchy; but he was obliged to return to his native country to defend it against a powerful confederacy which had been formed by the Corinthians, Thebans, Argives, Athenians, and Thessalians, for the purpose of throwing off the Spartan dominion. The confederates were not however successful in their attempt; and the Spartan supremacy was again secured for a brief period by a general peace made B.C. 387, usually known by the name of the Peace of Antalcidas. Ten years afterwards the rupture between Thebes and Sparta began, which led to a general war in Greece, and for a short time placed Thebes at the head of the Grecian states; but after the death of Epaminondas at the battle of Mantinea, B.C. 362, Thebes again sunk to its former obscurity. The Spartan supremacy was however destroyed by this war, and her power still more humbled by the restoration of Messenia to independence, B.C. 369. From the conclusion of this war to the reign of Philip of Macedon Greece remained without any ruling power. It is only necessary here to mention the part which Philip took in the Sacred War, which lasted ten years (B.C. 356-346), in which he appeared as the defender of the Amphictyonic council, and which terminated by the conquest of the Phocians. The Athenians, urged on by Demosthenes, made an alliance with the Thebans for the purpose of resisting Philip; but their defeat at Chæronea, B.C. 338 secured for the Macedonian king the supremacy of Greece. In the same year a congress of Grecian states was held at Corinth, in which Philip was chosen generalissimo of the Greeks in a projected war against the Persian empire; but his assassination in B.C. 336 caused this enterprise to devolve upon his son Alexander.

Fourth Period:—From the accession of Alexander the Great to the Roman Conquest, B.C. 146.—The conquests of Alexander extended Greek influence over the greater part of Asia west of the Indus. After his death the dominion of the East was contested by his generals, and two powerful empires were permanently established; that of the Ptolemies in Egypt, and the Seleucids in Syria. The dominions of the early Syrian kings embraced the greater part of Western Asia; but their empire was soon divided into various independent kingdoms, such as that of Bactria, Pergamos, &c., in all of which the Greek language was spoken, not merely at court, but to a considerable extent in the towns. From the death of Alexander to the Roman conquest Macedonia remained the ruling power in Greece. The Ætolian and Achæan leagues were formed, the former B.C. 324, the latter B.C. 281, for the purpose of resisting the Macedonian kings. Macedonia was conquered by the Romans, B.C. 197, and the Greek states declared independent. This however was merely nominal: they only exchanged the rule of the Macedonian kings for that of the Roman people; and in B.C. 146 Greece was reduced to the form of a Roman province, called Achæa, though certain cities, such as Athens, Delphi, &c., were allowed to have the rank of free towns. The history of Greece from this period forms part of that of the Roman empire. It was overrun by the Goths in A.D. 267, and again in A.D. 398, under Alaric; and after being occupied by the crusaders and Venetians, at last fell into

the power of the Turks on the conquest of Constantinople. Its recent history will be noticed in the following article.

Language and Literature.—The Greek language forms a branch of that extensive family of languages which is known by the name of Indo-Germanic. It has existed as a spoken language for at least 3000 years, and has been more widely diffused than any other tongue, unless we except the Arabic and English. It had attained a great degree of perfection in the 9th century before the Christian era; and it was eventually spoken not only in Greece and the numerous Grecian colonies, but was extended over a large part of Western Asia by the conquests of Alexander. It is evident from the books of the New Testament, that the lower orders in Palestine could converse in Greek as well as in their native Syriac; and many of the books of the New Testament were written in Greek by men who had received very little education. In Egypt also, under the Ptolemies, Greek became the language of a large proportion of the townspeople, and was used, jointly with the native language, in the business of administration. The conquest of Greece by the Romans tended still further to the diffusion of the Greek language; and though the study was condemned by Cato and many others of the old school, "it soon became a fashion for well-educated Romans to read, to speak, to translate, and even to write in this foreign language." Under the dominion of the Cæsars the language and literature of Greece were not only taught at Athens and Rome, but in every part of the Roman empire Greek philosophers and rhetoricians were maintained by their numerous pupils. After the fall of the Western empire and the extinction of learning in the west, the Greek literature and philosophy were still cultivated in Asia and at Constantinople, where Greek continued the spoken language of the people till the city was taken by the Turks in the 15th century. This is usually considered as the time at which it ceased to be a living language; but the best specimens of modern Greek, as it is called, can be read without much difficulty by any person acquainted with the Greek of Xenophon and Demosthenes; and the resemblance between the ancient and modern language is sufficient to justify us in considering the Greek language as one which has not ceased to be spoken from the time of Homer to the present day.

The Greek language is usually divided into four dialects, the *Æolic*, *Ionic*, *Doric*, and *Attic*, the peculiarities of which are noticed under the articles *ÆOLIANS*, *DORIS*, and *IONIA*. The *Boeotian*, *Thessalian*, *Laconian*, and *Sicilian* dialects are only subdivisions. The four dialects may however be reduced to two, the *Æolic* or *Doric*, and the *Ionic* or *Attic*: the latter originally spoken in the northern part of Peloponnesus and Attica, the former in the other parts of Greece. Till the time of Alexander the Greeks generally wrote in that dialect in which they had been brought up, and thus we have works in the *Æolic*, *Ionic*, *Doric*, and *Attic* dialects. But the number and superiority of the *Attic* writers gradually caused this dialect to be adopted by Greeks who were not natives of Attica; and thus the *Attic* dialect, somewhat modified by the peculiarities of other dialects, was called the common or Hellenic dialect (*ἡ κοινή*), or *ἡ ἑλληνική διάλεκτος*; in which almost all Greek prose writers from the time of Aristotle composed their works. Writers in this common dialect are, Aristotle, Theophrastus, Polybius, Diodorus, Strabo, Plutarch, Dionysius of Halicarnassus, Lucian, *Ælian*, Dion Cassius, Appian, and many others; though some of these writers, such as Lucian, Arrian, in his *Anabasis*, *Ælian*, &c., endeavoured to write in the pure *Attic* dialect, and to avoid every phrase which was not sanctioned by some *Attic* writer such as Xenophon or Thucydides. Poetry however was not written in this common dialect; the peculiarities of the Homeric dialect were imitated by all succeeding poets; and the poets of the Alexandrian school, such as Apollonius and Callimachus, and at a later period Nicander, Oppian, and others, continued to write in the Homeric dialect, or in what they considered such, which could only be thoroughly intelligible to those who had received a learned education. In the countries where the Macedonians established themselves the *Attic* dialect received many modifications; and as Alexandria in Egypt was, under the Ptolemies, the principal place where this dialect was cultivated, it was called the Alexandrine or Macedonian dialect. The Septuagint version of the Old Testament was written in this dialect; but it can hardly be considered as a fair specimen of the language spoken at Alexandria, since the Jewish translators have introduced into the version many Hebrew phrases and constructions. The New Testament was written in the same dialect, whence it has passed with some variations into the writings of the fathers, and has been called Ecclesiastical Greek. The Greek spoken at Constantinople became more corrupted, and so many foreign words were introduced into the language, that a glossary is necessary for understanding the writers of the Eastern empire.

The history of Greek literature may be divided into three periods: the first extending from the earliest times to the rise of Athenian literature; the second comprising the flourishing period of Athenian literature; and the third comprehending all the writers from the time of Alexander to the taking of Constantinople by the Turks. We shall conclude the article with a few observations on the rise of Greek literature.

The Greek colonies of Asia Minor appear to have attained a considerable degree of civilisation soon after their foundation, a circumstance probably owing to their intercourse with the Lydians and other

Asiatic nations, and to their exemptions from the political revolutions to which the mother-country was exposed. It was in the *Ionian* and *Æolian* cities on the coast of Asia Minor that the literature of Greece originated; and to the Greeks transplanted into Asia we are indebted for the earliest specimens we possess of Greek poetry and historical composition. Whether we look upon the *‘Iliad’* and *‘Odyssey’* as the work of one individual or of many bards, it must be regarded as the composition of Asiatic Greeks, and is a proof of the perfection which the language had attained in the 9th or 10th century before our era. Of the poets previous to Homer nothing satisfactory is known. Olen is mentioned by Pausanias (ix., 27, 2) as the most ancient; he was followed by Linus, Orpheus, Musæus, and many others. There were many poems circulated in the later ages of Greek literature under the names of Linus, Orpheus, and Musæus, some of which have come down to us, but they cannot be regarded as the genuine works of these ancient poets. Their poems appear to have been upon religious subjects, and were entitled *‘Hymns’* (*ὕμνοι*). The *‘Iliad’* and *‘Odyssey’* formed a part of a series of poems, which are usually known by the name of the *‘Epic Cycle’*. The poems known under this name were arranged according to the order of events by the grammarians of Alexandria, and included the works of many bards, of whom the most celebrated besides Homer were Hesiod, Arctinus (b.c. 775), Cinæthon (b.c. 765), Stasinus, Prodicus, Augias, and Lesches (b.c. 657). Lyric poetry arose on the decline of the epos, and was much cultivated from about b.c. 776 to the commencement of the Persian wars. The lyric poems of this period were considered, even in the most flourishing periods of Athenian poetry, as one of the most valuable parts of Greek literature. Unfortunately we have nothing remaining of them but a few fragments, which are hardly sufficient to enable us to form an opinion upon the subject. Many of the lyric poems bordered upon the epic, and contained the subjects of heroic song. They were sung, accompanied by music, by bands of youths and maidens; and in course of time a performer was introduced during pauses in the song to narrate the history or personate the character of some celebrated hero; to which the origin of Greek tragedy may be ascribed. But the lyric poetry of the Greeks was written for all occasions: it was employed by Archilochus, Alcæus, and Hipponax, for the purpose of satire and personal invective; by Tyrtæus, Terpander, and Alcman, to rouse the martial spirit of the Spartans; and by Anacreon, Ibycus, and Minnermus, to exalt the pleasures of the senses. Many didactic poems, fables, proverbs, &c., were written in the 6th century b.c. (when *Æsop* is said to have lived), and served to prepare the way for prose composition. The earliest historical compositions treated principally of mythological subjects, and many of them were little else than the *Cyclic* poems turned into prose. The earliest historical writer appears to have been Cæmus of Miletus, who lived in the beginning of the 6th century b.c.: Herodotus, who well deserves the title of *‘Father of History’*, was born b.c. 484.

Physical philosophy began to be cultivated in Asia Minor in the early part of the 6th century b.c., under Thales of Miletus. He was succeeded by Anaximander, Anaximenes, Heraclitus, and others; but the reputation of the *Ionian* school was soon eclipsed by the *Pythagorean* and *Eleatic* schools in Italy. Anaxagoras introduced into Athens the philosophy of the *Ionian* school; but the Athenian philosophers were indebted to the *Eleatic* school for the first principles of dialectic, in which they became so celebrated. The school, of which Socrates was the founder, is chiefly known to us through the writings of Plato and Xenophon. From this period philosophy was extensively cultivated at Athens. The doctrines of the Academy, over which Plato presided for nearly half a century, were somewhat modified by Arcesilaus (b.c. 296), who is considered as the founder of the *Middle*, as distinguished from the *Old Academy*. The *New Academy* was founded by Carneades, who lived about a century after Arcesilaus. The *Peripatetic*, *Stoic*, and *Epicurean* schools were founded respectively by Aristotle, Zeno, and Epicurus. Greek philosophy was studied, as we have already remarked, by the Romans; and in Rome, Athens, Alexandria, and many other cities of the Roman empire, numerous teachers of the *Platonic*, *Peripatetic*, *Stoic*, and *Epicurean* sects were supported by salaries from the state, or by private fees from their pupils. Many of the fathers, such as Clement and Origen, paid great attention to the *Platonic* philosophy as it was then taught at Alexandria; but the study of Greek philosophy gradually declined in consequence of the progress of Christianity, and the schools in which it was taught were finally suppressed in the time of Justinian.

GREECE, KINGDOM OF, consists of three great divisions, namely, Northern Greece, the Peloponnesus, and the Islands, which include the Cyclades, some of the Sporades, and Eubœa. The boundaries of Northern Greece, as determined by the commissioners of the three allied powers, Great Britain, France, and Russia, are formed by a somewhat tortuous line drawn across the continent chiefly along the summit of the range of Mount Othrys from the mouth of the river Surlotico, on the Pægassan Gulf, or Gulf of Volo, about 39° 11' N. lat., 22° 42' E. long., on the east, to the village of Menidhi (39° 3' N. lat., 21° 5' E. long.), on the Ambracian Gulf, or Gulf of Arta, on the west, which is about 137 miles long, and defined by 95 landmarks placed on the most important points. It lies between 36° 16' and 39° 20' N. lat., 20° 42' and 26° 10' E. long. The continental portion of the country is bounded N. by the Turkish pashalics of Albania

(Epirus) and Trikhala (Thessaly); and elsewhere by the Mediterranean Sea, which is known on the east as the *Ægean*, and on the west as the *Ionian Sea*. The following table shows the area, principal divisions, and population of the kingdom:—

Names.	Capitals.	Area in Eng. Sq. Miles.	Population in 1853.	
Northern Greece (Hellas).				
1. Attica and Bœotia	Athens	3,821	88,275	
2. Phocis and Phthiotis	Lamia (Zeitun)			80,693
3. <i>Ætolia</i> and <i>Acarmania</i>	Mesolonghi			98,060
Peloponnesus.				
4. Argolis and Corinth	Nauplia	10,159	106,162	
5. Achaia and Ellis	Patras			116,757
6. Arcadia	Tripolitza			115,711
7. Messenia	Kalamata			98,130
8. Laconia	Sparta			86,899
Islands.				
9. Eubœa and North Sporades	Chalcis	1,255	64,821	
10. Cyclades	Hermopolis (Syra)			134,856
Total		15,235	990,373	

Surface, Hydrography, Communications.—The physical features of Greece are broadly distinguished in the three great divisions noticed above. As a whole the country is characterised by its irregularity of form, its extremely broken outline and surface, and the remarkable extent of its coast-line; it being in this last respect, as has been well remarked, "distinguished among European countries by the same character which distinguishes Europe itself from the other continents. [see EUROPE, vol. ii. col. 981]—the great range of its coast compared with the extent of its surface; so that while in the latter respect it is considerably less than Portugal, in the former it exceeds the whole Pyrenean peninsula." (Thirlwall, 'Hist. of Greece,' c. 1.) The interior of the continent is mountainous; the plains, which are small and narrow, are for the most part along the sea-shore or by the mouths of rivers, except such as are mere basins inclosed by lofty hills. On these plains are the sites of the great cities of antiquity and the most flourishing towns of modern times.

Northern Greece, which is bounded S. by the Gulf of Corinth, includes the ancient territories of *Acarmania* and *Ætolia*, which are distinguished by the name of Western Greece, and those of *Doris*, *Phocis*, *Bœotia*, *Attica*, *Megaris*, the country of the *Locri Opuntii*, and the valley of the *Sperchius*, which constitute the division called Eastern Greece. The physical description of the country will be found under the heads *ACARNANIA*, *ÆTOLIA*, *ATTICA*, *BŒOTIA*, *PHOCIS*, &c. The country is in great part mountainous. The principal range is that of *Ceta*, which, beginning on the east on the coast of the channel of *Eubœa*, runs nearly due west across the country, joins the group of *Mount Tymphrestus* in *Ætolia*, and is only separated from the mountains of *Acarmania* and *Epirus* by the valley of the *Aspropotamos*. Offsets from the range of *Ceta* connect it on the south with the ridge of *Parnassus* in *Phocis*, and with the mountains that border the northern coast of the Gulf of Corinth, whilst to the south-east are the ridges of *Helicon*, *Cithæron*, and *Parnes*, the last of which separates *Bœotia* from *Attica*.

The second great division of the kingdom of Greece is the peninsula of the Peloponnesus, or *Morea*. A general description of its physical geography is given under *MOREA*, and more specific notices under the respective heads *ACHEEA*, *ARCADIA*, *ARGOLIS*, *CORINTH*, *ELIS*, *LAONICIA*, &c. The interior of the Peloponnesus forms an elevated table-land, traversed by numerous ridges of hills, which inclose spacious basins, some of which are occupied by marshes and small lakes. The principal ridge of mountains is that known to the ancients as the *Erymanthus*, *Lampe*, and *Cyllene*. The highest summits of the *Morea*, *Taygetus* in the south, and *Cyllene* in the north, are about 5000 feet above the sea-level. The principal plains are those of *Elis*, *Inachus*, and *Argos*. The perennial rivers are the *Alpheus*, *Eurotas*, *Pamisos*, and *Peneus*.

The third great division of Greece consists of the islands in the *Ægean Sea*, including the *Cyclades* and the *Sporades*, besides the large island of *Eubœa*. The inhabited islands, besides *Eubœa*, are distributed as follows:—1. The Western *Sporades*—*Hydra*, *Spezia*, *Ægina*, *Poros*, *Salamia*, *Angistra*. 2. The Northern *Sporades*—*Scopelos*, *Khildromi*, *Skiathos*, *Skyros*. 3. The Northern *Cyclades*—*Andros*, *Zea*, *Thermia*, *Tino*, *Mikoni*, *Syra*. 4. The Central *Cyclades*—*Naxos*, *Paros* and *Antiparos*, *Siphnos* or *Siphanto*, *Seriphos*, *Milo*, *Kimolos*, *Polikandro*, *Sikino*, *Nio*, *Amorgo*. 5. The Southern *Cyclades*—*Santorin*, *Anaphi*, *Astypalea*. *Candia*, or *Crete*, *Chios*, *Samos*, *Lesbos*, and the other islands near the coast of *Asia Minor*, still belong to *Turkey*. The physical geography of this division is given under *ARCHIPELAGO*, (vol. i. col. 443—5), *CANDIA*, and *EUBŒA*.

Greece contains no navigable rivers; and few which possess a perennial stream of any considerable size. Most of the streams are indeed little more than mountain torrents, and many even of the

larger become nearly dry in summer. The *Achelous* is still as in *Homer's* time the King of the Rivers of Greece. [*ACHELOUS*.] The other more important streams—at the present day perhaps most interesting for their classical associations—are the *Cephissus*, *Ilissus*, *ACHERON*, *Sperchius*, *ALPHEIUS*, *Pamisos*, *Inachus*, *Eurotas*, &c.; they are noticed, where distinguished by small capitals, under their titles, in other cases under the various headings to which references have already been given. The want of navigable rivers is to a great extent supplied by the numerous gulfs and inlets of the sea, which on every side deeply indent the coast, and afford unusual facilities for commercial intercourse, while they add greatly to the picturesqueness of the scenery. The chief of these inlets is the extensive Gulf of Corinth, which being surrounded, except at its mouth, by lofty mountains has the appearance of an extensive inland lake, the scenery being of the very finest kind. The other large gulfs are those of *Ambracia*, or *Arta*, *Volo*, *Egina*, *Argos*, or *Nauplia*, *Kolokythi*, *Koron*, &c. The largest of the lakes is that of *Copais*, or *Topolias* [*BŒOTIA*]; the other larger lakes are those of *Apokuro*, or *Trichonis*, *Valto*, *Lykuria*, &c., but most of the lakes are little better than marshes, and many of them are quite dry in the summer. There are no canals.

According to *Murray's* 'Hand-book for Greece,' "The only roads practicable for carriages in the whole country are that from the *Piræus* to *Athens*, that from *Athens* to *Thebes*—passing through *Eleusis* and a gorge of *Mount Cithæron*, that from *Eleusis* to *Megara*, that from *Argos* to *Nauplia*, and a few others for a short distance round *Athens*." The Greeks have almost entirely neglected the making or even maintaining of roads. The paved causeways in various parts of Greece were the work of *Venetians* or *Turks*.

Geology, Mineralogy, &c.—The ranges of *Ceta*, *Parnassus*, and *Helicon* are composed of compact gray-limestone, and this may be regarded as the characteristic rock of the country. In the *Pindus* range the prevalent rocks are of the primitive and metamorphic formations, as granite, serpentine covered with a yellowish-green *steatite*, *mica-schist*, &c. The calcareous rocks contain much *silex*. Tertiary formations abounding in fossil shells prevail along the shores of the Peloponnesus. Over the whole of Greece are traces of volcanic agency. Caverns and fissures, from which sulphureous and other mephitic vapours arise, occur in various places; their use in ancient times for religious purposes, as at *Delphi*, will be remembered. Hot and cold mineral springs are numerous. Many minerals are found in Greece, but the quantity of any of them now obtained is very small. Gold, silver, and lead, have been found in *Attica*, in the islands of *Seriphos* and *Siphnos*, and one or two other places, and though now not worked to any extent are, according to *Thiersch*, far from exhausted. *Antimony*, *zinc*, *cobalt*, *manganese*, *copper*, *sulphur*, &c., are also found. Iron occurs in *Eubœa*, *Seyros*, and *Laconia*; coal is likewise found in considerable seams in those places, and also in *Elis*. Many very beautiful kinds of marble occur in various places, including the fine white *Pentelic* marble of the ancient sculptors, and the red and green marbles of the Peloponnesus. *Porphyry* and *gypsum* are also quarried.

Climate, Soil, Productions.—The climate of Greece is probably more varied than in any other country of the same extent in Europe. *Sir W. Gall* illustrates this variety by observing, that in the month of *March* he left *Kalamata*, on the shore of *Messenia*, in a summer of its own, found spring in *Sparta*, and winter at *Tripolitza*, on the upland plain of *Arcadia*. Again while in the month of *September* the heat is intense in *Argos*, the winter is setting in on the neighbouring mountains of the Peloponnesus. Along the coast the winters are short, but the cold is intense: in *Athens* the winters are confined to *January* and *February*. In the interior the winters are longer: the mountains are capped with snow in *November*, and it does not melt from them till *June*. The spring and autumn are rainy, but the atmosphere is delightfully clear and fresh. The summers are generally long and very warm; but the "long long summer" of Greece, celebrated by poets and travellers, appears to have gained its fame from a peculiarity of the climate of *Attica*, where the atmosphere is drier and the temperature milder than elsewhere, and where during spring and autumn as well as summer there is almost undisturbed as well as nearly unequalled purity of air, and brilliant blueness of sky. In the plains the mean temperature of the year is about 62° Fahr.: at *Athens* the thermometer frequently rises in summer to 100° Fahr. In *Attica* the harvest is usually in *May*; in other parts of Greece in *June*. Violent storms occur frequently in spring and autumn. Slight shocks of earthquakes are not uncommon. *Malaria*, inducing intermittent fever, sometimes prevails along the shores, and by the swampy lakes, but elsewhere the country is generally healthy.

In its vegetation Greece resembles for the most part the provinces of southern Italy. The vine, olive, fig, orange, pomegranate, with similar fruits; nearly all the cereals; cotton and tobacco, and the myrtle, cypress and similar evergreens, grow luxuriantly in the plains and lower slopes of the mountains. Above 1500 feet is the region of the beech, chestnut, white fir, pine, and other forest trees. From about 3000 to 5000 feet the pine alone flourishes. The pine is found some 500 feet higher, but above that is a sub-alpine region, where only a few wild plants grow.

The fine forests with which the mountains were once clothed have been for the most part entirely destroyed, in great measure by the carelessness or wanton rapacity of the inhabitants themselves, and

the mountains are now naked and barren, and the springs dried up in consequence. Forests however remain still on the Taygetus, on Mount Cronion and other mountains of Arcadia, on those of Megaris, on the ridges of Parnassus and Helicon, and on part of the Ceta range. The pine is the most common timber-tree, but fine oaks are found in the northern mountains near the borders of Thessaly.

The resources of the continental part of the kingdom are derived chiefly from agriculture; but agriculture and agricultural implements are in a very backward state. Farms are mostly rented on the 'Metayer' system. Not more than a tenth of the surface of the country is under cultivation, and of this nearly five-sixths belong to the church or the state, which in most places succeeded to the property which formerly belonged to the Turkish government or to the mosques. The vineyards are almost all private property. Grain is usually grown on the plains. Northern Greece is a better corn country than the Peloponnesus. Wheat, barley, and maize are the species cultivated; oats and rye are not much in use. Rice is grown in the plains of Argos and Marathon, and the marshy tracts along the coast. Tobacco thrives, especially near Argos and Kalamata, and cotton grows also in these plains in considerable quantity. Wine is chiefly the produce of the islands: enough is made for the home consumption; it is generally good-bodied, but for want of proper management in making it, and of cellars, it does not keep beyond a year or two. Currants are cultivated in various districts, especially along the northern shores of the Peloponnesus; the demand for currants in England having greatly stimulated the culture. The olives which are largely grown in Attica, Megaris, and Salona, are of good quality, but the art of pressing and refining the oil is very imperfectly understood, and the oil is inferior to that of Provence. Silk is made in Messenia and Laconica, and also at Tinos and in other islands, but is inferior to the Italian silk. Honey is an important article of produce and a considerable quantity is exported; the honey of Hymettus and Attica usually retains its ancient celebrity. A good deal of wax is exported from Nauplia. Of fruit-trees, the almond, the fig, the chestnut, the orange, and the lemon thrive the best, but a great variety of fruit is grown. Owing to the uneven surface of the country, Greece is still more a pastoral than an agricultural country. Horned cattle however are not numerous, being almost exclusively used for the labours of the field. There are numerous flocks of sheep and goats, which migrate to the mountains in the spring, and return to the plains after the harvest. The produce of wool is considerable, but of a coarse kind, and is used chiefly for home manufacture. Pigs are scarce, except in Arcadia, and their flesh is not deemed wholesome. The only milk used is that of ewes and goats, and the butter and cheese made of it is very inferior. Asses and mules are employed almost exclusively as beasts of burden; the horses are of a strong breed, but neglected.

The manufactures of Greece are almost wholly domestic; the few articles required being generally produced by the families of the peasantry. The articles made in the larger towns are those required for ordinary consumption, such as soap, leather, brandy and other spirits, vinegar, hats, common silk, cotton and woollen stuffs, pottery, cutlery, &c. In some places ship-building and sail-making are carried on to a considerable extent. Salt is largely made in the lagoons about Mesolonghi and elsewhere.

The commerce and navigation of Greece are centred in the ports of Nauplia, Mesolonghi, Patras, Galaxidi, and the islands of Hydra, Spezia, and, above all, Syra, which is the centre of the steam navigation of the Levant, and where a handsome town has risen since the independence of the kingdom, with churches, schools, hospitals, docks, warehouses, lazarettos, and companies of insurance. The number of Greek merchant vessels amounts to considerably over 1000, exclusive of small craft, or coasting-boats. The merchants, many of them, have large capitals, and they assist each other, and are also assisted by their wealthy countrymen, who are established all over the Levant and in the ports of the Mediterranean. The extensive line of coast and the numerous islands supply a multitude of good sailors, active, hardy, and frugal. The principal traffic of the Greek vessels is the carrying trade, especially of corn, between the ports of the Mediterranean and the Black Sea, and the export and import trade with England, France, and Germany. Almost the entire trade in corn between the Mediterranean and England, valued at nearly 4,000,000*l.* a year, is in the hands of Greek merchants. The principal exports are currants, figs, wool, silk, valonia, olive-oil, sponge, wine, tobacco, wax, &c. The imports are chiefly of Manchester cotton goods and the woollen manufactures of England and Germany, with hardwares and various minor articles and fancy goods from the former countries and France. A very important part of the commerce of the Greek merchants consists in their banking and exchange operations, which are on a most extensive scale.

Inhabitants.—The three divisions of the kingdom are inhabited by populations differing in their physical and moral character. The inhabitants of Northern Greece are distinguished by the name of Roumeliotes, while those of the Peloponnesus are styled Moreotes, and there is but little sympathy between the two. The Roumeliotes are a military people who have maintained in the mountains of the interior a sort of wild independence, which the Turks could never entirely subdue. The Moreotes, on the contrary, with the exception of Maina, had completely submitted to the Turkish yoke; and their

archontes, or primates, shared with the pashas and other agents of the Porte the spoils of their own countrymen. In Roumelia the population of the mountains of Parnassus, Agrafa, Baltos, Xeromenos, and other interior parts of *Ætolia*, is supposed to be of Hellenic stock; but the peasantry of the plains are chiefly Valachians, Bulgarians, or Albanians, and are a steady, quietly-disposed people. In the towns near the coasts the population is a mixture of many races.

In the Peloponnesus the Albanian race occupies Argolis and Triphylia; the rest of the population speak Greek. In the towns the population consists in great measure of families who emigrated from various parts of the Levant, after the Turkish conquest, to exercise various trades, or to manage the affairs of the Beys and other wealthy Turks.

In the islands there is a mixture of Albanians and Greeks, and descendants of the Latin invaders of the middle ages. The Albanian race inhabits almost exclusively Hydra and Spezia: the Chiote and Psariote emigrants, who now inhabit Syra, are probably of Hellenic descent. At Naxos, Santorin, and some other islands, there is a kind of territorial nobility, who date from the time of the Crusades, and belong to the Western or Latin Church: their lands are cultivated by a Greek peasantry. At Tinos the peasantry are proprietors, and cultivate their lands with great care. Mikoni and Milo are inhabited by active and thriving sailors and traders.

Besides these races there have been since the Revolution large immigrations of military refugees from various parts of the Turkish empire, such as the Candiotas, the Souliotes from Epirus, the Olympiotes from the mountains between Thessaly and Macedonia, &c., and a mixed body of Fanariotes from Constantinople, of emigrants from the Ionian Islands, of Asiatic Greeks, Epirotes, and adventurers from Italy, France, and other parts of Western Europe.

From the oldest times the organisation of society in Greece has been based on paternal authority. A father decides absolutely on the destiny of his children, their profession, marriages, &c., without even consulting them; and in some instances, until within a very few years, assisted by a family council of his nearest relations, he exercised the power of life and death over them. Most of the country population of Greece live in villages, for the sake of security and mutual protection. Once a year the heads of families assemble in the church to elect their demogerontes, or municipal magistrates, one in every village or commune, and three for a town. The demogerontes act as justices of the peace and also as treasurers of the commune, have no emoluments, and are generally chosen among the archontes, that is, landed proprietors, or notables of the place, who form in fact the aristocracy of Greece. A communal council, consisting of those who have filled the office of demogerontes and of the other notables, assist them in their functions, in laying the local taxes, &c. Deputies from the communes assemble in the chief town of the eparchy, or district, to elect three or more eparchical demogerontes, who, joined to the local demogerontes of the place, constitute a council which concert measures with the prefect or political authority concerning the police, the assessment of taxes, and other matters affecting the whole district.

Divisions, Government, &c.—Greece is divided into 10 nomes (*Νόμοι*), each of which is presided over by a nomarch; the nomes are divided into 49 eparchies (*Επαρχίαι*), and these are again divided into several hundred demes (*Δήμοι*). These divisions are intended to correspond to the departments, cantons, and communes of France.

The government is a constitutional hereditary monarchy. The king has the usual privileges of constitutional sovereigns, and is assisted by an executive council of ministers, who are responsible to the legislature, which is composed of a Senate (*Γερουσία*), the members of which are named by the king, and hold their office for life; and a House of Representatives (*Βουλή*), composed of deputies elected by the various towns and districts of the kingdom.

The revenue is derived from the tithe of the produce paid by all private lands, and from the fourth of the produce of the national domains, together with certain taxes on imports and exports, salt, stamps, &c. Altogether the available revenue is under 700,000*l.*, owing, as is commonly said, to the general and notorious corruption of the various grades of officials. The expenditure fully equals the receipts. About one-fourth of it is for the interest and charges on the debt, which amounts to about two millions and a half sterling, and the payment of which was guaranteed by the allied powers of Great Britain, France, and Russia.

The numerical strength of the Greek army amounts to 8600 officers and privates, including the phalanx, 410 strong, not now on active service, which consists of veterans who served in the war of independence, and the police (*χωροφύλακες*), a force resembling the French gendarmes, who number 1450 and are dispersed in small bodies throughout the kingdom. Besides the regular army, a kind of militia, consisting of some companies of irregular troops, has been raised to watch the frontiers and to suppress brigandage. The duration of military service is 4 years. All males between the ages of 18 and 30, except married men, only sons, ecclesiastics, students, officers in the civil service of the state, &c., are liable to serve.

The navy consists of two corvettes of 26 guns, 2 steam-packets, and 35 small vessels and armed boats, chiefly engaged in watching

the coasts and suppressing piracy. The royal naval station, dock-yard, arsenal, &c., are at Poros. At Athens is a military college.

The civil code of the kingdom of Greece is still in the main an abridgement of the Basilica drawn up in the 14th century by the Byzantine Aristenopoulos, and known as the 'Manual of the Laws'; but the commercial, criminal, and correctional codes are founded on the Code Napoléon. The chief court is the Areopagus, or court of appeal and cassation, at Athens. There are besides courts of assize and primary jurisdiction in the chief towns of the ten nomes, and various inferior courts. Trial by jury has been introduced, but it does not work very satisfactorily.

The religion professed by the people generally is that of the Greek Church, but full religious toleration is guaranteed by the constitution. The church in Greece acknowledges no superior external authority, while preserving unbroken dogmatic unity with all the eastern orthodox churches; in other words, it declares itself independent, or autocephalous, as regards its former head, the Patriarch at Constantinople. The King of Greece is supreme head in the administration of the church. The chief ecclesiastical authority in the church is a perpetual synod consisting of five bishops at first selected by the king, but now taken in order of seniority of consecration, and assisted by a royal commissioner and a secretary. The church is at present presided over by 24 bishops, but their number is to be eventually raised to 86. The clergy are generally miserably ill paid, and as an almost necessary consequence very insufficiently educated; they are however on the whole not unexemplary in conduct. There are only about 100 monasteries in the kingdom; their number having been greatly reduced since the war of independence; and they are much fewer than the Greek monasteries in the Ionian Islands and Turkey. Besides the members of the Greek Church there are about 15,000 Roman Catholics and 4000 Jews in the kingdom: the members of other religious bodies are quite insignificant in number.

In the early part of the reign of Otho a law was passed directing the establishment of elementary schools in every deme in the kingdom. Like many other of the most useful edicts it has not been carried into execution; but popular education is widely diffused, and its advantages are generally appreciated. The principal educational institution is the University of Athens, which occupies one of the finest modern buildings in that city, and has 89 professors, an average of 600 students in the faculties of theology, law, philosophy, medicine, and pharmacy, and a library of 80,000 volumes. There are besides 7 gymnasia, or colleges, in the principal towns, with 48 professors, and about 1100 students (the gymnasium of Athens having about half of that number); an ecclesiastical seminary, a polytechnic school, and a ladies' college at Athens, and an agricultural school near Nauplia; about 80 secondary schools with nearly 4000 scholars; 840 common schools for boys with 84,000 scholars, 81 common schools for girls with 4400 scholars; a normal and an infant school; and several private and semi-private establishments, among which may be named the excellent American female schools at Athens—the first schools established in Greece for the education of females. There are also several scientific, artistic, and antiquarian institutions, with museums and libraries, chiefly seated in the capital. About 120 political, religious, and literary newspapers and magazines are now published in the kingdom of Greece.

History.—The Greeks, who had long cherished the hope of throwing off the Turkish yoke, and with a view to facilitate their object had formed a powerful secret society, with a well-organised agency spread throughout the whole Ottoman empire, saw in the outbreak of war between the Porte and one of his most powerful vassals, Ali Pasha, in 1821, the long-desired opportunity. A general rising was accordingly solemnly proclaimed on the 6th of April 1821 by the archbishop of Patras, and universally responded to. The Greeks were at first successful, but disasters quickly followed, which their character, on which centuries of slavery had wrought their sure effects, did not enable them to retrieve. For seven long years the struggle was protracted, marked on both sides by the most atrocious cruelties, but relieved somewhat on the part of the Greeks by deeds of heroism worthy of their ancestors. The Greeks had succeeded in clearing the Peloponnesus of their enemies and defeating them by sea. The Porte, unable to subdue them, called to its assistance the disciplined forces of the pasha of Egypt, which invaded the Peloponnesus, and the cause of Greek independence had again become problematical. The feeling of the Christian nations was however at length fairly aroused, and the three powers, Great Britain, France, and Russia, resolved to put a stop to this war of extermination. The victory of Navarino, gained by the allied fleets in October 1827, obliged the Egyptian forces to evacuate the Morea. The Conference of London, in March 1829, established the principle of the independence of Greece as a state, and the successful campaign of the same year of the Russians against the Turks induced the Sultan to acknowledge it by an article of the treaty of Adrianople in September 1829. In January 1830 the total independence of Greece was settled by the Conference of London. Meantime the internal government of Greece had undergone many vicissitudes, and the country was in a very disorganised condition. When the independence of Greece was secured by the interference of the three allied powers, the congress of deputies from the various districts of Greece appointed count John Capodistria,

a native of Corfu, who had been employed with distinction as a diplomatic agent of Russia, to be the head of the executive of the new state of Greece, with the title of President, for seven years, and with very extensive powers. His measures however were very unpopular with the national party, an insurrection broke out, and the country seemed to be again falling into anarchy, when, on October 8th, 1831, Capodistria was murdered at Nauplia in open day, on the threshold of the church of St. Spiridon. His brother Augustin Capodistria succeeded him in the presidency, but the civil war continuing, he was obliged to resign. At last the allied powers offered the crown of Greece; which had been refused by Prince Leopold of Saxe Coburg, to the King of Bavaria for his younger son Otho, and the offer was accepted. In June 1835 king Otho, being of age, assumed the direction of the affairs of state. Otho refused to establish a representative system of government, and continued to govern absolutely till Sept. 1845, when an entire change of system was brought about by a revolution, which has hardly its parallel for the skill and success with which it was designed and executed. The leaders of the constitutional party, having matured their plans and gained over the army and a large portion of the people, surrounded the palace with troops, and presented to the king a charter, granting representative government among other popular objects, and enforcing the dismissal of the obnoxious Bavarian and other foreign ministers. The alternative was offered to the king of signing this charter, or of quitting Greece at once and for ever in a vessel which had been prepared, and was then lying ready for the purpose. After some indecision the king, finding himself wholly in the hands of the constitutionalists, signed the charter.

The only subsequent events of general interest are the interventions of foreign powers, which the duplicity of the government has rendered necessary. The first of these was in 1850, when, in consequence of the refusal of Otho's ministry to liquidate the claims of certain British subjects to compensation for various injuries inflicted on them, a British fleet blockaded the Greek ports for three months before the Greek government assented to the payment of the sums in question. The other intervention is that which has occurred within the last two or three months. The war between Turkey and Russia seemed at the commencement of the present year (1854) to afford to certain self-styled Greek patriots—but in reality, there can be little doubt, mere tools of Russia—a favourable opportunity for exciting the turbulent spirits of the less civilised portion of the community to make an inroad upon the neighbouring provinces of Turkey. A large number of the idle and profligate, attracted by the prospect of pillage—over an irresistible lure to a modern Greek—was soon collected; and their numbers were largely swelled by bodies of soldiers who joined them, in many cases with their officers, without even the semblance of an attempt at prevention on the part of the authorities. The feeble mind of Otho was unable to resist the visions which had been artfully displayed before it, of a widely-extended Grecian empire, with himself at its head, and he lent the marauders every possible countenance and encouragement, while with characteristic disingenuousness he issued protests and proclamations against them. At first the invaders were able to overcome the resistance of the weak and unprepared Turkish garrisons, and a considerable tract of country was subjected to the lust and rapine of the 'liberating army.' At the same time Greece itself, all restraint being removed, began to swarm with brigands and the Greek seas with pirates. But a check was promptly put upon these proceedings. The remonstrances of the allied powers being unheeded, a few British ships of war were sent into the Ægean, and a few French soldiers landed in the Piræus; and the king, awakened thus rudely from his dreams, accepted at once the proffered ultimatum—dismissed his ministry, recalled his officers, issued proclamations commanding the misguided adventurers to return to their homes and duties, and agreed on his own part to carry on the government for awhile under British and French surveillance.

Otho married in 1836. He has no issue; and it is settled that his successor is to be another prince of Bavaria, who has engaged to enter the communion of the Greek Church on his accession to the throne.

(Thiersch, *De l'Etat Actuel de la Grèce; Travels, &c., in Greece* of Leake; Mure; Bowen; Fiedler; and Ross; *Histories, &c., of the War of Independence*, by Gordon, Keightley, Stanhope, and Blanquière; Sir J. Emerson Tennent, *History of Modern Greece*; Murray, *Hand-book for Travellers in Greece*, 1854.)

GREENLAND is an extensive island situated between Iceland and the continent of America, and forming a colony of Denmark. Its southern extremity, Cape Farewell, is situated on an island, in 59° 49' N. lat., 48° 54' W. long, consequently nearly in the parallel of the southern extremity of the Shetland Islands. Its northern districts are buried under masses of eternal ice. The most northern points which have been observed are near 78° N. lat., namely, Edam Land on the eastern coast, and the entrance to Murchison's Sound on the western coast. The whole western coast-line has been visited and mostly surveyed by British, Dutch, and Danish seamen; but much of the eastern side remains unexplored.

The entire country may be considered as an enormous mass of rocks. The outline of this mass, forming the sea-coast, is high, rugged, and barren; close to the water's edge it rises into tremendous precipices and lofty mountains, crowned with inaccessible cliffs, visible from the

sea at a distance of above sixty miles. Though the western coast, in its general outline, forms nearly a direct line, trending north-north-west and south-south-east except towards the southern extremity, where it runs nearly east, the whole is indented by a great number of deep and narrow inlets, which extend a considerable distance inland, sometimes more than a hundred miles. Along these inlets, or fiords, and on some of the numerous islands which line the coast in all its extent, occur small patches or narrow strips of low land, as well as in a few valleys, which are watered by small brooks. In these places alone vegetation appears, but it is nothing more than grass and low brushwood. It has been established by a Danish naturalist, Dr. Pingel, that for the last four centuries this coast has been undergoing gradual subsidence.

The rocky mass which incloses the fiords and valleys, in its average height, probably does not exceed 2000 feet, except in the numerous summits which are scattered over it, some of which rise to 5000 feet; yet it is everywhere covered with eternal snow and ice. The whole of the eastern region is a vast table-land of ice: mountains and valleys are levelled to a uniform plain; the river-beds are concealed, and every vestige hidden of the original form of the country. Greenland may in fact be considered as one immense glacier, or more correctly an aggregation of glaciers, which are with an imperceptible but continuous motion pushing forward towards the sea; and, as in Switzerland, the glacier frequently bursts asunder with a tremendous crash, and crevices and chasms of great width and depth are sometimes formed. In the midst of the icy masses on the western side here and there rise some smooth and almost perpendicular rocks, which appear at a distance of a dusky-gray colour, and without any sign of vegetation; but on a nearer inspection a little earth is found in places, on which some hardy species of heath grow. The outer edges of this accumulation of glaciers, doubtless the most extensive on the surface of the globe, extend over the rocks on the sea-coast, and descend by the fiords into the sea, where in some places they skirt the shore for many miles, and advance a considerable distance into the water. One of the most remarkable of these icy rocks is that which occurs on the western coast between 62° and 63° N. lat. It seems to form the sea-shore for about twenty miles, and is called by the Danish colonists the Ice-Blink. But Dr. Rink, who resided several years in Greenland and paid great attention to the formation of glaciers and icebergs, thinks that it is from the east coast, between 68° and 74° N. lat., that many of the largest icebergs issue; and he mentions five principal ice-friths, from that of Jacobshavn in 69° 10' N. lat. to that of Upernivik in 73° N. lat., each of which receives and discharges annually many thousand cubic feet of ice. ('Journal of Royal Geog. Society,' vol. xxiii. p. 152.) When the ice in such places has protruded to a vast extent, the enormous mass at the outer end, unable longer to resist the upward pressure of the water, breaks off with a tremendous crash, and is carried into the sea, where it floats about as an iceberg, the marvel and the terror of navigators. The larger of these icebergs rise above the surface of the sea to a height of from 100 to 150 feet, and some are 4000 feet in circumference, yet the part above is scarcely more than one-eighth of that below the surface of the water; so that, as Dr. Rink observes, such a fragment of ice if fairly landed would form a mountain about 1000 feet in height.

It is now supposed that Greenland is traversed in all its breadth by narrow straits which divide it into several islands; but all such straits are at present filled up with masses of ice, except one, called Prince Christian's Sound, which occurs towards the southern extremity, and divides a group of islands from the mainland. It is about 100 miles long, but in many places hardly a mile wide. On both sides rise high and bold rocks, and it is only in a few places that there is low beach enough to allow of a boat being hauled up.

The sea which surrounds Greenland is distinguished by peculiarities not less remarkable. A current which issues from under the great masses of ice inclosing the pole runs southward along the eastern coast of Greenland, carrying down an immense body of heavy drift-ice. This ice sometimes occupies the whole extent of ocean between Greenland and Iceland, and often forms a belt round Cape Farewell reaching from 120 to 160 miles out to sea. It is carried hence along the western coast of Greenland northward as far as Queen Anne's Cape, near the Arctic Circle, where it passes to the other side of Davis Strait. On the northern portion of the eastern coast, as well as on the southern portion of the western coast, the current runs along the shores; but whenever the wind blows from the sea it presses the ice hard to the shore, and blocks up the inlets and harbours, rendering for a time the Danish settlements on the south-western coast inaccessible to vessels. On the south-eastern coast the current runs along shore, setting in towards the land; hence there always exists a broad belt of very heavy drift-ice, which renders this coast entirely inaccessible. The stream of ice disappears entirely near Cape Farewell and along the western coast in the month of September, but it always re-appears towards the end of January.

The climate of the small low tract inhabited by the natives and the Danish colonists is much less rigorous than might be expected from its high latitude and the neighbourhood of the immense glacier. On the eastern coast the mean temperature is below freezing point; yet south of 65° N. lat. the thermometer in February 1830 did not sink lower than from 4° to 6° below zero of Fahrenheit; but as early as

the close of August the sea was every night covered with a crust of new ice, and in the middle of September the ice on the bays and fiords was from an inch to two inches thick. The climate is somewhat milder on the western coast south of the polar circle, but farther north, where the sun rises only for a few minutes, or not at all, the cold becomes extreme, and even ardent spirits freeze in a room where there is a fire. In February and March it is so intense that stones are split and the sea smokes like a furnace. In general however the winter cold is several times interrupted by thaws, which last many days and sometimes even weeks. July is the only month when there is no snow. The earth begins to thaw in June, but at no great depth ice is always found. The heat in the long summer days is so great as to evaporate the water left in the rocks and clefts by the tide, and to reduce it to a beautiful fine salt; but towards evening the air becomes very cold, being chilled by the breezes which pass over the interior. Fogs prevail almost every day from April to August. Little rain falls, especially towards the north. Gales are not frequent, but in autumn they sometimes rage with the fury of a hurricane. There is lightning occasionally, but no thunder. Earthquakes occur, though rarely. The aurora borealis is frequent, especially in winter, and always appears either in the east or south-east.

The vegetation is scanty. It is composed chiefly of mosses and lichens, and includes a small number of annual plants and a few shrubs, most of which bear edible berries. Juniper, willows, and birch creep along the earth, and in the well-sheltered valleys birch and elder grow to the height of a man, and have a stem three or four inches thick. The attempts at raising oats and barley have not succeeded; potatoes are planted only towards the most southern extremity. Radishes succeed as well as in Europe. Salad and cabbage remain very small, and turnips seldom attain the size of a pigeon's egg.

Some sheep are kept, but the difficulty of procuring provender for the long winter limits them to a small number. The only domestic animal of the natives is the dog, which is used to draw the sledges. Rein-deer, hares, foxes, and white bears are the only wild animals. Land-birds are not numerous, but sea-fowl are so plentiful as to exceed all belief; among them are the eider-ducks (*Anas mollissima*). Fish constitutes the principal wealth of Greenland. Whales are far less numerous than formerly. Walrus are only met with in Davis Strait, and are not numerous. Seals however are extremely common, and supply all the wants of the natives.

From the researches of a body of scientific men sent out from Copenhagen in 1852 to explore the physical features of Greenland, it appears that the rocks are chiefly of granite, gneiss, porphyry, clay-slate, and calcareous rocks. Coal was found in the Isle of Disco. In the mainland valuable ores of copper appear to extend far to the north of Disco; and besides copper, blacklead, asbestos, serpentine, garnets, crystals, &c. were found in Southern Greenland; while Sir R. I. Murchison states it to be his opinion, from the crystalline character of the rocks collected in 1853 by Capt. Inglefield in the more northern parallel of 77°, that a very large portion of that region may prove to be metalliferous.

The low tracts along the coast and the fiords only are inhabited. The inhabitants consist of natives and Danish settlers, the latter amounting to between 300 and 400. The natives are Esquimaux. The total number of inhabitants subject to Denmark was 9400 in 1850, of whom about 600 live on the eastern coast south of 65° N. lat. But natives have been met with as far north as 77° on the western coast.

Greenland was discovered in 981 or 983 by an Icelander or Norwegian named Gunbiörn, and was soon afterwards colonised by a number of families from Iceland. The settlements increased rapidly, and it is said that in 1406 there were 190 villages; but the whole colony suddenly disappeared from the pages of history. Davis re-discovered Greenland in his voyage, 1685-87, and in the beginning of the 17th century the Danish government fitted out several expeditions to re-establish a communication with the lost colony. According to the usual explanation, it was supposed that the ancient settlements were on the eastern coast; and this opinion prevailed till 1829, when the researches made by the Danish Captain Graah proved conclusively that the ancient Icelandic colonies were on the western coast, where numerous ruins of old buildings, especially churches, occur. The modern colonisation of the western coast took place in 1721, and was due to the zeal of a Norwegian clergyman, Hans (John) Egede, who planted a colony at Godthaab (near 64° N. lat.) for the purpose of converting the natives to Christianity. After the foundation of the colony a regular commerce with the natives was established, which led to the erection of other settlements. These are, from south to north—Julianehaab (61° N. lat.), with about 1500 inhabitants; Frederikshaab, Lichtenfels, Godthaab and New Hernhut, Sukkertoppen, Holsteinsborg, Egedesminde, Christianshaab, Jacobshavn, Ritenbenk, Omenak, Upernivik (72° 48'). Between 68° and 71° N. lat. is an extensive bay, called Disco Bay, from a large island of that name. Disco Island extends about 80 miles south and north, and nearly as much east and west. On its southern shores is the settlement of Godhavn. The Danes obtain from these settlements seal-skins, fur, eider-downs, train-oil, whalebone, and fish.

GREENLAND. [BERWICKSHIRE.]

GREENOCK, Renfrewshire, Scotland, a parliamentary burgh, sea-port, and market-town, in the parish of Greenock, is situated on the left bank of the estuary of the Clyde, 22 miles W. by N. from Glasgow, in 55° 57' N. lat., 4° 55' W. long. The population in 1851 was 36,689. The town is governed by a provost and 15 councillors, and returns one member to the Imperial Parliament.

Greenock is situated on rising ground. The east end of the town, which is called Cartdyke, is occupied with manufactories, the west end with the villas of merchants and professional men. In the beginning of the 18th century the harbour was small, and fit only for the reception of fishing-boats. Since then it has been enlarged and improved, and dry docks have been constructed. Outside the harbour is depth of water and anchorage for vessels of any burden; but the roadstead is narrowed by a sandbank of considerable breadth which stretches from Dumbarton to a little below the town. The principal street is about a mile in length, and runs parallel to the quay. There are several ship-building yards, extensive sugar-works, and one large manufactory of machinery. Large quantities of herrings are cured, and there are several vessels employed in the Newfoundland and Nova Scotia fisheries. Rope and sail-making, block-making, and the other occupations of a sea-port constitute the branches of industry pursued by the inhabitants. In 1851 there were in Greenock 26 places of worship, of which 7 belonged to the Free Church, 5 to the Established Church, 4 to the United Presbyterian Church, 2 to Baptists, and 8 to other bodies. The number of sittings provided in all was 20,441. There are a grammar school, several congregational and other public schools, a mechanics institute with a library of 2500 volumes and a reading-room, the Greenock library which has 10,000 volumes, the Cartdyke mechanics' library with 2200 volumes, and 6 congregational libraries with an aggregate of about 3300 volumes. Greenock is connected with Glasgow by railway. All the steamers of the Clyde touch at the port. An abundant supply of water is obtained from a large artificial lake on the hills about six miles from the town. The stream from the water-works drives several water-mills in its course, the most important of which is an extensive cotton-spinning mill, which has a water-wheel 70 feet in diameter, being the largest in Britain. Greenock is well lighted with gas. The buildings of importance include the custom-house, situated on the quay, a large and handsome Grecian building, the Tontine Hotel, and the Exchange buildings. The town possesses a jail, an infirmary, and several charitable institutions. The public library occupies a large building in Union-street, erected at the expense of Mr. Watt of Soho, in which is a statue by Chantrey of the celebrated James Watt, his grandfather, who was a native of Greenock. *Cartdyke*, the east end of Greenock, was made a burgh of barony by Charles I. It has a small quay, but is included in the parliamentary boundaries of Greenock.

The vessels registered at the port of Greenock on December 31st, 1853, were 220 of an aggregate tonnage of 6209, and 184 having an aggregate burden of 65,677 tons; two steam-vessels of 47 tons aggregate burden, and 12 of 1965 tons. During 1853 there entered the port in the coasting trade, 574 sailing-vessels, tonnage 38,328, and 214 steam-vessels, tonnage 39,511; the clearings in the coasting trade were 162 sailing-vessels, tonnage 3662, and 102 steam-vessels, tonnage 10,752. In the colonial trade there entered 224 sailing-vessels, tonnage 84,454, and one steam-vessel, tonnage 190; and there cleared 103 sailing-vessels, tonnage 34,899, and 3 steam-vessels, tonnage 644. In the foreign trade 54 British and 89 foreign vessels entered, tonnage 23,694; and 47 British and 45 foreign vessels cleared, tonnage 32,062; one British steam-vessel of 336 tons entered, and two foreign steam-vessels cleared, tonnage 675. The amount of customs duties received at the port during 1851 was 410,206*l.* 10*s.* 8*d.*

(*New Statistical Account of Scotland; Parliamentary Papers.*)

GREENWICH, Kent, a market-town, a parliamentary borough, and the seat of a Poor-Law Union, chiefly in the parish of Greenwich, is situated on the right bank of the river Thames, in 51° 28' N. lat., 0° 0' W. long., Greenwich observatory being the point from which in British maps and charts the longitude of all other places is calculated. It is distant from Canterbury 47 miles N.W. by W., and from London 5 miles E. by S. The population of the Parliamentary borough was 105,784 in 1851. The borough returns two members to the Imperial Parliament. Greenwich Poor-Law Union contains four parishes with an area of 4800 acres, and a population in 1851 of 99,365.

The chief object of interest in Greenwich is the Royal Hospital. It occupies the site of an old palace called Greenwich House, Placentia, or 'the Pleasance,' a favourite residence of several sovereigns, particularly of Henry VII., Henry VIII., Edward VI., and Queen Elizabeth. Being in a dilapidated state at the period of the Restoration, the building was taken down, and the north-western wing of the present building erected under the superintendence of Inigo Jones. Queen Mary, the wife of William III., it is said, suggested the plan of founding an asylum for disabled seamen belonging to the royal navy, and the unfinished palace of Greenwich was enlarged and adapted to that purpose. Sir Christopher Wren undertook to superintend the work without any pecuniary emolument. The foundation was laid June 3rd, 1696, and the whole of the superstructure then contemplated was finished within two years, though the hospital was not opened for the reception of pensioners until 1705. During the last century and a half the buildings have been successively enlarged and

improved. The whole now consists of four quadrangular piles, built principally of Portland stone, and designated by the names of the kings or queens in whose reigns they were erected or commenced. The hall, a noble room opposite to the chapel, was painted by Sir James Thornhill, and contains a fine collection of paintings, consisting of naval portraits and sea-fights. The management of the hospital is in the hands of a governor, lieutenant-governor, two chaplains, and numerous other officers. The funds required for the hospital have been obtained from parliamentary grants, the rents of the forfeited Derwentwater estates, and the bequests of benevolent individuals. The pensioners, of whom there are about 3000, receive maintenance, clothing, and lodging, besides a weekly allowance for pocket-money. Besides the inmates of the hospital, there is a considerable number of out-pensioners, who, since 1829, have been provided for by special parliamentary grant. At the Royal Hospital Schools, which are chiefly supported out of the funds of the hospital, 800 boys, children of seamen in the navy and merchant service, are boarded, clothed, and educated.

Greenwich sent two members to the House of Commons in 1557, in the reign of Philip and Mary, but was not again represented in Parliament till the passing of the Parliamentary Reform Act. The town is lighted with gas and paved, and is supplied with water from the Kent water-works at Deptford. Considerable improvement has taken place during the last few years in the town and its immediate neighbourhood, by the erection of handsome buildings, the formation of new lines of street, and widening and improving the approaches to the town. The parish church, a handsome and commodious edifice, erected in 1718 from a design by Sir Christopher Wren, consists of a nave and two side aisles, and has a tower of three stories, surmounted with a dome and spire. On the walls are some portraits of royal personages and numerous monumental tablets. St. Mary's church is a neat Grecian structure, erected in 1825, and there is a new church on Croome's Hill. The Independents, Wesleyan Methodists, Baptists, English Presbyterians, and Roman Catholics have places of worship. There are numerous richly-endowed schools and hospitals in Greenwich, also National, British, and Infant schools, and an Orphan Girls school. The Marine Society maintains in the river a frigate for exercising and training 100 boys for the sea-service. The Dred-nought man-of-war has been fitted up as an hospital for seamen of all nations, and lies in the river off Greenwich. A Proprietary school, opened in 1849, had 132 scholars in 1852. There are in Greenwich a literary institute, a savings bank, and a building for baths and washhouses. A county court is held in the town. The market is held on Wednesday and Saturday. Extensive engineering establishments, iron steamboat yards, rope-walks, an iron-foundry, and some large factories, are in Greenwich.

Greenwich Park, which comprises near 200 acres, is diversified with lawns, and well planted chiefly with elms and chestnut-trees, and stocked with deer. Upon an eminence is situated the Royal Observatory. The park is a favourite resort of Londoners, especially at Easter and Whitsuntide, when the Greenwich fairs are held.

Blackheath, an extensive common or heath on the south side of Greenwich Park, is partly in the parish of Greenwich and partly in that of Lewisham. It has been the scene of numerous historical events and triumphal processions, and was the place where, in the 15th and 16th centuries royal visitors to England were frequently met by the British sovereign or his representatives, or by the corporation of London.

Deptford, on the right bank of the Thames, 3 miles S.E. from London, population 27,896 in 1851, situated in the counties of Kent and Surrey, at the mouth of the Ravensbourne River, forms part of the parliamentary borough of Greenwich: it contains Her Majesty's dock-yard and victualling-yard for the royal navy. The streets of Deptford are narrow, and the houses irregularly built. The place has a considerable retail trade. At New Cross, Deptford, is the Royal Naval School, incorporated in 1840, which had 184 scholars in 1852; and Deptford has several educational and benevolent institutions, including the Kent Dispensary, two old hospitals for decayed pilots and shipmasters, or their widows, a Charity school well endowed, and a savings bank. There is constant communication by railway and by steam-vessels between London, Greenwich, and Deptford.

(*Hasted, History of Kent; Lysons, Environs of London; Greenwich Guides; Parliamentary Papers; Communication from Greenwich.*)

GREIFSWALDE. [STRALSUND.]

GREITZ. [REUSS.]

GRENADA, one of the Lesser Antilles, lies between 11° 58' and 12° 20' N. lat., 61° 20' and 61° 35' W. long.: its greatest length from north to south is 25 miles, and its greatest breadth 12 miles; the total area is about 133 square miles. This island was discovered by Columbus on his third voyage in 1498, at which time it was inhabited by Caribs. The first settlement was formed in 1650 by Du Parquet, governor of the island of Martinique. In 1700 there were only three sugar plantations and some indigo works; the entire population consisting of 251 whites and 520 negroes. By the definitive treaty of Paris, signed in February 1763, Grenada was ceded to Great Britain and a legislative council and assembly were granted to the inhabitants.

The island is traversed through its whole length from north to south by an irregular range of mountains. Mount St. Catherine,

near the centre of the island, is 3200 feet high. Hills of less elevation branch off from the principal range in a lateral direction, forming a succession of rich and extensive valleys, which as they approach the shore open into level alluvial plains. Several hot chalybeate and sulphurous springs are met with in different parts. In the centre of the island, and 1700 feet above the sea, is a circular lake $2\frac{1}{2}$ miles in circumference and 14 feet deep. The soil of the island consists principally of a rich black or reddish coloured mould. The fall of rain is about 65 inches in the year. On the hills the atmosphere is cool and pleasant; in the low grounds the maximum heat is 89° Fahr., the minimum 77°. The hottest season is from June to October.

The town of *St. George* is situated on the south-west side of the island, at the foot of an amphitheatre of hills encircling an extensive bay. It is a well-built town, and contained at the census of 1851 a population of 4567, mostly coloured persons. The other towns of any consequence are *St. Andrew's* on the east coast, *St. Patrick's* on the north, and *Charlotte town* and *St. Mark's* on the west. The island is but thinly populated, having with its dependencies altogether only 32,671 inhabitants in 1851, of whom 28,082 were natives of the colony, 1168 other British West Indians, 2425 Africans, and 400 natives of Madeira. The number of British Europeans was 384.

In 1852 there were 24 places of worship in the colony, namely, Church of England, 10; Roman Catholic, 8; Wesleyan, 4; and Presbyterian, 2. The number of children attending schools was 1828, of whom 1018 were at schools of the Church of England, 508 at Roman Catholic schools, 276 at Wesleyan schools, and 31 at Presbyterian schools. African labourers have been brought into the colony on several occasions of late years, but they have in numerous cases purchased land and become small proprietors or tenants. The total revenue of the colony in 1852 was 17,366*l.*; the expenditure was 16,894*l.* The expenses of the civil and military department defrayed by the home government was 14,391*l.* in 1852. The staple produce consists of sugar, rum, and molasses. The cocoa of Grenada is the best that is grown in any English colony. The value of imports in 1852, consisting chiefly of British manufactured goods, was 149,718*l.*, and the exports amounted to 131,940*l.* On December 31st 1853 there were registered as belonging to the island 46 vessels, with an aggregate burden of 484 tons. The aggregate tonnage of the vessels which entered inwards during 1852 was 21,478; and of those which cleared outwards 21,964. In 1852 there were 7698 acres under cane cultivation, of which the produce was 8734 hogsheads of sugar; of this about 8352 hogsheads were exported.

The island of *Carriacou* is situated about 15 miles N.E. from Grenada. Its extreme length is 7 miles; its breadth $2\frac{1}{2}$ miles. The coast for about a mile from the shore consists generally of good arable land of deep rich loam; in the interior the country is mountainous. Many labourers have, since their emancipation in 1834, become proprietors of small patches of ground. The population of *Carriacou* in 1851 was 4461 (included in the population of Grenada given above). The principal town is *Hillsborough*. The island suffers occasionally from long-continued drought, which greatly reduces the amount of the sugar crop. *Bequia*, the most northerly of the Grenadines, is 8 miles S. from *St. Vincent*; it is about 7 miles long by a mile and a half broad. *Admiralty Bay* is an inlet on the west side of *Bequia*. *Union Island* and *Canaguan Island* are smaller islands between *Carriacou* and *Bequia*.

GRENADÉ-SUR-GARONNE. [GARONNE, HAUTE.]

GRENOBLE, the capital formerly of Dauphiné, now of the department of Isère, in France, is situated on the Isère, just above its confluence with the *Drac*, in 45° 11' 57" N. lat., 5° 43' 43" E. long., 345 miles S.E. from Paris, and has 26,852 inhabitants in the commune, exclusive of the garrison and the floating population.

Grenoble occupies the site of the ancient *Ularo*, which was situated in the territory of the *Allobroges*. Inscriptions which have been dug up speak of the fortifications and edifices within the town, which were erected by the emperors *Diocletian* and *Maximian*, from whose assumed designations of *Jovius* and *Hercules* two of the gates were named *Porta Jovia* and *Porta Herculea*. In the 4th century the name *Gratianopolis* was given to the town in compliment to the emperor *Gratian*; and this new name gradually superseded the old one, *Ularo*, and was the origin of the modern name *Grenoble*. *Grenoble* has given title to a bishop at least since A.D. 381.

The part of the town on the right bank of the *Isère* is called *St. Laurent*. It consists chiefly of one spacious street, which has been lately embellished by the construction of quays along the river; it communicates with the rest of the town by a stone bridge, lately rebuilt, and by an iron chain bridge, the approaches to which are adorned with some handsome modern buildings. Immediately behind this street rises a hill, the lower part of which is called *Rabot*; higher up it takes the name of *Bastille*, from an old feudal castle that once stood on it, and the summit is called *Mont Rachel*. The greater part of this hill is covered with formidable fortifications, the guns of which can sweep the valleys of the two rivers. The view from *Mont Rachel* is very picturesque, presenting as in a plan the town and its fortifications, the valley of the *Drac* on one side, and of the *Isère* on the other; the view up the *Isère* is terminated by the snowy mass of *Mont Blanc*. This part of *Grenoble* was formerly surrounded by an ancient wall, which has been demolished in recent times, and is now replaced by a

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handsome promenade. The quarter of *Bonne* on the left bank is also fortified, and *Grenoble* is now considered one of the strongest fortresses in France. This part of the town is extensive; the streets are well laid out, and the houses are good. Among the principal buildings are the office of the prefect; the court-house; the town-hall, once the residence of the Constable *Lesdiguières*; and the building occupied by the college, by the public library of nearly 60,000 volumes, by the museums of natural history and antiquities, and by the gallery of paintings. The other remarkable objects are the cathedral of *Notre-Dame*, the episcopal palace, the hospital, the colossal bronze statue of *Bayard* in the *Place-St. André*, the arsenal, the citadel, the botanic garden, several handsome fountains, the theatre, and the public walks. The town is well lighted with gas.

The chief manufactures of the town are kid gloves, of which about two million francs' worth are exported to England and America annually, liqueurs, chamolis and other leather, &c. The dressing of hemp gives employment to about 1000 workmen. The trade of the place is much promoted by the navigation of the *Isère*; other articles of trade are wrought iron, marble, and timber.

The diocese of *Grenoble* is co-extensive with the department of *Isère*. The city is the seat of a High Court and University Academy, which have jurisdiction over the departments of *Isère*, *Drôme*, and *Hautes-Alpes*. In connection with the academy there are two faculties of law and science. The town has also a college, a school of medicine, a school for artillery, two seminaries for the priesthood, a botanic garden at which courses of instruction are delivered, and other educational institutions. It has also tribunals of first instance and of commerce, and an exchange.

Grenoble was the first place which openly received *Napoleon I.* on his return from *Elba* in 1815. A railway is in course of construction from *Grenoble* to the *Lyon-Avignon* line, which it joins opposite *Annonay*; the town is connected with *Paris* and *Turin* by electro-telegraphic wires.

(*Dictionnaire de la France.*)

GRESFORD. [DENBIGHSHIRE.]

GRESLEY. [DERBYSHIRE.]

GRETNA GREEN. [DUMFRIESSHIRE.]

GREY ABBEY. [DOWN.]

GREYSTOKE. [CUMBERLAND.]

GRIFIN. [GEORGIA, U.S.]

GRIGNAN. [DRÔME.]

GRIMSBY, GREAT, Lincolnshire, a municipal and parliamentary borough, market-town, and sea-port, in the parish of Great Grimsby, is situated on the right bank of the river *Humber*, near its mouth, in 53° 34' N. lat., 0° 4' W. long., distant 40 miles N.E. by N. from *Lincoln*, 163 miles N. from *London* by road, and 1544 miles by the Great Northern and East Lincolnshire railways. The population of the municipal borough in 1851 was 8860; of the parliamentary borough, 12,263. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. For sanitary purposes it is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry and diocese of *Lincoln*.

In the time of *Edward III.* *Grimsby* furnished the king with 11 vessels and 170 mariners for his armament against *Calais*. The gradual blocking up of the harbour by the accumulation of mud and sand led however to the decay of the port, until it was renovated by the exertions of some of the neighbouring landed proprietors about the beginning of the present century. The town is lighted with gas. The public buildings are a town-hall, a small borough jail, and a custom-house. The older part of the town, which is irregularly laid out, is at the head of the harbour, about a mile from the sea; the new part, commonly called 'the Marsh,' consists of several streets parallel to the harbour, on the east side. The harbour, which is a tide harbour, with a lock, &c., is at one of the mouths of the *Lacey Beck*, extending inland about a mile southward from the sea. The largest ships and steamers can enter the harbour at any time of the tide. There are here large warehouses and timber-yards. The opening of the *Manchester*, *Sheffield*, and *Lincolnshire*, and the *East Lincolnshire* lines of railway, and the construction of spacious docks, have added greatly to the commercial activity of *Grimsby*. The first stone of the new docks was laid by *Prince Albert*, April 17th, 1849. The works are according to the designs of *Mr. Rendel*, and when completed will inclose about 132 acres, of which 20 acres are appropriated to wharfs and quays, and 85 acres to warehouses and other buildings. A basin of 11 acres in extent connects the docks with the river *Humber*. The supply of fresh-water to the docks is from land streams. The plan includes a breakwater, to be constructed on a bank called the *Burcom Sands*, in the middle of the river, opposite the new dock, the intervening channel to be deepened and kept clear for the accommodation of vessels of large burden.

The vessels registered on December 31st 1853, as belonging to the port of *Grimsby*, were as follows:—Under 50 tons, 74 sailing-vessels, tonnage 2151; and 4 steam-vessels, tonnage 71; above 50 tons, 14 sailing-vessels, tonnage 1251; and 2 steam-vessels, tonnage 1030. The vessels which entered and cleared at the port during 1853 were as follows:—Coasting trade, sailing-vessels, inwards 251, tonnage 17,143; outwards 176, tonnage 14,656; steam-vessels, inwards 4,

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tonnage 1563; outwards 1, tonnage 346. Colonial and foreign trade, sailing-vessels, inwards 110 British, tonnage 24,419; and 310 foreign, tonnage 57,978; outwards 28 British, tonnage 5818; and 215 foreign, tonnage 45,221: steam-vessels, inwards 84 British, tonnage 33,212; and 4 foreign, tonnage 548; outwards 91 British, tonnage 35,763; and 4 foreign, tonnage 548.

The amount of customs duty received at Great Grimsby in the year 1851 was 24,554*l.* 1*s.* 6*d.*

The parish church is a large cruciform structure with a tower in the centre; the architecture is chiefly early English; the west door is Norman. The Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship. There are here a Free Grammar school, which had 37 scholars in 1850; a National school; and a mechanics institution, with a library of 1100 volumes. There are ship-building yards, a tan-yard, bone-mills, corn-mills, a large ropework, brick-fields, and breweries. The market is on Friday for corn and cattle; a fair is held on June 6th. A county court is held in Grimsby.

GRINDELWALD. [BERN.]

GRISONS. [GRAUBÜNDTEN.]

GRODNO, a government of Russia in Europe, lying between 51° 31' and 54° 21' N. lat., 23° 49' and 26° 44' E. long., is composed of a portion of the grand-duchy of Lithuania and other eastern parts of the kingdom of Poland. Its area is 14,652 square miles, and its population was stated to be 1,008,100 in 1848. Its greatest length is about 173 miles, and its greatest breadth about 120 miles. The surface is a wide plain broken only by a few chalk hills; it is covered in parts by extensive forests, particularly in the north, and in others by swampy lowlands. The soil is either a pure sand, or alluvial deposit intermixed with sand, and is in general favourable to the cultivation of grain and feeding of cattle. The principal river is the Niemen, which becomes navigable at Lititaha before it reaches Grodno, and is augmented in this province by the waters of the Shtahara, the western Beresina, Rossa, Kotra, &c. In the south-west the Bug separates Grodno from Poland, and the Narew, a tributary of the Vistula, rises in the circle of Prushana. The winter is very cold, and the climate damp and foggy.

Rye is the grain most cultivated: in ordinary years the yield is said to amount to above 2,346,000 English quarters, of which about one-third is exported by the Niemen Canal and overland to Baltic ports. Large quantities of barley, oats, hops, hemp, and flax are also raised. Vegetables and fruit are not of extensive growth. The crown holds a great number of the forests of Grodno, which are chiefly of the pine species. The pastures are extensive. Horned cattle and sheep of improved breeds are fed in considerable numbers. Much wax and honey are gathered; but the fisheries are unproductive. The minerals, which are insignificant in point of produce, consist of iron, limestone, clay, chalk, and saltpetre. The manufactures are inconsiderable and chiefly for domestic use; the principal are woollen-cloth, and leather.

Grodno is divided into eight districts, named from their chief towns. The more important of the towns are:—GRODNO; Lida, with a castle, college, and school, 2000 inhabitants; Novogrodek, a walled town defended by a castle, with 6 churches and 3 monasteries, 2 synagogues, and 4000 inhabitants; Slonim on the Shtahara, with 7 churches, a large woollen manufactory, and a population of about 7000; and Brzeso or Brzeso-Litewaky or Litovski, at the efflux of the Mushaviec into the Bug, a walled town, with an imperial palace, 12 churches, 2 synagogues, and about 8000 inhabitants, who carry on an extensive trade.

GRODNO, the capital of the Government of Grodno in Russia, is situated at the foot and on the side of a hill on the right bank of the Niemen, about 660 miles S.W. from St. Petersburg, in 53° 40' N. lat., 23° 52' E. long., and has about 16,000 inhabitants, many of whom are Jews. It is the seat of government for the province, and occupies a large extent of ground, but has neither walls nor gates. Most of the houses are built of wood. The town is as old as the 12th century, and had an ancient palace surrounded by a deep moat, which is now uninhabitable. The modern palace, erected by Augustus III., king of Poland, is spacious, handsome, and regularly built, and opposite to the quadrangle in front of it is a fine building containing the government offices. Grodno has 9 Roman Catholic churches, 2 United Greek-Catholic churches, a Greek church, a Lutheran chapel, and two synagogues. The churches of the former college of Jesuits and of the Carmelite convent are very fine. The Greek abbey of St. Basil is also a handsome structure. There are a good market-place; an equestrian seminary, a high school, and several other seminaries, besides the academy for medical science, with its library, collections in natural history, and botanic garden, founded by Stanislaus Augustus. The manufactures comprise some woollens, silks, and hats. The fairs, held three times a year, are well attended. Grodno was for a short time after 1673 the place of meeting for every third session of the Polish and Lithuanian Diets, but they were afterwards transferred wholly to Warsaw. The Diet held here in 1795 was for the mere purpose of ratifying the dismemberment of Poland. Grodno, two years after this, was the place of Stanislaus Augustus's abdication of the Polish crown.

GRONINGEN, a province in the kingdom of Holland, is bounded N. by the German Ocean, E. by Hanover, S. by the province of

Drenthe, and W. by Friesland. It lies between 52° 49' and 53° 27' N. lat., 6° 14' and 7° 10' E. long., its greatest length from south-east to north-west is 50 miles, its mean breadth is about 20 miles. The area is 882 square miles, and the population at the end of 1852 was 195,264.

The surface is level, intersected everywhere by canals and ditches, and protected from the sea by dykes. The principal rivers are the Hunze, which is navigable for large vessels from the town of Groningen to its mouth in the Lauwer-Zee; and the Aa, which runs into Dollart Bay. A great proportion of the land is marshy, and unfit for any purpose but pasturage, which however is rich, and supports a fine breed of cattle, and a great number of horses and sheep. A great quantity of turf is dug in the eastern part of the province. There are a few unimportant manufactures of broadcloth, calico, hosiery, linen, and silk. Some of the population are engaged in the coast fisheries, but the bulk of the people live by farming and grazing. The province is divided into three districts, Groningen, Winschoten, and Appingadam.

The capital *Groningen*, situated on the Hunze, is a large well-built town with 25,000 inhabitants. It is the most important town in the northern part of the kingdom, nearly circular in its form, and surrounded by walls and a fosse. The great church of St. Martin, the town-hall (a modern building in the Bree-markt, one of the finest squares in Holland), and the university are the most important structures in the town. The university was founded in 1614, and has usually about 300 students and 18 professors. There are also a public library, a museum of natural history, a botanic garden, and an institution for deaf-mutes, founded by Guyot, to whom a monument is erected in the Ossen-markt. The harbour is good, and a considerable trade is carried on in butter, cheese, rape-seed, rape-oil, corn, cattle, and other agricultural products. The Great Ship Canal from the Ems to Harlingen, on the western coast of Friesland, passes through Groningen, from which another canal runs north-east through Appingadam, and terminates at Delfzyl on Dollart's Bay. Groningen has ship-building yards, paper-mills, and a large trade in cattle, butter, and cheese. *Appingadam* is a small place of under 2000 inhabitants, situated on the Ship Canal, 14 miles E.N.E. from Groningen. *Delfzyl* is a strongly fortified town, 16 miles N.E. from Groningen, on the western shore of Dollart's Bay, with a good harbour inclosed by a dyke, and about 4000 inhabitants, employed chiefly in the fisheries and the coasting trade. *Winschoten* is about 17 miles E. from Groningen on the Ems and Harlingen Canal. It is fortified, and has a population of about 3500.

GROTTAMARE. [FERMO.]

GRUBENHAGEN, a principality in the southern part of the kingdom of Hanover, now forming a portion of the province or landrostei of Hildesheim. Its area is about 310 square miles. The eastern districts, which comprehend the Harz Mountains, are elevated, and not susceptible of cultivation: the highest summits are the Achtermanshöhe, 2706 feet, and the Bruchberg, 3018 feet above the level of the sea. The western districts, though bleak, consist of spacious, open valleys, which are well cultivated. The mountains are, with very few exceptions, richly wooded: the streams are only mountain brooks. The more important rivers are the Leine, Ilm, and Hahle; and there is a small lake near Seeburg. The climate is in general bleak and variable, and the sky seldom clear. In the lowlands much fruit and corn are raised; and besides these, hops, tobacco, flax, &c. Much attention is paid to the rearing of horses, and particularly horned cattle. Excellent butter and cheese are made. Sheep and swine are bred extensively. Wax and honey are collected. The chief wealth of the principality however consists in its woods and forests, which are estimated to cover above one-half of its entire surface. The mines of the mountain districts are productive, and yield silver, copper, lead, iron, zinc, vitriol, and sulphur: the quarries produce marble, freestone, slate, gypsum, alabaster, &c. Much charcoal is made. Linen yarn, laces, linen cloth, woollens, cottons, and metallic articles are also manufactured.

The chief towns of the principality are the following:—*Zimbeck*, the capital, situated on the Ilm, 40 miles S. from Hanover, is surrounded with walls, and contains about 6000 inhabitants. It has two religious houses, a gymnasium, three churches, in one of which (St. Alexander's) are the sarcophagi of the dukes of Grubenhagen; an orphan asylum, two hospitals, and manufactories of woollens, cottons, linens, tobacco, leather, &c. *Osterode*, a walled town, 10 miles S.E. from Zimbeck, on a feeder of the Leine, has a castle (now used as a granary), three churches, two hospitals, a gymnasium, and about 5200 inhabitants. The industrial products comprise woollens, cottons, hats, deals, white lead, tobacco, soap, linen, stockings, beer, spirits, leather, &c. *Duderstadt*, 16 miles S.E. from Osterode, is situated near the Prussian frontier, in the valley of the Hahle. It is surrounded by ramparts laid out in walks, and has about 4500 inhabitants, a Roman Catholic gymnasium, an Ursuline convent, a Lutheran and a Roman Catholic church, an orphan asylum, two hospitals, and manufactories of woollen stuffs, tobacco, tapes and ribands, brandy, &c. [HILDESHEIM.]

GRÜNBERG. [LIEGNITZ.]

GRUYÈRE. [FREYBURG.]

GUADALAJARA. [CASTILLA LA NUEVA.]

GUADALAJARA, or **GUADALAJARA**, the capital of the republic of Jalisco in Mexico, is situated on the river Santiago, in about 21° N. lat., 104° W. long., and has a population of about 60,000. The town is handsome, the streets are airy, and many of the houses excellent. There are 14 squares, 12 fountains, and a number of convents and churches. The cathedral is a magnificent building. The portales or colonnades, may be called the bazaars of the town, being filled with handsome shops, well stocked with foreign manufactures, and with the less important produce of national industry. These portales are much better than those of Mexico, and built with equal solidity and in good taste. The other remarkable buildings are the hall of congress, the mint, the episcopal palace, the opera-house, and the barracks. The city has a college and several schools. Great numbers of Mexican dollars are coined in the mint of Guadalajara. The Alameda, or public walk, is well laid out, and resembles in some respects an English park: it has a fountain in its centre, and a stream of water all round. The inhabitants are industrious, and carry on various trades. They are good blacksmiths, carpenters, silversmiths, and are noted for their skill in working leather, as well as in manufacturing a sort of porous earthenware, with which they supply not only Mexico but also the neighbouring states of the Pacific. Shawls of striped calico are also made in considerable quantities.

GUADALFEO. [SPAIN.]

GUADALOUPE, or, as the French write it, **GUADELOUPE**, an island (or more correctly, two islands, divided from each other by a very narrow channel, and forming part of the Lesser Antilles), lies about the point indicated by 16° 20' N. lat., 62° W. long. Guadeloupe was discovered and named by Columbus in 1493. It was previously called by the native inhabitants *Quéraqüera*. It was colonised by the French in 1635, and remained in possession of France until 1759, when it was taken by the English, who restored it to France in 1763. It was again taken by the English in 1794, and retaken in the following year. In 1810 it once more fell into the hands of the English, and was restored in 1814 at the general peace, since which time it has remained in the possession of France.

The channel which divides the island is called *La Rivière Salée*, or Salt River, runs north and south, and has a large bay at each end; that on the north is called *Grand Cul-de-Sac*, and that on the south *Petit Cul-de-Sac*. Between these bays the channel varies in breadth from 30 to 70 yards, and its length is about 5 miles. Its depth is so unequal that only vessels of small burden (60 tons) can pass through it. The land to the east of this channel is called *Grande Terre*, while that on the west, being the part first discovered and earliest settled, is properly called *Guadeloupe*, but is also denominated *Basse Terre*. The entire length of the whole island is from 60 to 70 miles, and its greatest breadth is 25 miles.

The island is apparently of volcanic origin. About the middle of the western division, somewhat towards the south, is a mountain called *La Souffrière*, or the Sulphur Hill, about 5100 feet above the sea. A thick black smoke rises from this mountain, mixed with sparks, which are visible at night. It is sometimes an active volcano. It forms part of a ridge which divides the western division, extending through it in a direction north and south. Several streams rise in these mountains. The eastern division is more level than the western side, but has no streams or springs; and the soil, being of a more sandy nature, is less fertile. Earthquakes and hurricanes are not uncommon. The rainy season lasts from the middle of July to the middle of October. The total rain-fall in the year averages 86 inches.

The former capital of the island, *St. Louis*, or *Point-à-Petre*, stands on *Grande Terre*, at the south entrance of the *Rivière Salée*, in 16° 16' N. lat., 61° 36' W. long. The harbour is sheltered and the anchorage good. It had formerly a population of above 15,000, including the suburbs, but in 1843 it was almost destroyed by an earthquake. The town of *Basse Terre*, which is in the other division of Guadeloupe, stands near its south-west point, in 15° 59' N. lat., 61° 47' W. long., and has about 6000 inhabitants. It is the residence of the governor of the island, the seat of a high court of assize, and has several schools. The harbour is merely an unsheltered roadstead with indifferent anchorage, unsafe during the hurricane season; but from its greater proximity to the most productive part of the island, it is more frequented by shipping than *Point-à-Petre*, and is the chief commercial station of the colony. The exports of Guadeloupe consist chiefly of sugar, with some molasses, rum, cotton, dye-stuffs, copper, &c. The imports are chiefly manufactured articles from France.

The population of Guadeloupe is about 130,000. Of this number about 100,000 were in a state of slavery previous to the French revolution of 1848. As an immediate result of that event they were all made free.

Guadeloupe exported to France, in 1848, 20,319,543 kilos. (= 20,000 tons) of sugar; in 1849, 19,191,700 kilos.; in 1850, during which the island was subjected to a state of siege in consequence of insurrection, the quantity fell to 13,020,900 kilos.; in 1851 it amounted to 16,922,630, and in the first six months of 1852 to 18,058,458 kilos.

GUADALQUIVIR. [SPAIN.]

GUADIANA. [ALEMTEJO.]

GUADIX. [GRANADA.]

GALEGUAY and **GALEGUAY CHA.** [ENTRE RÍOS.]

GUANA. [VIRGIN ISLANDS.]

GUANABACOA. [CUBA.]

GUANAXUATO, STATE OF. [MEXICO.]

GUANAXUATO, or **GUANAJUATO**, the capital of Guanajuato one of the United States of Mexico, is situated on the table-land of Anahuac, 7294 feet above the level of the sea, in 21° N. lat., 100° 50' W. long.: population about 40,000. It is built on extremely uneven ground, furrowed by numerous ravines. The town, which owes its origin altogether to the gold- and silver-mines which surround it, is very irregularly built. Many of the streets are very steep. It contains numerous splendid memorials of the former rich produce of the surrounding mines, in the magnificent palaces of the proprietors, the church which formerly belonged to the Jesuits, the numerous chapels and religious edifices, the Alhondiga, a large square building used as a public granary, and the road which leads to the mine of Valenciana. Before the War of Independence the town contained a population of 41,000, and its six suburbs nearly 30,000 more; but most of the works of the mines were destroyed during the civil war. Since that period they have been re-established; and in 1852 the silver coinage of Guanajuato amounted to 7,300,000 Spanish dollars. The mines have for many years yielded more silver than the mines of Potosi.

GUANCABELICA, or HUANCABELICA. [PERU.]

GUARDA. [BEIRA.]

GUASTALLA. [PARMA.]

GUATEMALA, Republic of, Central America, occupies the table-land of Guatemala, with the hilly country between it and the Gulf of Honduras, and a portion of the table-land of Yucatan. It lies between 13° 40' and 18° 10' N. lat., 88° 15' and 93° 20' W. long. On the S.E. it is bounded by the Republic of Salvador; E. by Honduras; N.E. by the Gulf of Honduras and the British settlement of Belize, or British Honduras; N. by the Mexican state of Yucatan; W. by Chiapa; and S. by the Pacific Ocean. The area is about 50,000 square miles: the population about 500,000.

Coast-line, Surface, &c.—The general bearing of the Pacific coast from the Salvador boundary of the state to the Barra de Guacalate is W. by N., and thence to the Rio Sitalapa, the boundary between Guatemala and Chiapa, it is N.W. The shore is for the most part low, the descent from the table-land being steep, and a strip of lowland, from 20 to 30 miles across, being left between its base and the sea; but in many places the shore is high and rocky, and several rocky barriers lie off it. The only port at present frequented on this coast is that of Ystapa, at the mouth of the Rio Michetoyat; but though it is a port of entry, the harbour is little better than a roadstead, affording no protection for shipping. Ocos, farther north, formed by the Barra de Ocos, is also an available port, but, owing to the absence of inhabitants, is not resorted to. The low tracts along the coast are very thinly peopled. On the northern coast Santo Tomas, in Honduras Bay, is a good and well-sheltered port; and somewhat inland, in the lake known as Golfo Dolce, is the port of Yzabal, in some respects the principal port of Central America; most of the European goods designed for that market being brought to it by vessels, and thence transported to the interior by mules: owing to a bar at the mouth of the Rio Dolce, Yzabal is inaccessible to vessels drawing over 7 feet of water.

The table-land of Guatemala occupies all the countries between the isthmus of Chiquimula and that of Tehuantepec in Mexico; the high-land in the interior of the peninsula of Yucatan, usually called the table-land of Yucatan, forms its north-eastern projection. Near its southern borders, about the town of Guatemala, it is nearly 5000 feet above the sea; and this may be considered as the mean height of that portion which is south of the Rio Motagua. But north of this river the country rises higher. The most elevated part of it appears to lie between the towns of Totonicapán and Gueguetenango (15° 30' N. lat.). From this point it begins to lower gradually, and its north-western edges, which belong to the Mexican state of Chiapa, are indented by deep and sometimes wide valleys. No continuous range of any considerable elevation traverses this plain, the surface of which is slightly undulating, like the central parts of England; but here and there it is traversed by a range of hills, rising a few hundred feet above the plain. The descent from this plain to the low shores of the Pacific is extremely steep, and consequently when seen from that side it has the appearance of a mountain range, an illusion which is confirmed by a few lofty volcanoes standing near the edge of this descent. The most remarkable are the active volcano of Atitlan, near Gueguetenango, and the two volcanoes situated S. and N.W. of the town of New Guatemala, of which the Volcano de Agua (or Water Volcano), according to Colonel Galindo, is 12,620 feet, but according to other authorities 13,578 feet high; and the Volcano de Fuego (the Fire Volcano), appears to be somewhat higher, but which has not been ascended. All the volcanoes, whether active or extinct, are situated near the Pacific, and are in line with those of Salvador and Nicaragua. The eastern border of the table-land, by which it descends to the Gulf of Honduras, is cut by deep valleys, between which the high land takes the shape of ridges, which extend to a great distance, and in some places, as between the Rio Motagua and the Golfo Dolce, advance to the very shores of the sea. The country between the table-land and the Gulf of Honduras may therefore be considered as a succession of valleys and ridges, except the part to the west and north-west of the Golfo Dolce, which is a low plain.

The state is well watered by a large number of rivers, but very few of them are navigable: the principal are the Dolce, Polochic, and Motagua. The *Rio Dolce*, though short, is the most important river of Central America, being the channel by which the Golfo Dolce discharges its waters into the Gulf of Honduras, 15° 35' N. lat. The Golfo Dolce is a fresh-water lake, about 50 miles in circuit, having on its southern bank the small port-town of Yzabal. The *Rio Dolce*, issuing from the eastern portion of the lake, turns to the north, and expands into a small lake, called the Golfetta (the Small Gulf), about 10 miles in width. This river is about 20 miles long, and of considerable depth, except on its bar, where there are only 6 or 7 feet water.

The *Rio Polochic* rises near the village of Tactic, on the table-land of Guatemala, but soon descending into a wide and deep valley, it becomes navigable at the Embarcadero de Teleman, a considerable distance above the Golfo Dolce, into which it falls. It is a rapid river, and deep enough for vessels drawing several feet of water, but on the bar at its mouth there are only 3 or 4 feet of water.

The *Motagua* rises near the town of Solola on the table-land of Guatemala, through which it runs in an eastern direction till it descends from it some distance west of Zacapa. At Gualán, some miles farther down, the river becomes navigable, but, owing to its numerous rapids and shoals, it can only be navigated by boats not drawing more than a foot and a half water. Towards its mouth the river turns to the north-east and falls into the Gulf of Honduras about 15 miles west of Omoa. By means of this river a considerable quantity of European goods, especially the heavier kind, is sent into the interior of Guatemala; they are transported from Gualán to the places of consumption on rafts.

The Lacantun, which rises in this state and separates it for a considerable distance from Yucatan, becomes an important river after its entry into the state of Yucatan. The rivers which enter the Pacific are numerous, but have all a short course. One of the most important is the Michetoyat, which at its mouth forms the harbour of Ystapa, the port of the city of Guatemala.

There are four rather considerable lakes in the state. Of these that called Golfo Dolce, noticed above, is the most important, as by means of it most of the foreign trade of the republic is carried on. The lake of Peten, situated in the most northern district of Vera Paz, on the table-land of Yucatan, is of an oval form and about 70 miles in circuit. It contains several islands, on the largest of which is a small fortress and a collection of houses forming the village of Flores. The lake of Atitlan is 80 miles north-west of the city of Guatemala, and near the western edge of the table-land. It is about 18 miles long and 9 miles broad, environed by lofty heights, including the volcano of Atitlan, and remarkable for its extraordinary depth and for having no outlet, though several small rivers fall into it. The lake of Amatitan, 18 miles south-east from the city of Guatemala, is 9 miles long and 3 miles wide, and of great depth. It is much resorted to as a bathing-place by the inhabitants of the city during the season from February to April; and near the lake are several hot and mineral springs. The *Rio Michetoyat* flows from this lake.

Climate, Soil, Productions.—The climate of the table-land is that of a perennial spring; the thermometer scarcely varying throughout the year. The average heat in the middle of the year is from 68° to 70° Fahr.; but during the north winds, which prevail in the dry season, from October to May, it sometimes though rarely descends 20 degrees within a few hours. The rainy season usually sets in in May and lasts till October; but rain seldom falls except between 3 o'clock in the afternoon and 6 o'clock in the morning. In June thunder is frequent; in August and September the Pacific coast is subject to violent storms from the south-west. The table-land is considered to be very healthy, but góitre is prevalent, especially among the mixed races, and is often accompanied by idiocy. Earthquakes are painfully frequent.

The soil is generally very fertile. The table-land is nearly without trees, and even bushes, except on the declivities of the hilly ranges, which traverse it in every direction. On the lower lands by the Pacific trees of very large size form extensive forests, and are a source of great natural wealth; but owing to the thinness of the population and the want of roads, are at present of little profit. Among the trees are mahogany, cedar, Brazil, Santa Maria, guaiacum, pimento, &c. Various medicinal plants are also abundant. On the low tract by the Gulf of Honduras there is a luxuriant and vigorous vegetation.

On the table-land wheat and maize of excellent quality are largely grown. Most European fruits and vegetables produce well; and tropical fruits and vegetables abound. In the lower tracts excellent rice is raised. Tobacco, cotton, sugar, cacao, vanilla, and indigo are raised for exportation. Most of the cochineal which forms so important an article in the commerce of Central America is obtained in Guatemala. The agricultural resources of Guatemala remain however but slightly developed. The country is thinly peopled, and owing to its unsettled state, and the inert character of the major part of the people, little has been done towards improving the rude systems of cultivation or introducing superior implements; and a considerable portion of the country lies almost waste. Of this uncultivated land a large part is used as grazing ground, and a rather large number of cattle is kept. Sheep are reared in considerable numbers,

the wool, which is somewhat coarse, being used for the native manufactures. The horses are small, but hardy and handsome. Mules are numerous, being largely used for carrying goods. Hogs abound, and are of good quality. A good deal of poultry is raised.

Several metals are believed to exist in sufficient quantities to be profitably worked under favourable circumstances. Gold, silver, lead, copper, and iron are said to have been found. Lead mines are worked by the Indians in Totonicapan. Jasper and marble are obtained. Brimstone of good quality is procured in the vicinity of some of the volcanoes. Salt is made along the Pacific coast.

The manufactures are chiefly confined to articles of domestic consumption. The cotton manufacture, one of considerable importance, has greatly declined. It is now chiefly carried on in the corregimientos of Guatemala and Sacatepeques. The manufacture of woollen cloth has retained more of its former consequence: the making of the ordinary coarse cloths, and of a kind of black cloak much worn in the country employs a large number of looms. Hats, jewellery, furniture, earthenware, and the ordinary articles of domestic use are largely made in several of the towns. The exports are confined to few articles. Of these the most important is that of cochineal, which was introduced into Guatemala as late as 1811, and did not for several years produce more than sufficient for home consumption. In 1811 about 15,000 lbs. were exported: in 1849 the quantity had increased to 1,469,100 lbs. The other articles of export are chiefly mahogany and other woods employed in cabinet work; vanilla, sarsaparilla, and other medicinal roots and plants; indigo; and hides. Sugar, coffee, and cotton are also exported in small quantities. The imports are British cotton and dry goods, linen and silk fabrics; outlery and hardware; porcelain and fine earthenware; fancy goods; wines, &c. In 1851 the exports amounted to 994,488 dollars; the imports to 1,354,430 dollars.

Divisions, Towns, &c.—Guatemala is divided into seven departments (corregimientos), which, with their chief towns, are as follows:—

1. Guatemala occupies the south-eastern portion of the territory, has an area of nearly 5000 square miles, and a population of about 90,000. The surface of the country is considerably diversified, the climate equable and genial, and the soil remarkably fertile. This and the following department form the great cochineal district. The nopal (*Cactus opuntia*), the plant on which the cochineal insect is produced, grows freely and luxuriantly, especially around the town of Amatitan, where are the chief plantations: the insects come to maturity in April, and the collecting of them continues for about a month. The other productions of this department are maize and wheat, sugar and coffee, most of which however is required for home consumption. The principal towns are GUATEMALA, the capital of the state, Amatitan, Escuintla (population 3,000), and Jalpatagua. *Amatitan*, at the foot of the lake of the same name, which formerly depended on the persons who annually resorted to it for bathing, is now, in consequence of the great increase in the rearing of cochineal, a rich and flourishing place, having a population including the suburbs of upwards of 9000.

2. Sacatepeques lies to the west of the corregimiento of Guatemala; it contains above 1900 square miles, and a population of about 56,000, who are chiefly settled in its southern part. The country around the city of Old Guatemala is one of the most picturesque in the world, and the soil is extremely fertile. Maize and other grains, and vegetables and fruit in great variety, are largely grown. Cotton, coffee, tobacco, and sugar flourish here, though they are not yet grown to any great extent. Poultry and hogs are raised in considerable quantities for the supply of the capital. The olive and vine grow well here, but are not cultivated to any extent. The chief town is Old Guatemala [GUATEMALA, City of], but there are several other populous places around it notwithstanding the proximity of the two volcanoes Agua and Fuego, and the frequency and severity of the earthquakes with which it is visited. The larger of these towns are Chimaltenango, population 4000, and Patsun.

3. Sololá, lies to the west of the former corregimientos, and contains about 4000 square miles. The surface is very much broken, and the soil, especially in the valleys, very fertile. The climate is colder than in some other parts of the state. Wheat, maize, and fruits are the chief products. Sheep are bred in large numbers. Jergas and other coarse woollens are manufactured. At least three-fourths of the inhabitants are Indians, who are mostly engaged in agriculture or weaving: twelve or fourteen of their villages are placed around the shores of the lake Atitlan, which is nearly in the centre of Sololá. From the midst of this lake rises the volcano of San Pedro. The chief towns of this department are Sololá, population 5000, Atitlan, and Masatenango, but neither of them is of any importance.

4. Quesaltenango lies to the north-west of Sololá; it contains above 4500 square miles, and 70,310 inhabitants; and is one of the most important of the departments in an industrial point of view. It has a tolerably level surface, a temperate climate, and a very fertile soil. The products are maize and wheat, sugar, cacao, and various fruits and vegetables, which are largely exported to the city of Guatemala, to Salvador, and Chiapa. Large herds of cattle and mules, and great flocks of sheep are maintained. The capital *Quesaltenango*, population 20,000, a large portion of whom are Indians, is the next town in importance to Guatemala. It stands on the little river Samala, and is a large well and regularly-built place. It contains a spacious

church, and six of smaller size, a large town-hall, a plaza, or great square, with a fountain in the centre, has a daily market, and is a place of considerable trade. In its vicinity is a hot spring which ejects the water to a height of above 20 feet. The other towns are San Marcos, Tapachula, and Tejutla.

5. Totonicapan, is an inland department, lying north-east of Quetzaltenango; it contains 5600 square miles, but is very thinly peopled; the larger part of the inhabitants are Indians. The surface is much broken; the climate is temperate but considerably varied; the soil in the valleys, which are well watered, is fertile. Maize and wheat, sugar, fruit and vegetables are the chief products of the soil. Sheep and cattle are largely bred. Lead-mines are wrought by the Indians in the neighbourhood of Chiantla. Salt is made from springs near Yxtatan. The only town of any importance is Totonicapan, which is said to contain 12,000 inhabitants, nearly all Indians, who make considerable quantities of woollen cloth, earthenware, and wooden utensils. The other towns are Momostenango, Gueguetenango, and Jacaltenango.

6. Chiquimula, occupies the north-eastern extremity of the state, bordering on the republic of Honduras: its area is nearly 5000 square miles; its population about 80,000. The surface is considerably diversified, and in parts very fertile; the valleys and low tracts by the Golfo Dolce and the Bay of Honduras are hot, moist, and unhealthy. Tobacco, cotton, rice, and sugar are raised largely, with maize, frixoles, &c. The sugar is grown chiefly for distillation or for making chicha, a favourite intoxicating drink of the Indians. Horses, mules, and cattle are reared in large numbers. The chief towns are Chiquimula, population 4500; Acasaguastlan, 3600; Jalapa, 3500; Jiloquepeque, 3200; Mita, 3800; Quetzaltepeque, 4000; Zacapa, 3000; and the little port town of Yzabel on the Golfo Dolce. Near this last place are the remarkable ancient remains of Quirigua, consisting of seven lofty columns, and various sculptured alaba.

7. Vera Paz, the largest of the seven *colegimientos*, comprehends the projecting tract of country which forms the most northern part of the republic; the area is about 11,000 square miles: the population is estimated at 65,000, of whom nine-tenths are Indians. The country is very varied in surface and character of soil; but comparatively very little of it is cultivated. Mahogany, rosewood, and other valuable timber-trees abound; the coffee, cacao, indigo, and nopal plants are said to be indigenous in the forests. In the northern part of Vera Paz is the lake of Peten. The most populous town is Coban, situated in a remarkably fertile valley of the same name, with a population of above 10,000, nearly all Indians, who are industrious and wealthy, possessing fine plantations of sugar-cane, bananas, pimentos, and various kinds of fruits; the other towns are Salamá, population 4500, Cajabon, 4000; and Rabinal, 6000; but none of them call for specific notice.

Government, &c.—According to the constitution of the 19th of October 1851 the executive is confided to a president elected by a general assembly, composed of the legislative chamber, the archbishop of Guatemala, the members of the supreme court of justice, and the members of the council of state having a deliberative voice. The president is elected for four years, but is eligible to be re-elected. The legislative assembly consists of 59 members. The council of state is composed of the ministers, eight councillors chosen by the legislative assembly, and of others appointed by the president. The revenue and expenditure average somewhat over 400,000 dollars. The debt amounts to 1,200,000 dollars. The army consists of 1000 men, with a patriotic corps and a militia of 5000 men.

The population consists of aboriginal tribes, some of whom live in a state of almost perfect independence, but the main body have obtained all the rights of free citizens of the republic, and form the bulk of the population; of the descendants of Europeans, and of the mixed offspring of Europeans and Indians who are known as 'ladinos.' The Roman Catholic is the established religion, and there are few if any open dissenters. The church is presided over by the Archbishop of Guatemala.

During the Spanish occupancy Central America was termed the kingdom of Guatemala, the city of Guatemala being the capital and seat of government. During the struggle for independence it remained quiet and subject to Spain; but on the declaration of independence in 1821 it was for awhile united to the Mexican empire of Iturbide. On the publication of the new constitution, July 2nd 1823, by which the federal union of Central America was formed, Guatemala became one of the united states. This union was however after a short time dissolved, and Guatemala then became an independent republic and has so continued to the present time.

(Hæfkin, *Central America*; Juarror, *Guatemala*; *Travels of Humboldt*, Dunn, Byam, Thompson, &c.; Baly, *Central America*.)

GUATEMALA, the capital of the republic of Guatemala, Central America. A city of this name was founded by Pedro de Alvarado in 1524, about 28 miles W. from the present city, near the town of Guatemala la Antigua, and was destroyed in 1541, it is said, by enormous masses of water bursting forth from a neighbouring volcano, which from that circumstance has obtained the name of Vulcano de Agua, or the Water Volcano. A new town was built at a little distance, and is now called Guatemala la Antigua, or briefly La Antigua. This second city, the capital of the Spanish kingdom of

Guatemala, was partly destroyed by earthquakes in 1773, after which disaster the present city, called Guatemala la Nueva, or 'the New,' was founded in 1774.

Guatemala la Nueva is situated in 14° 37' N. lat., 90° 30' W. long., on a plain which is about 14 miles long and 9 miles wide, and is 4961 feet above the sea-level; it is 90 miles from the Atlantic and 26 miles from the Pacific Ocean: population about 40,000. The city is built with great regularity; the streets are 40 feet wide, straight, intersect at right angles, and always terminate in some conspicuous building. The houses have only one story, but occupy a great deal of ground, containing within their walls one or more court-yards. The town is well provided with water brought by an aqueduct from a spring which rises on a hill about four miles from the city, and conducted by pipes into twelve public reservoirs, from which it is carried to every private house. The most remarkable buildings are round the plaza, or great market-place, a square of about 150 yards, situated nearly in the centre of the city. On the east side stands the cathedral, a simple but noble building; and near it on one side the palace of the archbishop, and on the other the university. The north and west sides of the plaza are occupied by other public buildings, and on the south side are the best shops of the city. Besides the cathedral there are 19 other churches and chapels. Guatemala enjoys a perpetual spring; the thermometer rarely rises above 70°, or descends below 64°. Earthquakes are however frequent. The commerce of the city is limited to its own consumption and that of the neighbourhood. Its manufactures consist of common cottons, muslins, gauze, porcelain, earthenware, cigars, jewellery, &c. The suburbs, which are mostly inhabited by Indians and mulattoes, here called *ladinos*, partly surround the city.

Guatemala la Antigua, about 26 miles W.S.W. from the capital, is situated in a wide valley of great fertility, at the western end of which rise the two vast and lofty volcanoes called De Agua and De Fuego, noticed in the previous article. The city itself is at an elevation of 5817 feet. After its partial destruction in 1773, and the foundation of New Guatemala, the Spanish government ordered the place to be abandoned, but a considerable portion of the inhabitants returned to it; and it now contains a population of about 16,000. This amount of population is mainly to be attributed to the great fertility of the valley, in which nearly all the vegetables are cultivated which are consumed in both cities: there are also some manufactures, and a considerable quantity of cochineal is collected. The city is regularly laid out, and the streets are spacious. Among the buildings which were not destroyed is the town-hall, a magnificent edifice, and a good example of the style in which the city was built. A great part of the place is still in ruins.

GUAYAQUIL. [ECUADOR.]

GUBEN. [BRANDENBURG.]

GUELDERLAND, or GELDERLAND, a province of the kingdom of Holland, lying between 51° 45' and 52° 32' N. lat., 4° 57' and 6° 47' E. long., is bounded N. by the Zuider-Zee and Overijssel, W. by Utrecht and South Holland, S. by North Brabant and Limburg, and E. by the Rhenish provinces of Prussia. Its area is 1962 square miles, and on the 31st of December 1852 the population was 383,394.

The surface is in general level: some of it is reclaimed marsh land; northward from Arnheim to the mouth of the Yssel, the country is hilly or undulating. The climate is healthy; the soil is good and the pasture luxuriant; but there is a considerable breadth of heath and naturally barren land, some of which is planted with pines, firs, and stunted oaks. Guelderland is watered by the Rhine, the Waal, the Yssel, the Maas, and the Leek, besides which rivers there are several canals. It is traversed by the railroad from Amsterdam to Arnheim, whence the line is to be continued across the province to Emmerich within the Prussian frontier. The greater part of the inhabitants employ themselves in agriculture. The principal crops are wheat, rye, buck-wheat, potatoes, hops, and tobacco. Orchards are very numerous, and the cultivation of the land is generally in a very advanced state. Some few manufactures are carried on; among these, paper-making and tanning are the principal: some linen is likewise produced. The province is divided politically into four districts, namely, Arnheim, Nimeguen, Thiel, and Zutphen. The capital of the province is ARNHEIM.

Nimeguen, or *Nymegen*, the Roman *Noviomagus*, stands on the left bank of the Waal, and has about 20,000 inhabitants. It is built on the slope of a hill, and is strongly fortified. The town is well built, but the streets are narrow. The quay is separated from the town by a wall. The most remarkable buildings are the town-house and the church of St. Stephen. Some Roman antiquities have been discovered. On an eminence above the town is the fine café and promenade of the Belvedere, from which there is a very interesting prospect. Leather, glue, Prussian blue, and a pale beer called *moll*, are the chief industrial products. Nymegen is famous for the treaties of peace concluded in it August 10 1678 between Spain, France, and Holland; and February 5, 1679, between Spain and France, the emperor of Germany, and Sweden.

Zutphen, at the siege of which in 1591 Sir Philip Sidney fell, is a strongly fortified town, on the right bank of the Yssel, and has 11,000 inhabitants. The ramparts are planted with trees, and form a plea-

sant public walk. The town is well built, and contains several pretty churches, a town-hall, a house of correction, and the S'Gravenhof, or palace of the counts of Gelderland, all of which are stately edifices.

Hardewyk is a fortified port on the *Zuider-Zee*: the inhabitants, about 5000 in number, carry on the herring-fishery, and have a considerable corn trade.

Thiel, a fortress on the right bank of the *Waal*, is a place of some manufacturing industry, and has 5000 inhabitants.

GUELDRES. [RHEIN PROVINZ.]

GUÉRET. [CREUSE.]

GUERNSEY, one of the islands of the English Channel, belonging to England, is situated in the Gulf of Avranches, between 49° 24' and 49° 30' N. lat., 2° 32' and 2° 47' W. long. It is distant 62 miles S. from Torquay; 120 miles S.W. from Southampton; 45 miles W. by S. from Cherbourg. The population of the island in 1851 was 29,757. The form of the island approximates to that of a right-angled triangle: the sides face the south, east, and north-west, and are respectively about 6½, 6, and 9 miles long; the circumference of the island is about 30 miles. The coast is somewhat difficult of approach, from the number of rocks and the rapidity of the currents around it. The tides rise to the height of 32 feet. The northern part of the island is a level tract, and the coast for the most part lies low: the southern part is more elevated, but the high ground is intersected by narrow valleys and deep glens, and the coast is lofty and abrupt. Springs and rivulets are plentiful. Good roads lead from St. Peter Port to different parts of the island.

The island is almost entirely of granitic formation: the rocks are chiefly gneiss, granite, and sienite. Sienite is quarried at Grande Rocque, on the north-west side of the island, for building; and at St. Sampson's, on the east of the island, a gray or black granite is wrought. It is used for building and paving, and large quantities of it are sent to London and Portsmouth. Some trap rocks and mica and argillaceous schist occur in the western part of the island. A lode of copper has been found near Fort George.

The climate of Guernsey is subject to frequent but not great variations: the thermometer seldom rises above 80° of Fahrenheit, or falls as low as 37°, and never remains long stationary at the freezing point. The mean winter temperature is about 41° 62'; that of summer 60° 7'. Snow is rare, and frosts are neither severe nor durable. During the spring easterly winds prevail, but the prevailing winds during the rest of the year are westerly.

The soil is fertile, but the improvement of the land has been checked by the minute subdivision of property. The country people live upon and cultivate their own estates, the largest of which is said not to exceed 200 Guernsey verges, or about 74½ English acres, and few of them exceed half that size. Wheat and barley are generally grown, the red wheat having the preference. Parsnips are used for winter fodder for cattle, and for fattening them; clover is largely raised. Potatoes yield excellent crops. The ploughed lands are never suffered to lie fallow. The principal manure used is sea-weed. The island breed of horses has been greatly improved of late years. The breeding of cattle, especially of cows, is in Guernsey an object of great attention. The dairy is in all farms of any size the principal object of attention, and the chief source of profit. The butter is in high repute. Swine are numerous, and the hogs attain a great size. Poultry is sent to market in large quantities.

The island is not so well wooded as Jersey. In some parts however there is tolerable abundance of wood. The hedge-rows are chiefly of furze. The orchards are productive, and a considerable quantity of cider is made. The mildness of the climate affords opportunities for raising in the open air fruit-trees which in England require artificial heat or shelter. The cultivation of flowers is carried on with great success.

A great variety of fish is taken on the shores of the island; crabs, lobsters, cray-fish, and oysters are abundant. There is also a shell-fish, said to be peculiar to the Channel Islands, called the ormer, which, when dressed, is a favourite dish.

The only division of Guernsey is into parishes: these are ten in number, and, with their situation, and population in 1851, are as follows—St. Andrew, central, 1204; Cdtel, or St. Mary-de-Castro, west and central, 2182; Forest, south, 673; St. Martin, south-east, 1968; St. Peter-du-Bois, west and south-west, 1152; St. Sampson, north, 2006; St. Saviour, west and central, 1087; Torsteval, south-west, 355; the Vale, north, 2110; St. Peter Port, east, 17,070.

The only town in Guernsey is *St. Peter Port*, situated on the slope of a hill about the middle of the eastern coast of the island, and extending for nearly a mile along the shore. The population of the town parish in 1851 was 16,778. New Town, as the upper part of the town is called, and what is termed *Hauteville* (the upper town), on the slope of the hill to the south-west of the old town, are the most modern and best built quarters. The appearance of *St. Peter Port*, on approaching it by sea, is imposing, the houses rising one above the other. The streets in the old town are narrow, steep, and crooked; and the houses are dusky looking and old: but both streets and houses have been considerably improved of late years. The government-house, the residence of the lieutenant-governor, is a substantial but heavy building. Near it is *Elizabeth College*, a handsome and extensive building, surrounded with spacious grounds. *St. Peter's*

church was consecrated A.D. 1812. *Trinity church*, formerly a proprietary chapel, has been enlarged, and is now a convenient building. *St. James's church*, erected in 1817, is a neat edifice, having accommodation for 1300 persons. *St. John's church*, erected in 1836, is a more ambitious structure. The Wesleyan, Primitive, and New Connexion Methodists, Independents, Baptists, Quakers, Roman Catholics, and Plymouth Brethren have places of worship in the town. There are several schools, numerous religious and charitable institutions, a literary institute, reading-rooms, several clubs, &c. The court-house, a neat building, and the new prison, an expensive but ill-contrived structure, are at *Hauteville*. The town hospital was erected in 1741-42, and enlarged and improved in 1809-10. In it are received all sick and destitute poor. There are three markets: the fish-market, which is well supplied, is a spacious and handsome arcade, 190 feet long, and broad and lofty in proportion, with a double row of marble slabs extending the whole length of the building; the other markets are commodious. The markets are open every day, but the principal market-days are Wednesday and Saturday. The theatre is a plain building. A promenade, called the *New Ground*, is pleasantly laid out. In the suburbs are numerous villas and excellent private residences.

The harbour is formed by two piers; it is small, and insufficient for the trade of the place. The roadstead affords a convenient anchorage, sheltered from the south-west winds, and defended by *Castle Cornet*, built on an insulated rock, somewhat less than half a mile from the shore, from which it is accessible at low water in spring tides. *Fort George*, a regular fortification on the heights, about half a mile south of the town, was begun in 1775: it is considered to be of great strength. Around the island are 15 martello towers. The chief shipping trade at present is the carrying trade: the amount of shipping belonging to the island is about 15,000 tons. The principal manufactures are those of tobacco and snuff, soap, candles, Roman cement, bricks, rope, cordage, &c.; cider is largely made, and spirits are extensively distilled for exportation.

St. Sampson's Harbour is the only harbour in the island besides *St. Peter Port*. Around it a small town has grown up, with an esplanade, &c., for visitors, and ship-yards, docks, and store-houses for the shipping traffic. The Guernsey granite is all shipped from *St. Sampson's Harbour*, and there is a steadily increasing trade attached to the place. *St. Sampson's church* is the oldest in the island: it is of the 12th century, and resembles the transition early English style. The harbour is defended by the *Mount Crevet battery*.

Guernsey, like the neighbouring island of Jersey, has a political constitution of its own. The legislative body is 'the States of Deliberation,' which are composed of the bailiff of the royal court, who is speaker; the procureur, or attorney of the royal court; the rectors of parishes; the delegates of the parishes, one from each of the country parishes, and six from the town parish; and the jurats, or judges of the royal court; in all 37. The bailiff and procureur are nominated by the crown; the rectors are presented by the governor; the delegates are elected by the islanders. The revenue of the island is derived from the general taxes, harbour-dues, publicans' and spirit retailers' licences, and other sources. The general taxes are levied for parochial as well as general purposes, and are assessed upon capital of almost every kind, including capital in the British or foreign funds, provided it belongs to an individual domiciled in Guernsey. Pensions, salaries, professional income, half-pay, &c., are not taxed. The chief court of justice in the island is the royal court, which consists of the bailiff and 12 jurats, the former appointed by the crown, the latter by the islanders. There is an appeal in certain cases to the queen in council. Judicial proceedings are conducted in the language of the island. Norman customs and ancient precedents form the basis of the civil jurisprudence, which is a complex mixture of Norman and English law. The power of the court is very extensive.

The island constitutes a deanery in the diocese of Winchester. The livings are 12 in number, including the chapelries. According to the 'Census of Religious Worship,' taken in 1851, there were then in Guernsey and the adjacent islands 64 places of worship, of which 26 belonged to four sections of Methodists, 16 to the Church of England, 7 to Independents, 6 to Baptists, and 9 to minor bodies. The total number of sittings provided was 23,827. There were 116 day schools, of which 28 were public with 2477 scholars, and 87 private with 1994 scholars. The number of Sunday schools was 33, with 4315 scholars. Of these Sunday schools 17 belonged to Methodists, 12 to the Church of England, 2 to Baptists, and one each to English Independents and French Independents.

The small proprietors often unite with their other pursuits the trades of carpenter or mason, or some handicraft. If near the coast, they frequently unite fishing with agriculture. The cottagers are the children of the small proprietors, or day-labourers. The cottages are remarkably neat and comfortable within and without. The dialect of the island, commonly considered a patois of the French, is rather the Norman of many centuries ago. The knowledge of English is general among the upper classes, and pretty common among the middle classes.

The principal place of education is *Elizabeth College* at *St. Peter Port*, founded by Queen Elizabeth in 1563. The education given in this institution is that usually given in a collegiate grammar school.

The building, a large and commodious structure in the Tudor collegiate style, was completed in 1829 at a cost of about 14,000*l.* The college has an income from endowment of 70*l.* a year, and the states further provide 200*l.* or 300*l.* a year. There are two exhibitions for four years. The number of scholars in 1852 was 95.

Guernsey and the Channel Islands generally must have been known to the Romans, but the only mention of them in any ancient writer is in the Itinerary of Antoninus, and it is difficult to identify the names there given with the several islands. Before the year 1035 Nigellius, or Néel, Viscount of St.-Sauveur, was lord of half Guernsey, and the six churches in his moiety belonged to the abbey of Marmoutier, at Tours. The other half of Guernsey belonged to Earl or Duke Robert of Normandy. In his moiety were five churches which belonged to the abbey of St. Michael; but one of these, that of St. Tugdual of Herm, appears to have belonged to the abbey of Cherbourg. The Channel Islands were included in the duchy of Normandy, and are the only relics of that duchy which remain to the English crown. On more than one occasion the islanders withstood and repelled the attacks of the French. In the great civil war the Channel Islands embraced the king's party, and were not subdued until after the death of Charles.

The primeval antiquities, or relics of the ante-Christian period, are numerous in the island. Several cromlechs remain in different places. The finest is that known as the Druids' Temple, which stands on an eminence near L'Ancrese Bay, and consists of five very large stones. There are also some cairns, and there was formerly a logan, or, as it was called here, a Roc Balan. The cromlech at L'Ancrese was explored in 1837 by Mr. Lukis, who found about forty urns of different sizes, with many fragments of broken pottery, besides unburnt human bones. In the cromlech Du Tus, in the parish of the Vale, Mr. Lukis found two vertical kneeling human skeletons. Other cromlechs examined by the same skilful antiquary yielded stone-hammers, arrow-heads, and other relics. Of these remains Mr. Lukis has a fine collection at his residence near St. Peter Port. An admirable account of the 'Primeval Antiquities of the Channel Islands' was contributed by Mr. Lukis to the 'Archæological Journal,' vol. i. In the 10th century Guernsey is said to have been called the Holy Isle, on account of the number of monks and hermits who inhabited it, and several monasteries were founded here; a few vestiges of these remain, but of the ecclesiastical remains at present existing the churches are the chief, and none of these require further notice. The principal fortress in the island has always been Cornet Castle, which appears to have been founded about 1204. Cornet Castle has undergone many sieges, and has been the scene of many gallant exploits. The present castle is a rather picturesque structure of very different dates. It is still maintained in a defensive state: it stands on a small islet off St. Peter Port. The Marsh Castle, or as it is frequently called Ivy Castle, north of St. Peter Port, erected in 1306, is now a ruin. Of Vale Castle, north of St. Sampson's Harbour, only a few fragments remain.

Dependencies of Guernsey: Alderney, Serk, Herm, and Jethou.—Of Alderney an account is given elsewhere. [ALDERNEY.] *Serk*, or *Sercq*, the next in size to Alderney, is about 6½ to 7 miles E. from Guernsey: the population in 1851 was 580. Its greatest dimension is about three miles from north to south, its greatest breadth is about a mile and a half; but it is so contracted near the centre of the island that it may be regarded as consisting of two parts, one of them called Little Serk, connected together by a high and narrow ridge or isthmus called the Coupée. The coast is indented on every side by small bays called by the islanders 'boutiques' (shops); and is so girt with cliffs that there is no way of landing on the island but by scrambling up the cliffs, or ascending by a tunnel cut through the solid rock in the little harbour of Creux, on the north-east side of the island. The eastern shore is lined with rocks running far out into the sea. The western side of the island belongs for the most part to the trap and schistose formation; the eastern side to the granite formation. On the west side of Serk, separated from it by a narrow strait, is the island of Brechou, or Brechnou, otherwise the Ile des Marchands, about a mile and a half round.

The land in Serk is generally under tillage. The manure used is vraic, or sea-weed. The produce consists of wheat, barley, oats, beans, potatoes, and parsnips. From the indivisibility of property, the inclosures are larger than in the neighbouring islands. There are many good orchards, which produce abundantly. The farms scarcely average more than fifteen acres, and as this does not afford sufficient occupation for the farmer and his family all the farmers are fishermen also. The farmers are their own boat-builders, and the little harbour of Creux, protected by a pier or breakwater, forms the building yard. Cows are very generally kept, and butter made, some of which is sent to Guernsey.

The island, in civil, military, and ecclesiastical affairs, is a dependency of Guernsey, but a power of making local enactments is vested in the lord of the manor and the forty copyholders, who form a little parliament that meets three times in the year. Serk is called Gers by the French.

Herm is within two miles and a half of Guernsey; its greatest length is from north to south about a mile and a half, the greatest breadth scarcely exceeds half a mile: the population in 1851 was 46. The

island is composed of gneiss and granite. It has one little harbour near the old granite quarries.

Jethou lies half a mile S.W. from Herm, and two miles and a half from Guernsey; it is less than half a mile long and about a quarter of a mile broad: the population in 1851 was 3. It is considerably elevated in proportion to its extent, and the sides are precipitous, except at one spot. It is chiefly composed of gneiss. The island has been purchased by the government for purposes connected with the construction of the harbour of refuge at Jersey.

(Dicey, Berry, Jacob, and Duncan, *Histories of Guernsey*; Barbet and Redstone, *Guides to Guernsey*; Tupper, *Cornet Castle*; Ingliis, *Channel Islands*; *Parliamentary Papers*; *Communications from Guernsey*.)

GUIANA. [GUYANA.]

GUILCOWAR. [HINDUSTAN.]

GUILDFORD, Surrey, a market-town, the capital of the county, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the right bank of the river Wey, in 51° 14' N. lat., 0° 34' W. long., distant 29 miles S.W. from London by road, 30½ miles by the South-Western railway, and 42 miles by the South-Eastern railway. The population of the borough was 6740 in 1851. The livings are rectories in the archdeaconry of Surrey and diocese of Winchester. The town is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. Guildford Poor-Law Union contains 20 parishes and chapelrys, with an area of 64,461 acres, and a population in 1851 of 25,054.

The town of Guildford is situated in that depression in the North Downs through which the river Wey passes. Alfred the Great in his will bequeathed Guildford as a royal demesne to his nephew Ethelwald. In 1036, in the reign of Harold I., Alfred, son of Ethelred II., was seized here, and his Norman attendants massacred to the number of nearly 600. The keep of a castle of Norman date stands on an eminence on the south side of the town. Guildford has sent two members to Parliament since the 23rd Edward I. The bridge over the Wey is a handsome structure of five arches. The town is well paved, and is lighted with gas. The old town-hall, or guild-hall, is a large building surmounted by a turret, and having a clock projecting into the street. There are a corn-market and court-house of neat and handsome appearance, and a neat theatre. The county house of correction is about a quarter of a mile from the town; there are extensive barracks on the site of an ancient Dominican friary. St. Mary's church, on a declivity to the south of the High-street, is a curious edifice, chiefly of chalk, very ancient and rudely built. Trinity church, situated in the higher part of the town, was rebuilt of red brick about the middle of the last century. St. Nicholas church is an ancient structure, rudely built of chalk and flints, with an intermixture of stone. It has a low embattled western tower entirely of stone, and some good lancet windows. The Baptists, Independents, and Wesleyan Methodists have places of worship. The Free Grammar school, founded in 1509 and chartered by Edward VI. in 1553, is free to 10 boys, sons of inhabitants, and has an income from endowment of more than 100*l.* a year, and an exhibition of 35*l.* per annum, tenable for six years, for either Cambridge or Oxford University. There are 4 masters; the number of scholars in 1851 was 53. The school-house is an ancient and spacious building. In the Blue-Coat school about 50 boys are educated; of the scholars 22 are on the foundation, and receive clothing every second year. There are also Lovejoy's Charity school, National, British, and Infant schools, and a savings bank. The Guildford Institute has a museum, with a library, and reading and lecture rooms. Abbot's Hospital, or Trinity Hospital (erected and endowed by Archbishop Abbot, a native of Guildford), is a quadrangular building in the Elizabethan style.

There are in Guildford paper-mills, powder-mills, corn-mills, breweries, brickfields, coach-works, and an iron-foundry. The timber trade is extensively carried on. There are markets on Wednesday and Saturday—the market on Saturday is a good corn-market. A weekly lamb-fair, or market, is held on Tuesday, from about Easter to Whitsuntide; and there are fairs for cattle and horses on May 4th and November 23rd. The Midsummer quarter-sessions for the county are held here, and the summer assizes alternately with Croydon; the quarter sessions for the borough, and the petty sessions. A county court is held in Guildford.

Stoke, a village situated about a mile N.N.W. from the town, may be regarded as a suburb of Guildford. Half a mile south of the town, on a hill to the left of the Godalming road, are the picturesque ruins of St. Catherine's chapel.

(Manning and Bray, *Surrey*; Brayley, *Surrey*.)

GUILDFORD. [CONNECTICUT.]

GUILLESTRE. [ALPES, HAUTES.]

GUILTCROSS, a hundred in the county of Norfolk, which has been constituted a Poor-Law Union. Guiltcross hundred is bounded N. and W. by the hundred of Shropham, E. by the hundred of Dias, and S. by the county of Suffolk; it comprises 12 parishes and a small extra-parochial district, with an area of 28,340 acres, and a population in 1851 of 7446. Guiltcross Poor-Law Union, which is much more extensive than the hundred, contains 21 parishes and townships, with an area of 41,575 acres, and a population in 1851 of 12,468.

GUIMARAES. [ENTRE DOURO E MINHO.]

GUINEA, an extensive country on the west coast of Africa, between 4° and 10° N. lat., 5° E. and 13° W. long., has a coast-line of more than 1800 miles. The countries along this coast are known to European sailors under the names of Sierra Leone, Grain Coast, Ivory Coast, Gold Coast, Slave Coast, and Benin. We shall notice here only a portion of the Grain Coast, Ivory Coast, and Slave Coast, having given an account of the GOLD COAST, of LIBERIA, and of SIERRA LEONE, in separate articles: see also ASHANTEE, BENIN, Bight and River, and DAHOMY.

The Grain Coast extends from Cape Mesurado (7° N. lat.) to Cape Palmas (4° 30' N. lat.), a distance of somewhat less than 300 miles: the western portion of it is included in the American settlement of Liberia. The high land, which occupies nearly the whole space between the Bay of Guinea and the Sahara, advances here, as in Sierra Leone, close to the sea, forming a bold and rocky coast. The interior is a succession of mountain ridges and of valleys. The mountains are mostly wooded, and the valleys wide and fertile, producing rich crops of rice, which is exported to a large amount, and of a coarse pepper. Cattle, sheep, pigs, goats, and poultry are abundant. Besides rice, ivory and cam-wood are exported. The coast is scarcely visited except by vessels which sail between the settlements of Sierra Leone and those on the Gold Coast, though several of its rivers offer great facilities for trade, being navigable for small vessels to a considerable distance in the interior. The country appears to be divided into three kingdoms. The most western is the kingdom of Cape Mount, which extends on both sides of Cape Mesurado, and comprehends a coast of about 160 miles, reaching more than 100 miles inland. Its capital, Couseea, is said to have a population of 10,000. The middle of the coast is occupied by the kingdom of Sanguin, from which much palm-oil is obtained. Its principal port is BASSA; its capital is the village of Monrovia.

The Ivory Coast occupies the countries between Cape Palmas and Cape Three Points (Tres Puntas), a distance of nearly 400 miles. In this part the high land of the interior is divided from the beach by a low tract, about 10 or 12 miles wide; it is inhabited by a number of small, and for the most part independent negro tribes. Near Cape Palmas is a harbour formed by a reef, which is the only spacious and secure one on this part of the coast. East of the Ivory Coast is ASHANTEE, extending from the Assinee River to the Volta.

The Slave Coast begins on the west at the Rio Volta, which empties itself into the Gulf of Guinea, near the meridian of Greenwich; it extends eastward to the neighbourhood of the river BENIN, a distance of more than 400 miles along the sea-shore. The Rio Volta, which comes down from a great distance, is a broad river in the interior, but towards its mouth it divides into several branches, and forms a kind of delta. The shores of this coast are flat and low, and partly rendered inaccessible by sand-banks. They are covered by extensive salt-marshes and numerous lagoons, traversed by several rivers, among which the Lagos is the most considerable. The plain extends inland 80 or 100 miles; it is fertile, open, and level, exhibiting large savannahs covered with high grass; in some parts however it is thickly wooded with fine trees. Farther inland, where the ground rises, it is covered with extensive and thick forests. The greatest part of the plain is converted into a swamp during the rainy season, from May to October. The whole plain, with the mountain region extending north of it, seems to be divided between the kingdoms of DAHOMY, ARDRAH, and LAGOS. The little kingdom of Ardrah extends east of Dahomy, and comprehends only a portion of the plain. Its capital, Ardrah (6° 26' N. lat.), is built on the banks of a lake, and contains a large number of inhabitants. Its port is Porto Novo. The kingdom of Lagos occupies the countries extending on both sides of the lower course of the river Lagos. In its territory are the populous towns of Lagos and Badagry. But the king of Lagos is dependent on the king of Yarriba, whose dominion extends over the whole breadth of the Kong Mountains to the banks of the river Quorra, and along that river to 10° N. lat. East of Lagos is the kingdom of Benin, which extends along the low and swampy banks of the river and bight of Benin, and far into the interior. The country, which is very populous, is described elsewhere. [BENIN, BIGHT OF; BENIN RIVER.] The capital, Benin, is said to have a population of above 15,000, but, though the residence of the king, it is like most of the towns in these parts, a mere collection of thatched clay huts. The king's palace is of great extent, including several squares, long galleries, and ranges of state apartments, but it has no architectural pretensions. The town is clean and orderly, and is a place of great trade, being a centre for the exchange of ivory, palm-oil, cattle, sheep, &c., for European goods. It was formerly a great slave-market. Along the river and in the interior are several other populous towns.

By Ritter and some other recent geographers the country along the coast, east and south of that above described, to about 18° E. long., is called Lower, or South Guinea, and includes LOANGO, CONGO, ANGOLA, and BENGUELA.

GUINEA, NEW. [PAPUA.]

GUINES. [PAS-DE-CALAIS.]

GUINGAMP. [CÔTES-DU-NORD.]

GUIPUZCOA. [BASQUE PROVINCES.]

GUISBOROUGH, GISBOROUGH, or GUILSBROUGH, North Riding of Yorkshire, a market-town, and the seat of a Poor-Law Union, in the parish of Guisborough, is situated at the foot of the Cleveland Hills, in 54° 32' N. lat., 1° 8' W. long.; distant 50 miles N. by E. from York, and 245 miles N.N.W. from London by road. Middlesborough station of the Stockton and Darlington railway, which is about 8 miles from Guisborough, is 241 miles from London via York and Northallerton. The population of the township of Guisborough in 1851 was 2062; of the parish 2308. The living is a perpetual curacy in the archdeaconry of Cleveland and diocese of York. Guisborough Poor-Law Union contains 27 parishes and townships, with an area of 80,090 acres, and a population in 1851 of 12,202. In the year 1129 a priory was founded at Guisborough by Robert de Brus, for canons of the order of St. Augustine. Of this building a small portion remains. The parish church was partly rebuilt in 1791. The Independents, Wesleyan Methodists, and Quakers have places of worship. The Free Grammar school, founded in 1561 by the Rev. Robert Purglove, the last superior of the priory, has an endowment of about 50*l.* per annum, and had 29 scholars in 1853. Providence school, established by subscription in 1790, was remodelled in 1821, when National schools were established. There are almshouses for six men and six women, and a savings bank. The town consists chiefly of one spacious street, running east and west, with many good houses. The market-house, erected in 1821, has in its upper part the town-hall, where petty sessions are held fortnightly. The market is held on Tuesday; there are several fairs, besides special markets for the sale of wool. Rope-making, brick and tile-making, and tanning are carried on. In the vicinity are several corn-mills.

GUISE. [ALSACE.]

GUJERAT, or GUZERAT. [HINDUSTAN.]

GULF STREAM. [ATLANTIC OCEAN.]

GUMBINNEN, one of the two governments into which the province of East Prussia is divided, lies east and south of the government of Königsberg, and between it and the frontier of Prussia. It has an area of 6310 square miles, and its population in 1847 was 632,366. It is a flat country except in the south, where a large portion of the surface is hilly, and abounds with lakes, the largest of which are the Spirding-see and the Mauer-see. The land is fertile. Agriculture and cattle feeding are the chief occupations. There is little manufacturing industry. Wheat, rye, flax, and hemp are the chief products. Cattle and sheep are numerous. There are extensive forests. The largest horses in Prussia are bred in the government of Gumbinnen. The chief rivers are the Memel [NEMEN], which passes Tilsit, and flows by several arms into the Curische-Haff; and the Pregel, which flows due west, and falls into the Frische-Haff below Königsberg.

In the government of Gumbinnen the most important town, Tilsit, is situated on the left bank of the Memel, at the point where the Tilsa falls into that river. It is a pretty, well-built town, and contains five churches, a fine town-hall, a gymnasium, very extensive barracks, two hospitals, and 17,179 inhabitants, including the garrison. The gymnasium had 12 professors and 224 pupils in 1850. The townspeople trade in corn, flax, hemp, timber, &c., and manufacture beer, spirits, leather, woollen-cloth, hosiery, firearms, and hardware. The town is defended by a strong castle. Tilsit has acquired celebrity by being the place where the famous treaties were concluded between France, and Russia and Prussia, on the 7th and 9th of July, 1807. Insterburg, a town of 8386 inhabitants, stands near the junction of the Pregel and the Inster, on the left bank of the Angerap, 14 miles W. from Gumbinnen and 30 miles S. by W. from Tilsit. It has manufactures of cloth, linen, woollen stockings, and spirits, and trades extensively in corn and flax. The town has a castle and a training school. Gumbinnen, the chief town of the government, stands on the Pissa, east of Insterburg, and has about 7000 inhabitants. The town is regularly built, and has woollen and linen factories, distilleries, and tanyards; the trade in corn and flax-seed is important. It has also a gymnasium with 11 professors and 237 pupils (in 1850), a public library, and schools of architecture and midwifery. Angerburg, 31 miles S.W. from Gumbinnen, is a small town of about 4000 inhabitants, situated on the Angerap, which issues from the Mauer-see a couple of miles to the south of the town. It has a linen market, a castle, and manufactures of coarse woollens and leather. The Mauer-see abounds in excellent eels.

GUNDUCK RIVER. [HINDUSTAN.]

GUNTOOR. [CIRCARS, NORTHERN.]

GURWAL. [HINDUSTAN.]

GUSTROW. [MECKLENBURG SCHWERIN.]

GUYANA, or GUIANA, is the name applied to the north-eastern portion of South America extending from the banks of the Orinoco to those of the Amazonas River. Guyana has an area of more than 650,000 square miles, of which about five-sixths are included within the boundaries of the empire of Brazil and the republic of Venezuela: a territory of about 50,000 square miles constitutes British Guyana, about 30,000 square miles Surinam, or Dutch Guyana, and about 14,000 square miles Cayenne, or French Guyana; but the boundaries of the respective districts are in some instances not very clearly defined.

The coast of Guyana is skirted by a mud bank which extends some miles out to sea. The water on this bank decreases gradually

towards the beach, so that vessels drawing more than 12 feet can find sufficient water only to within three miles of the land. Vessels of large size are unable to enter the rivers in consequence of large accumulations of mud or sand which collect at their mouths. The low and flat character of the land continues inland from 40 miles to 70 miles, the level corresponding generally with that of the sea at high water. When the lands are drained, banked, and cultivated, they become consolidated, and the level usually sinks about a foot, so that the most unremitting care and attention to the embankments and sluices is necessary to keep out the sea. In some places savannahs of considerable extent afford good pasturage, but by far the greatest portion of the surface is covered with trees and fit for the growth of every kind of grain and tropical products.

The high land which lies at the back of this plain was little known till about the year 1835, when the London Geographical Society sent out Mr. (now Sir R.) Schomburgk, who made considerable researches in British Guyana. The high land does not rise immediately from the plain to a great elevation, the hills on its southern edge attaining only a height of from 50 feet to 200 feet above the plain. Behind these hills the high land stretches out in level or undulating plains, rising here and there into eminences; but farther south ranges of hills appear running north-west and south-east nearly parallel to the coast, and south of them the surface is again depressed and extends in plains. These ranges appear to occupy an inconsiderable width, and the plains between them are of great extent. Between the Sierra Pacaraima and the Sierra Taripona the plain affords a natural communication between the rivers which traverse British Guyana and the Rio Branco, which falls into the Amazonas River. The Rupunoony flows near some of the upper branches of the Rio Branco, and is separated from them by a low and level tract (near 59° W. long.). This tract contains the Lake Amucu, which in the dry season is of small extent, but after the rains have fallen inundates the adjacent low country, and its waters run partly eastward into the Rupunoony, and partly westward into the Rio Branco. The plains south of the Pacaraima range are in general level, and form extensive savannahs covered with grasses and plants; the winding course of the rivers alone is marked by a fringe of trees, and some swampy tracts of small extent are overgrown with the *Mauritia vinifera*. In the country north of the Pacaraima range the belt of wooded and rich land along the water-courses is covered with high forest-trees. The proportion of rich and cultivable land in this region is very great.

Rivers.—The largest river is the *Essequibo*, which traverses nearly the middle of British Guyana. In 3° 14' N. lat., about 230 miles from its mouth in a straight line, the river is some hundred yards wide, and forms a great cataract, called King William's Cataract. Near 4° N. lat., it receives the river Rupunoony, which has a course of about 220 miles. It afterwards receives the Siparony, and at various points in its course forms rapids and cataracts, which can only be passed by small vessels, and with danger. North of 5° its tortuous course is in general to the north; here too there are several dangerous rapids, and a great number of rocky islands in the river, among which the island of Gluck is 7 miles long, but narrow. Fifty miles from its mouth occur the last rapids, which, though not high, are numerous: up to this point the tides ascend. Five miles lower down the river enters the low plain, and is here above a mile wide, growing continually wider until at its mouth it forms an estuary 14 miles wide. Within the plain it receives from the west the waters of the united rivers Mazarony and Cuyuni, which at the point of junction are more than a mile wide. In the wide estuary of the Essequibo there are numerous islands, some of which are extensive. Hog Island is large and well cultivated. Across the entrance of the river are three islands, the largest of which, which lies in the middle, is from 7 to 8 miles long. The entrance of the Essequibo is dangerous, even for small craft, on account of the banks of mud and sand. East of the Essequibo and parallel to it runs the *Demerara*, whose sources are probably a little south of 5° N. lat. At 5° 25' N. lat. it forms a great cataract, and below it becomes navigable for small craft. Towards its mouth it widens to a mile, and at Georgetown, where it enters the sea, it is more than a mile and a half across. This river runs more than 200 miles, and as it affords an easy means of transport for goods, there are many settlements on its banks. Farther east runs the *Berbice*, whose source is probably near 3° 40' N. lat. It has numerous rapids and cataracts, but is navigable for 165 miles, measured along the numerous windings of the stream. [BERBICE.]

The *Courantyne* River forms the boundary between British and Dutch Guyana. Its sources are probably in the Sierra Acaray. Like most of the rivers of Guyana, it has many rapids and cataracts, and its course is very tortuous. It is navigable for about 150 miles measured along its windings. Seventy miles from the sea the tide rises 30 inches. North of 5° 55' N. lat. it forms an estuary, which is 10 miles across where it meets the sea. South of the estuary is Parrot or First Island, which is 7 miles long and 1 mile wide, and divided from the eastern bank by a channel only 3 cables wide, but 9 feet deep at low water. Along the western shore is a mud bank.

The *Surinam* River, which traverses the middle of Dutch Guyana, is supposed to have its source about 4° N. lat. It enters the low plain about 4° 40' N. lat., and so far it is navigable for river barges. Vessels of considerable size can sail up the river to the town of Paramaribo.

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The *Marony*, which separates Dutch and French Guyana, rises probably in the Sierra Acaray. Many rapids and cataracts occur in this river. Large river vessels can ascend to the town of Armina, to which the tide ascends. From Armina to the mouth of the river it is not less than a mile and a half wide, but is full of islands. Of the *Oyapoc*, which separates French Guyana from Brazil, very little is known.

Climate.—Guyana has two rainy and two dry seasons. The long rainy season sets in about the middle of April and lasts till August. The long dry season continues from August to November. February and March constitute the short dry season. The trade-winds, passing over the whole breadth of the Atlantic, reach this coast loaded with moisture, and both the wind and the moisture render the heat less oppressive than it would otherwise be. The thermometer, even in summer, seldom rises above 90°, and it does not often descend below 75°. The climate of Guyana is more healthy than that of most places in the West Indies. Thunderstorms occur only during the rainy seasons, and are violent, but rarely do any damage. The hurricanes so destructive in the West Indies are unknown in Guyana. Slight shocks of earthquakes sometimes occur.

Productions.—Guyana possesses many indigenous plants and large forest-trees. Many of the trees produce excellent timber, others are used for furniture, as the mahogany, or afford dye-wood, and others are valuable on account of their fruits. Indian corn and rice are cultivated, and yield abundant crops. Wheat is not successfully cultivated. Cassava, or mandioc, yams, sweet potatoes, and arrow-root are raised in considerable quantities. The chief fruits are the banana, the pine-apple, and the cacao-nut. The sugar plantations of British Guyana are hardly inferior in extent to those of Barbadoes or Jamaica. Coffee and cotton are cultivated to a great extent. Tobacco and indigo are also attended to. The cacao-tree and the plant which produces castor-oil grow wild.

The domestic animals are the same as in England. Black cattle grow to a greater size than in Europe, but their flesh is not so tender nor of so fine a flavour. The wool of the sheep is converted into hair. Among the ferocious animals are the jaguar and cougar. Other animals are the armadillo, agouti, ant-bear, the sloth, and a great variety of monkeys. Lizards are numerous; the iguana is common, and its flesh esteemed a delicacy, as well as its eggs. Alligators of great size, the manati, or sea-cow, the vampire-bat, and the boa constrictor are among the more remarkable objects in the natural history of Guyana. Parrots, humming-birds, the flamingo, Muscovy ducks, spoon-bills, peacocks, &c., are numerous.

History.—Guyana was discovered before the end of the 15th century by Vincent Pinzou. The Dutch formed the first settlement about 1590 on the Demerara River, and afterwards established themselves at other places. The English settled in 1634 in the neighbourhood of the rivers Berbice and Surinam; but in 1667 the English settlements were given up to the Dutch. The French occupied Cayenne in 1633. During the last war with France the English occupied the Dutch settlements; and by the treaty of Paris, 1814, they restored only those between the Courantyne and the Marony to the Dutch, retaining possession of the remainder.

Inhabitants.—Guyana is inhabited by Europeans, Africans, and native Americans. In British Guyana there are six tribes of natives. The Arawaaks surround the settlements on the Demerara and Berbice rivers; the Acaaways live on the banks of the Cuyuni and Mazarony, and also on the Essequibo, north of 5° N. lat. Between the Sierra Pacaraima and Sierra Taripona are the Macoosis, and south of them the Warpeshana. The Warrows occupy the coast between the Pomaroon and the mouth of the Orinoco. Several Carib tribes are dispersed among the natives. The Arawaak Indians visit the British settlements, and work in the wood-cutting establishments for daily wages. Some of the tribes are almost as fair as Spaniards or Italians, while those who live near the sea-coast are of a very dark brown.

British Guyana includes the countries from the Courantyne River westward to the Orinoco, and from the sea-coast to the sources of the Essequibo and Courantyne. The most western portion between the Orinoco and the small river Pomaroon is only inhabited, as already mentioned, by the tribe of the Warrows. The settlements on the Pomaroon and Essequibo rivers are few in number and not large in extent; but the settlements along the banks of the Demerara and Berbice, as well as along the sea-shore between these rivers, are numerous, and extend from 30 to 50 miles inland. On the river Courantyne there are numerous settlements, some of which are of considerable extent. Sugar and coffee are cultivated on a large scale. The cultivation of cotton has declined. Previous to 1831 the country was divided into three colonies—Essequibo, Demerara, and Berbice; but in that year they were united under one government, called British Guyana, the three districts being now called counties. The residence of the governor is in *Georgetown*, formerly called Stabrook, or Stabrook, on the Demerara River, a short distance from its mouth. Its wide streets are traversed by canals. The houses are of wood, and seldom above two stories high. Before them are porticoes and balconies, shaded by a projecting roof, which is made of red wood, resembling mahogany. New Amsterdam, on the river Berbice, not far from its mouth, is a small place.

British Guyana is under a governor, who resides in Georgetown, Demerara. Within the last few years considerable changes have

taken place in the circumstances of the colony. Many of the negro labourers have become proprietors, and to supply the demand for labour there have been brought to the colony many natives of Madeira and Coolies from Madras and Calcutta. The estimated value of exports from British Guyana was 978,296*l.* in 1852. The official value of the imports in 1852 was 964,986*l.* The number and tonnage of vessels belonging to British Guyana on December 31st 1853 were as follows:—Sailing-vessels, under 50 tons 49, tonnage 1141; above 50 tons 11, tonnage 803; with 1 steam-vessel of 69 tons. The tonnage of vessels which entered and cleared during 1852 amounted to 185,951 inwards, and 109,474 outwards.

The population of British Guyana on March 31st 1851 was 127,695; including an estimate of 7000 for aborigines, with 445 sailors and 854 soldiers, the population was 135,994. Of this number 86,451 were natives of British Guyana, 7168 were African immigrants, 7083 old Africans, 7682 Coolies, 7928 Madeirans, and 2088 English, Scotch, Irish, Dutch, and Americans; the proportion of males to females being as 6 to 5, arising from the large proportion of male immigrant labourers who have been brought during several years past from the East Indies, St. Helena, Madeira, and the West India Islands. In December 1851 there were 41 episcopal churches and chapels in the colony, with 10,210 attendants; of other chapels there were 71, with 22,374 attendants. The children at day-schools were 8000; the number of schools was upwards of 100. The Demerara Colonial Hospital, Small Pox Hospital, Seamen's Hospital, and Lunatic Asylum have been extensively useful. A penal settlement has been established for some years, in which the convicts are employed in public works, and thus made in part to work for their support.

Dutch Guyana, or Surinam, extends along the coast from the Courantyne to the Marony, and between them inland to their sources. Along the coast, and on the banks of the rivers, are many settlements and plantations. The Jews are numerous in this country; and in the interior is a village called Savanna inhabited by Jews, who cultivate their plantations. The higher and hilly part of the country is occupied chiefly by the Maroons, or runaway negroes, who have formed a kind of political society. The Dutch colony of Guyana is partly the property of the town of Amsterdam. It exports sugar, coffee, cotton, and cacao: the number of inhabitants in 1852 is given at 64,270, of whom more than five-sixths are negroes. *Paramaribo*, the capital, is situated on the bank of the river Surinam, about ten miles from the sea. It is regularly built in the Dutch style, and has a population of about 20,000. The streets, which are wide and straight, are planted with orange-trees. The houses are generally two stories in height, and built of wood. Near the town is the fortress Zelandia in which the governor resides.

French Guyana extends along the coast from the river Marony to the Oyapoc, which separates it from the empire of Brazil. Its area is still chiefly covered with large forest-trees. There are some settlements, not of much extent, from which the French export sugar, coffee, cotton, cacao, and arnotto. The capital, *Cayenne*, situated on the northern side of an island formed by the river Cayenne, is a miserable place, with a shallow harbour. On the mainland is the plantation La Gabrielle, where the experiment of transplanting from Asia to America the pepper-vine, the clove-tree, and the nutmeg-tree has been tried; the pepper and clove have succeeded better than the nutmeg: the population of French Guyana in 1841 was 22,010. Since the French revolution of 1848 Cayenne island has been made a penal settlement, to which have been sent multitudes of persons whose presence in Paris or in the provinces was considered by the government to be hazardous to the peace of the state.

GUYENNE, or GUIENNE, and GASCOGNE, two old provinces of France, forming together the largest of the thirty-two military governments into which in ante-revolutionary times France was divided. The government extended about 245 miles in extreme length from east to west, and about 205 miles in extreme breadth from north to south. The area of Guienne, the northern province, was estimated at 15,847 square miles, and that of Gascogne, the southern province, at 10,271 square miles, together 26,118, forming an area equal to more than half of England, watered by the Garonne, one of the finest rivers of France, with its feeders the Tarn, the Lot, the Dordogne, and a number of smaller tributaries, and by the Adour and its feeders. The military government of Guienne and Gascogne was bounded N. by Saintonge and Angoumois; E. by Limousin, Auvergne, and Languedoc; S. by Foix and the Pyrenees; and W. by the Bay of Biscay.

Gascogne, which nearly coincides with the Aquitania of Julius Cæsar and the Novempopulana of Augustus, takes its name from the Gascones or Vascones, a Spanish people, who in early times settled in this part of France. It included the countries west of the Garonne, distinguished by the names of Couserans, Comminges, Bigorre, Armagnac, Condomois, Marsan, Landes, and Labour; and now forms the departments of Landes, Gers, Hautes-Pyrénées, Haute-Garonne, and parts of Basses-Pyrénées, and Ariège, under which heads the particular features of the country are noticed. From this province the Bay of Biscay is sometimes called the Gulf of Gascogne.

Guienne lay to the north of Gascogne, and extended from the

Cévennes Mountains to the Bay of Biscay, including the districts of Rouergue, Quercy, Agenois, Périgord, Bazadais, and Bordelais. It now forms the departments of Gironde, Lot, Lot-et-Garonne, Dordogne, Aveyron, and part of Tarn-et-Garonne. The entire government of Guienne and Gascogne was sometimes spoken of under the name of Guienne.

The capital of Guienne was Bordeaux: among the other towns were—Libourne, Bazas, Périgueux, Agen, Cahors, Montauban, Rhodes or Rodez, Milhau, and Villefranche. The capital of Gascogne was Auch: the more important of the other towns were—Condom, St. Sever, Dax, Bayonne, Pau, Tarbes, St.-Bertrand-de-Comminges, and St.-Lizier. These towns are all noticed in this work either in separate articles or under the names of the departments to which they belong.

Guienne derives its name from the Aquitani, one of the three great branches of the Gallic people whom Cæsar found in possession of Gaul. These Aquitani occupied the country south-west of the Garonne, but when Augustus divided Gaul into four provinces he gave the name of Aquitania to the whole country from the Garonne to the Loire; the original country of the Aquitani becoming one of the subdivisions of the larger province, and taking the name of Novempopulana (that is, the country of the Nine Nations), from the number of principal tribes by which it was occupied. In the decline of the Roman empire Aquitania came into the hands of the Visigoths, who made Toulouse their capital; but in 507 Clovis, king of the Franks, wrested Aquitania from the Visigoths, and brought it under the dominion of the Franks. In 630 the kingdom of Aquitania, or Aquitaine, was re-established in favour of Charibert, or Charibert, son of Clotaire II., one of the Frankish kings of the Merovingian dynasty; but it was soon reduced from the rank of a kingdom to that of an hereditary duchy. Eudes, duke of Aquitaine (688-735) was possessor by inheritance or conquest of the whole country from the Pyrenees and the ocean to the Loire and the Rhône, and even of some districts beyond the latter. Waifre, grandson of Eudes, was defeated and despoiled of his territories by Pepin le Bref, king of France, 760-768.

The Gascons were originally a Spanish people, and were called by the Romans Vascones. Under the Roman empire we find a portion of the Vascones settled in the south of Gaul, in the immediate neighbourhood of the Pyrenees. It was not till A.D. 602 that they submitted to the Franks, to whom they became tributary. Their name may be traced in several modern designations, Biscay (Provincias Vascongadas) in Spain, the territory of the Basques in France, and in the more extended name of Gascogne, which appears in the Latin of the middle ages under the forms Vascitania, Vasonia, and Gasconia.

The Gascons were comprehended in the kingdom, afterwards the duchy, of Aquitaine; and though they remained near the Pyrenees the name of Gascogne was given to the country between the Pyrenees and the Garonne. It was Loup II. (son of Waifre above mentioned) who surprised the rear-guard of Charlemagne on the return of that monarch from Spain, 778, by means of an ambush in the valley or pass of Roncevaux. Loup was soon after taken and hanged as a traitor; but the Gascons were continually in rebellion against the Carolingian princes.

In the year 781 Charlemagne restored the kingdom of Aquitaine, and placed his son Louis le Debonnaire, then three years old, on the throne. On the death of Charlemagne, Louis became emperor of the West and was succeeded in Aquitaine by his son Pepin I., whose kingdom included not only the country to the south-west of the Loire, but a considerable territory on the right bank of that river. Pepin II., son and successor of Pepin I., was deposed by his uncle Charles le Chauve, whose sons, Charles and Louis le Bègue, were successively kings of Aquitaine; but on the accession of the latter to the throne of France, on the death of Charles le Chauve, A.D. 877, Aquitaine was united to the French monarchy. The duchy of Gascogne continued after the extinction of the kingdom of Aquitaine, and its dukes exercised an authority independent of the kings of France.

The duchy of Aquitaine also survived the kingdom, and became hereditary in the race of the counts of Poitiers. These nobles subsequently acquired the duchy of Gascogne, and consolidated under their sway a large territory in the south-west of France, including Poitou, Limousin, Guienne (excepting Quercy and Rouergue), and Gascogne; together with the suzerainty of the county of Auvergne. This rich inheritance came by marriage into the possession of Henry Plantagenet, afterwards Henry II. of England, and, united with his Norman and Anjevin inheritance, rendered the English kings as powerful in France as the kings of France themselves. [AQUITAINE.] By the sentence of confiscation pronounced by the court of the peers of France against king John these domains were confiscated to the crown; and the sentence was partly executed by Philippe Auguste. A portion however of the duchy of Aquitaine forming the duchy of Guienne, extending from the Charente to the Pyrenees, remained to the English, and was governed by English noblemen sent over from time to time. It more than recovered its extent and splendour for a short time under Edward the Black Prince, but soon shrank again in its dimensions, and in the years 1452 and 1453 was subjugated by the French king.

GWALIOR. [HINDUSTAN.]

H

HAARLEM, HAERLEM, or HARLEM, a city in the Dutch province of North Holland, stands on the Spaaren, a small stream which runs into the Y, 4 miles from the shore of the North Sea, in 52° 28' N. lat., 4° 38' E. long., and has 24,000 inhabitants. It is connected by canals with all the principal towns in Holland, and by railway with Amsterdam and Leyden, from which it is respectively distant 12 and 18 miles. Haarlem is famous for its resistance to the Spaniards in 1572, and for the cruel treatment of its citizens by the son of the Duke of Alva after their surrender. The town is well built; the streets are clean, planted with trees, and traversed by numerous canals. It contains 9 Catholic churches, one of which, the cathedral of St. Bavon, is the largest church in Holland, and celebrated for its great organ; there are besides 5 Calvinist churches and 1 Lutheran. The finest building in the town is the Stadhuis, or town-house, which stands on one side of the market-place. The Prinzenhof, in which the states-general of Holland formerly met, is now converted into a museum of arts, antiquities, medals, and pictures. The venerable gateway over the high-road to Amsterdam is an interesting relic of the old fortifications of the town. The public walks on the site of the ancient ramparts are exceedingly agreeable. Haarlem, besides many other benevolent institutions, has an academy of sciences, a botanic garden, a public library, a national normal school for schoolmasters, and an institution (named Teylerian from its founder, a rich merchant of the town), which comprehends an establishment for the poor, a society of natural history, valuable collections, and an observatory. The library boasts of the early productions of Laurence Coester, a native of this town, for whom the Dutch claim the invention of the art of printing. The neighbourhood of the town is studded with handsome country seats, and laid out in gardens. In the southern suburb of Haarlem are the famous nursery flower-gardens, which formerly supplied a great part of Europe with tulips, hyacinths, and other flowers. There are large steam-driven cotton-mills, and also extensive bleaching establishments here, which formerly supplied large quantities of linen to England, whence the article came to get the name of 'Holland,' as coming from that country. Silk, cotton, velvet, ribands, linen, soap, lace, carpets, and thread are among the principal manufactures. There is also a celebrated type-foundry for Greek and Hebrew letters.

The Lake of Haarlem, which has been recently drained, lay S.E. of the town; it was 14 miles long, 10 miles broad, and 14 feet deep, between water and mud. The mud of the lake was manufactured into valuable bricks called clinkers. The lake was drained in 1849, 1850, and 1851 by steam-engines, and its area, amounting to nearly 60,000 acres, converted into arable land.

HAARLINGEN. [FRIESLAND.]

HABESH. [ABYSSINIA.]

HACKNEY, Middlesex, a suburb of the metropolis, and the seat of a Poor-Law Union, in the parish of St. John, Hackney, is situated in 51° 32' N. lat., 0° 8' W. long.; distant two miles N. by E. from Shoreditch church. The population of Hackney sub-district in 1851 was 20,850; that of the entire parish 53,589. The livings are in the archdeaconry and diocese of London. Hackney Poor-Law Union comprises two parishes, with an area of 8950 acres, and a population in 1851 of 58,424.

Hackney, properly so called, has one principal street, known as Mare-street and Church-street; and some other streets, containing many good houses, some of them of old date, this having been one of the places first selected for rural retirement by the wealthy merchants and traders of London. St. John's parish church, a large plain brick edifice, was rebuilt in 1797. It has a stone tower, but as this was incompetent to bear the bells, the tower of the old church has been allowed to remain in the churchyard. Besides the parish church there are the district chapels of Stamford Hill, St. Philip, Dalston, St. James, Clapton, St. Barnabas, Homerton, and Ram's chapel, Homerton. South Hackney and West Hackney have each district parish churches. Subordinate to the rectory of West Hackney is the chapelry of St. Peter's, De Beauvoir Town. Homerton College, rebuilt some years ago for the education of Congregational ministers, is now the Normal School of the Congregational Board of Education. At Clapton are a neat iron bridge called Lea Bridge, over the Lea, and a handsome building erected for the London Orphan Asylum. In Hackney parish are about 20 places of worship for Independents, Baptists, Wesleyan Methodists, and other Dissenters. There are also several National, British, and Infant schools; a literary and scientific institute; and a savings bank. Among other institutions are the Cumberland Benevolent Institution; the Penitent Female Refuge; the Elizabeth Fry Refuge; the London Orphan Asylum; the New Asylum for Infant Orphans at Stamford Hill; and the boys' establishment of the Children's Friend Society, which is at Hackney Wick. There are two Proprietary Grammar schools; one connected with the Church of England had 54 scholars in 1852. A Theological seminary for Independents had 12 students in 1852. Several ranges of alms

houses are in the parish; among them is 'the Retreat' for twelve widows of Independent or Baptist ministers. Dyeing, calico printing, and some other manufacturing processes are carried on in the parish; and there are considerable brick fields. The Regent's Canal and the Lea navigation pass through the parish. At Hackney is a station of the North- and South-Western Junction railway.

HADDENHAM. [CAMBRIDGESHIRE; BUCKINGHAMSHIRE.]

HADDINGTON, the chief town of Haddingtonshire, Scotland, a royal and parliamentary burgh and market-town, is situated on the small river Tyne, about 16 miles E. from Edinburgh, with which it is connected by the North British railway, in 55° 58' N. lat., 2° 46' W. long. The population of the municipal burgh in 1851 was 2387; that of the parliamentary burgh was 3883. Conjointly with North Berwick, Dunbar, Jedburgh, and Lauder, it returns one member to the Imperial Parliament. Haddington lies at the foot of the Garlton Hills, which shelter it on the north. The town is connected with the suburb of Nungate by a stone bridge of four arches over the Tyne. The streets are paved, and lighted with gas. The parish church is a venerable gothic structure, with a square tower 90 feet high. There are also in the town a chapel of ease, a Free church, a chapel for Episcopalians, two chapels for United Presbyterians, and two for Independents. Besides the Parochial school, there are an Endowed Grammar school, a mechanics institute, several libraries, a savings bank, and several benevolent and friendly societies. The town-house has a lofty spire, and the county buildings form a handsome structure. A considerable trade is carried on in wool. There are tanneries, and works for preparing bones and rape-cake for manure. The Haddington market is one of the largest wheat markets in Scotland. Extensive nurseries are in the neighbourhood.

HADDINGTONSHIRE, a maritime county in the east of Scotland, one of the three counties which are designated the Lothians, and commonly called East Lothian, is bounded W. and N.E. by the German Ocean, N.W. by the Frith of Forth, S.W. by Edinburghshire, and S. and S.E. by the Lammermuir Hills, which are partly in Berwickshire. It lies between 55° 47' and 56° 5' N. lat., 2° 22' and 3° 1' W. long. The extreme length of the county from east to west is about 26 miles, and the extreme width from north to south is 17 miles. The area is 291 square miles, or 185,937 statute acres. The population in 1851 was 86,386. The county returns one member to the Imperial Parliament.

Coast-line.—The coast is generally low and rocky, the numerous small bays with which it is indented being often sandy, flat, and shallow. At Preston Pans is a small harbour. At Aberlady Bay, where the Peffer river falls into the Frith of Forth, vessels of 60 or 70 tons can enter at spring-tides. This is the port of Haddington, but its trade is extremely trifling. **NORTH BERWICK** is the most northerly port on the coast. On the north-eastern coast of the county, the only harbour is that of **DUNBAR**. The Bay of Belhaven is sandy and shallow. Eastward to Dunbar the coast is a series of low rocky ledges. The coast-line is diversified by the sandy outlets of the small streams which here fall into the Frith. Northward from Belhaven Bay, towards North Berwick, the coast is low and sandy, with the exception of the rocky promontories of Whitberry Head and Ravensheugh Craig. The small islands of Scarr, the Bass, Craigeith Lamb, and Fidra off the north coast belong to the county. The northern coast is elevated; at Tantellan the cliffs rise to the height of 100 feet.

Surface, Hydrography, Communications.—The surface of the county is extremely diversified, though not mountainous. It rises from the coast of the Frith of Forth in a series of parallel ridges towards the southern boundary, in which are the Lammermuir Hills. North Berwick Law is 800 feet, and Traprairie Law 700 feet above the sea. The only river of any importance in the county is the Tyne, whose source is in Mid-Lothian, a few miles west of Haddingtonshire. After entering the county it receives from the hills in the south the Arnot Water and the Salton and Gifford Waters, which drain the south-west district of the county. It passes Haddington and falls into the sea about 3 miles west of Dunbar, after a course of rather more than 20 miles. It abounds with trout, eels, and small salmon. The other rivers, or 'waters,' as they are termed, are the Coalstone, Biel, White-water, and Fastna, on the south of the Tyne, and the Peffer to the north. The turnpike roads of Haddingtonshire are generally kept in good repair. The coast is traversed by the North British railway, which has small branches to North Berwick and to Haddington.

Geology, Mineralogy, &c.—The old red-sandstone formation is that of a considerable portion of the county. It generally rests upon transition rocks, and is covered by the coal formation. Quartz, in grains, is the chief ingredient, either joined together without a basis, or ground, or imbedded in a red-coloured clay. The Lammermuir range is composed principally of grauwacke; the position of the strata is nearly vertical. The Garlton Hills consist of a sort of oolite-stone, apparently contemporaneous with North Berwick Law and

Traprairie. The harbour of Dunbar is in a red-coloured trap rock, which forms a single bed of great thickness. South-east of the harbour the coast consists of old red conglomerated sandstone, trap-tufa, and greenstone rock. The lower strata of the sandstone are calcareous, containing the impressions of animals and vegetables. Whitberry Head, towards the sea, presents a precipitous front, from 40 feet to 50 feet in height. It consists of basalt, with crystals of hornblende, red and green trap-tufa impregnated with lime, clinkstone, and clinkstone porphyry. North Berwick Law is composed of trap-tufa, above which is amygdaloid; the middle and upper parts of the hill being a variety of clinkstone-porphry, and the summit-rock clinkstone-porphry, intermixed with crystals of augite, forming a transition into greenstone. The clinkstone is occasionally columnar. The western part of the county contains excellent coal.

Climate, Soil, Agriculture.—The varying elevation of the different districts occasions a corresponding variation in the climate, and there is probably no county in Scotland in which so many varieties of temperature occur. The harvest is frequently three weeks or a month earlier in the northern than in the southern districts. Towards the coast the snow soon disappears, but in the uplands it lies long on the ground, and the highest parts of the Lammermuir are occasionally covered with it during a fourth part of the year. The vegetation is comparatively early.

In the north-western part of the county the prevailing soil is productive, and consists of a light rich loam with a substratum of clay. In the Lammermuir district the soil is principally moor or moss, though in the glens and flats which intersect the mountains it is of superior quality. In the upland district, which extends along the foot of the Lammermuir Hills nearly the whole length of the county, the soil is a gravelly loam resting upon a dry bottom, but it has been rendered comparatively productive. The midland district, through which the river Tyne flows, contains a considerable variety of soil, nearly the whole of which is extremely valuable, and principally arable.

Haddingtonshire holds a high rank in respect of agriculture and produce. The farmers of this county have a good character for intelligence and skill in farming. Wheat is the principal grain cultivated, though large crops of beans and oats are likewise raised. Barley is not much cultivated. The turnip crops are generally excellent. The breeding of sheep and cattle has been extended, and the amount of pasture-land increased. In the lowland and midland districts the more usual practice is to purchase and fatten for the Edinburgh market: in the Lammermuir district the breeding of live stock is the chief business of the farmer. The short-horned or Teeswater breed of cattle is that most in favour. The Leicester and Cheviot breeds of sheep are those principally reared. Drainage is carefully attended to. The farms average from 300 to 500 acres each, and are held on lease for terms of from 19 to 21 years.

Divisions, Towns, &c.—The county town is HADDINGTON. The other principal towns in the county are NORTH BERWICK and DUNBAR.

The following villages may be mentioned:—

Aberlady, on the bay of that name, population of the parish 1099 in 1851, is a small and neat village. In the neighbourhood is Bullencrieff, the seat of Lord Ellbank. *Cockenzie*, population about 1000, is a fishing village in Tranent parish, which has furnished many of the crews for the whale fishery. The fishermen here and at Portseton, an adjoining village, have about 30 boats, varying from 7 to 15 tons burden. At Cockenzie is a harbour which has a depth of 16 feet water at high tide. There are considerable salt-works on the coast. *Gifford*, population of the parish 1202 in 1851, a neat and well-built village, situated on the water of Gifford, at which a market for agricultural produce and several fairs are held during the year. Gifford was the birth-place of John Knox. *Prestonpans*, a fishing village and small harbour, population 1640 in 1851, is near the west boundary of the county. In the neighbourhood Sir John Cope was defeated by the Highlanders under Prince Charles Edward. The inhabitants are chiefly engaged in the oyster fishery. Salt is manufactured. Soap-making and tile-making furnish considerable employment. There is a brewery. *Prestonpans* is an old barony; the old village cross is still preserved, and is the scene of an annual festivity. *Tranent*, population 2096, a populous village in the parish of that name. The inhabitants of the village are engaged in agriculture and in the manufacture of salt. There is a large Free school. In this parish is one of the only two remaining stone-roofed chapels in Scotland. It is an interesting specimen of the architecture of the close of the 14th century.

History, Antiquities, &c.—Haddingtonshire has been the scene of some important events in Scottish history. It was inhabited by the Ottadini at the time of the Roman invasion; and when the Romans left it was taken possession of by the Saxons, and formed part of the kingdom of Northumbria. It was ceded to the Scottish king in the beginning of the 11th century. The siege of Dunbar is a well-known event. Somerset held the county in 1547, and it remained with the English till 1590. Queen Mary took refuge both at Seton in Tranent parish and at Dunbar. The whole county was held by Cromwell, and it was the scene of the first victory of the rising in 1745. Numerous remains, both of the early British occupation and of that of the Romans,

exist in different parts of the county. There are numerous castles of the feudal times, some of which are in a good state of preservation. Of these may be mentioned the castles of Dunbar, Tantallon, once the residence of the Douglasses, the castles of Dirleton, Luffness, Hailes, the residence of Queen Mary and Bothwell, &c. Throughout the county are numerous residences of landed proprietors.

Statistics of Religion and Education.—In 1851 the county contained 49 places of worship, with 17,160 sittings. Of these places of worship 22 belonged to the Established Church, 15 to the Free Church, 8 to the United Presbyterian Church, and one each to Episcopalians, Independents, Roman Catholics, and Mormons. The number of day schools was—public 52, with 4009 scholars; private 18, with 837 scholars. The number of Sabbath schools was 50, with 2764 scholars; of these Sabbath schools 23 belonged to the Established Church, 20 to the Free Church, 5 to United Presbyterians, and 2 to other bodies. There was 1 subscription library in the county in 1851, namely, the Gifford Subscription Library, which had 24 members, and had 350 volumes in its library.

HADLEIGH. [ESSEX.]

HADLEIGH, Suffolk, a market-town in the parish of Hadleigh, is situated on the left bank of the Bret, a feeder of the Stour, in 52° 2' N. lat., 0° 57' E. long.; distant 10 miles W. by S. from Ipswich, 64 miles N.E. from London by road, and 69½ miles by the Hadleigh branch of the Eastern Union railway. The population of the town in 1851 was 3338. The living, a rectory, is a peculiar of the diocese of Canterbury. Hadleigh has some interest as the place of martyrdom of Dr. Rowland Taylor, burned in the persecution under Queen Mary. A stone with an inscription marks the spot on the neighbouring common. The town consists of a principal street, and lesser streets branching from it. The church, which is chiefly of perpendicular date, is large and handsome, with a tower and spire and two south porches. There are chapels for Independents, Baptists, and Wesleyan and Primitive Methodists; National, British, and Infant schools, and a range of 12 almshouses with a chapel. There is a neat corn-exchange, or market-house. A good corn and general market is held on Monday, and there are two yearly fairs. A county-court is held. There is a savings bank. Some of the inhabitants are employed in weaving and silk-winding. (*Communication from Hadleigh.*)

HADRIA PICENUM. [ABRUZZO.]

HADRUMAUT. [ARABIA.]

HADSTOCK. [ESSEX.]

HÆMUS. [BALKAN.]

HAFOD. [CARDIGANSHIRE.]

HAGLEY. [WORCESTERSHIRE.]

HAGUE, THE (in Dutch, 's Gravenhage; in French, La-Haye), a large and beautiful city, the capital of the Dutch province of South Holland, stands in 52° 4' 50" N. lat., 4° 18' 32" E. long., at a distance of 2 miles from the North Sea, 37 miles S.W. from Amsterdam, and 13 miles N.W. from Rotterdam by the railroad which connects these cities. It is not fortified, but is surrounded with a moat crossed by drawbridges. It is ranked as one of the finest cities in Europe on account of its stately buildings, its broad and regular streets traversed by canals, and its pleasant, dry, and healthy situation. Many of the streets are planted with rows of trees and paved with coloured bricks. The finest parts of the town are the street called Voorhout, which is lined with trees, and contains several splendid hotels, and the Vyverberg, a sort of square, with a fine avenue of trees on one side, and on the other a spacious basin of water, backed by magnificent buildings. Among the public buildings are—the royal palace, a building of little pretension; the palace of the Prince of Orange; the Buitenhof, which contains a gallery of pictures; the town-hall; the brass-cannon foundry; the theatres; and the state-prison. The Binnenhof, on one side of the Vyverberg, contains a magnificent gothic hall, the only remaining portion of the original residence of the counts of Holland. The other parts of the building are used as chambers by the states-general and as public offices. Between the Binnen and Buitenhof (inner and outer courts of the old counts' palace) is an old gateway called Gevangpoort (Prison-gate), from which the De Witts were dragged and torn to pieces by the populace in 1672. The Mauritshuis contains the finest collection of paintings by Dutch masters in the world, a vast collection of Chinese and Japanese products and curiosities, besides numerous historical relics. The Royal Library in the Voorhout contains 100,000 volumes, and a collection of 34,000 medals. John De Witt's house in the Kneuterdyk, a short distance from the Gevangpoort, above mentioned, is historically interesting. Among the 14 churches are 3 Dutch Calvinist and 1 Roman Catholic. There are also 2 large synagogues, numerous charitable and scientific institutions, and fine private collections of pictures. On one side of the town there is a canal constantly covered with vessels, and on the other a fine wood of oaks called the Bosch, in which is the country palace of the royal family, with a fine collection of pictures and extensive gardens. There are numerous elegant villas in the environs, and on the west of the town is Scheveningen, a neat fishing village, which has become of late years much frequented for sea-bathing. Between that and the Hague is a fine avenue of oaks, beeches, and limes.

The Hague owes its origin to a hunting-seat built by the counts of Holland in 1250, and the Dutch name, 's Gravenhage, is said to be

taken from the circumstance that houses came to be erected along the inclosure surrounding the Counts' Park ('s Gravenhage, Counts' Hedge). In the 16th century the Hague became the residence of the states-general, the stadtholder, and the foreign ambassadors. The Hague ranked only as a village till Louis Bonaparte, during his reign, conferred on it the privileges of a city. The population, which in 1837 was 54,000, is now (1854) stated at 64,000. The Hague is not a commercial nor a manufacturing town.

HAIGH. [LANCASHIRE.]

HAIK LAKE. [ABYSSINIA.]

HAILSHAM, Sussex, a small town, and the seat of a Poor-Law Union, in the parish of Hailsham, is situated in 50° 52' N. lat., 0° 15' E. long., distant 48 miles E. by N. from Chichester, 59 miles S. by E. from London by road, and 64 miles by the London, Brighton, and South-Coast railway. The population of the parish in 1851 was 1825. The living is a vicarage in the archdeaconry of Lewes and diocese of Chichester. Hailsham Poor-Law Union contains 11 parishes, with an area of 54,076 acres, and a population in 1851 of 13,289.

The town of Hailsham is built on a gentle acclivity rising from Pevensey Level. The parish church is in the perpendicular style, with an embattled stone tower. The Baptists and Calvinistic Dissenters have places of worship. There are National schools and a mutual improvement society. Hailsham has one of the largest markets in Sussex for sheep and cattle, held every alternate Wednesday. A cattle fair is held on the market Wednesday immediately preceding Christmas. Twine and cordage are manufactured in the town, and there are gas-works. About two miles from Hailsham are a gateway and moat, a groined crypt, and other remains of Mitchelham Priory.

(Communication from Hailsham.)

HAINAN, an island in the Chinese Sea, opposite the southern extremity of the province of Quan-tong, or Canton, to which it is annexed, and from which it is divided by the channel of the Junks, a strait only 15 or 16 miles wide. It lies between 18° 10' and 20° 24' N. lat., 108° 50' and 111° E. long., and incloses the Gulf of Tonquin on the east. Its length from south-west to north-east is about 170 miles, its greatest breadth 100 miles, and its area about 12,000 square miles. The population numbers about a million Chinese, besides the tribes of the interior.

The interior of the island is occupied by an extensive mountain mass called Ta Utahi-shan, which rises in parts above the snow-line; from this there issue a great number of offsets, which towards the south-west and north-east advance close to the sea, but are separated from the south-eastern and north-western shore by a level tract of considerable width. These plains, which are of great fertility and well cultivated, yield annually two or three crops of rice and other grains; the rivers which descend from the mountain region are used for irrigating this tract. Sweet potatoes form the principal food of the people, though they cultivate fruits, sugar-cane, tobacco, indigo, and cotton on a large scale. But the extensive forests which cover the sides of the mountains form the principal wealth of the island. Besides different kinds of timber-trees, these forests produce sandal-wood, brailetto, ebony, rose-wood, and many other kinds of wood, which are used as dye-stuffs or for furniture. Wax is gathered in large quantities. An insect called Pelatshung produces a white wax from which candles are made at Khiung-tsheou, and exported to other parts of China. The climate of the island is not very hot, being exposed to the wind which blows over a large expanse of sea; fogs and heavy dews are frequent, and maintain a vigorous vegetation. The coast is frequently laid waste by typhoons, or violent hurricanes, which are peculiar to the Chinese Sea.

The mountains are inhabited by aboriginal tribes, which are still independent, and called Li. Those which are subject to China resemble the Chinese in figure, and have adopted their usages, but they speak a different language, though they use the Chinese characters. They are very industrious husbandmen. There are some very populous towns in this island. Khiung-tsheou, the capital, situated at its northern extremity on the channel of the Junks, is said to have 200,000 inhabitants; and Kai Kheou-so, where the governor resides, is said to contain as many. Some others have 80,000 or 90,000 inhabitants each.

(Du Halde; Klaproth; *Asiatic Journal*, vol. xx.)

HAINAULT (in Flemish, Henegouwen), a province of Belgium, bounded N. by East Flanders and South Brabant, E. by Namur, S. by France, and W. by West Flanders, lies between 49° 58' and 50° 48' N. lat., 3° 17' and 4° 33' E. long.: its greatest length is 63 miles and its breadth 32 miles. Its area is 1435 square miles, and the population in January 1849 amounted to 723,539.

The most southern part of the province consists of a narrow strip 22 miles long and 9 miles broad, which lies between the province of Namur and the French Ardennes. The surface is for the most part level, but there are some hills towards the south and east. The soil, except in the arrondissement of Charleroi in the south-east of the province, is very fertile. The chief crops are wheat, rye, oats, barley, beans, rape, flax, hops, and potatoes; tobacco and chicory are also grown. Much of the land near the rivers is laid out in meadow; in other parts trefoil, lucern, and sainfoin are cultivated. Horned cattle, horses and sheep of excellent breed are numerous; poultry, game, and bees abound.

The eastern half of the province is very rich in mineral wealth. The coal-fields of Charleroi and Mons are the richest in Belgium, and the mines worked give employment to above 40,000 men. There are also rich iron-mines. The other mineral products are—lead, slates, marble, building- and lime-stone. Many localities in this part of the country are studded with iron-foundries and blast-furnaces. Steam-engines are used in all the mines to pump out the water and draw up the coals, large quantities of which are exported by canals and railroads to France. In these districts the roads and cottages are black with coal-dust.

The *Schelde* enters the province from France a little below its confluence with the Scarpe, and flows north-west to Tournay; then changing its course to north, it forms the boundary-line between Hainault and West Flanders, and quits the province at its north-western angle. The *Sambre* enters the province also from France to the east of Maubenge, and flows north-east past Charleroi to join the Meuse at Namur. The *Dender* rises within the province, flows eastward to Ath, whence it turns almost due north, quitting Hainault at Grammont, and, having crossed a great part of East Flanders, enters the Schelde at Termonde. The *Haine*, or *Hene*, from which the name of the province is taken, is formed by three brooks, which rise a little to the west of Charleroi; it flows west past Mons, below which it is navigable by means of sluices, and joins the Schelde at Condé in France. The *Trouille* rises on the southern frontier, and flowing west enters France, but leaves it again almost immediately, and falls into the Haine near Jemmapes.

The province is traversed by several good roads and numerous canals, by which communication was much facilitated even before the making of railways; and, like every other part of Belgium, it is well supplied with this new and rapid means of transit. The great lines of railroad through Hainault are—the Brussels-Namur and the Brussels-Valenciennes, which coincide as far as Braine-le-Comte, where they branch off for Charleroi and Mons respectively. A junction line, 15 miles in length, connects these two branches, leaving the Brussels-Charleroi line at the Manage station, 17 miles N.W. from Charleroi, and joining the Mons line a little north of that town. A branch line from the Jurbise station, near Mons, runs through Ath to Tournay, to the west of which it joins the direct Lille-Antwerp-Ghent line. The Sambre-Meuse line, 51 miles in length (reckoning several branches to the iron-mines), connects Charleroi with Couvin in the south of the province of Namur, and opens up the rich iron district whence the great iron-works of Charleroi and Mons are supplied with ore. Another branch railway runs from Charleroi up the Sambre to the French frontier at Erquelinnes (near Maubeuge), where it is met by the St.-Quentin line, as yet uncompleted.

The commerce of the province is composed of its varied industrial products—glass, porcelain, pottery, salt, spirits distilled from grain, beer, machinery, nails, woollen stuffs, linen, lace, Brussels carpets (the centre of which manufacture is in Tournay), &c. The most considerable articles of export are coal, iron, and lime, which are transported by canals and railroads to France and the neighbouring countries.

The province is divided into three arrondissements, Mons, Tournay, and Charleroi, which are subdivided into 32 cantons and 424 communes. The principal towns are the following:—ATH. *Beaumont*, in the south of the province, on the road from Mons to Chimay, stands on a hill commanding an extensive view over a very diversified country, the surface of which is broken by steep hills, and limestone and schistose rocks. It was formerly fortified, but its defences were demolished by the English in 1691: population, 2100. *Binac*, W. of Charleroi, on the right bank of the Haine, is a well-built walled town, with 5500 inhabitants. In a fine square ornamented with a fountain, stand a church, a college, and an hospital. The principal articles of manufacture are hosiery, leather, outlery, glass, tiles, and pottery. *Braine-le-Comte*, at the junction of the Brussels-Namur and Brussels-Valenciennes railroads, has cotton-mills, breweries, dye-houses, tanneries, oil-mills, and 4500 inhabitants. *Charleroi*, a strong fortress on the Sambre, 19 miles E. from Mons, stands on the Brussels-Namur railway, and has 8000 inhabitants. The fortifications have prevented the town from extending, but the immediate neighbourhood has little short of 100,000 inhabitants. Charleroi is a manufacturing town of extraordinary activity; glass, iron, salt, sugar, leather, nails, woollen yarn, &c., are among its products. The town stands in a most extensive coal-field, which gives employment to 10,000 men, and yields annually 3,000,000 tons of coal. The number of smelting-furnaces, iron-foundries, and nail-factories in the surrounding district is very great. [CHARLEROI.] *Châtelet*, on the Sambre, is a small town, 4 miles E. from Charleroi, with 8000 inhabitants, who manufacture cotton, woollens, pottery, salt, beer, and leather. *Châteaux*, a small town with 3100 inhabitants, near Ath, has important linen manufactures, breweries, and oil-mills. *Chimay* stands 24 miles S. from Charleroi, near the French frontier; it contains a college, and about 4000 inhabitants, many of whom are engaged in the numerous iron-works and coal-mines of the vicinity. There is a castle and park at Chimay, and several breweries. *Enghien*, 12 miles N.E. from Ath, contains 3800 inhabitants. The town stands on the side of a hill: it is regularly laid out, and well built; it contains a college and an hospital. The château of the Duc d'Arenberg, which was surrounded by a beautiful park, was destroyed at the first French revolution

The park still remains; it contains a temple, to which seven noble avenues of beech and chestnut-trees converge. *Fontaine-Evêque*, 6 miles E. from Charleroi, contains 3000 inhabitants. It has several smelting-furnaces, iron-foundries, and nail and hardware manufactories. *Gosselies*, a town with 5000 inhabitants, stands 5 miles N. from Charleroi: nail-making, salt-refining, and glass-blowing are carried on. Woollen-cloth and hats also are manufactured here. Many of the inhabitants are employed in the neighbouring coal-pits. Near Gosselies is *Gilly*, which has a population of about 6000 in the commune, who are employed chiefly in the coal-pits and in the manufacture of cutlery. *Lessines*, a town with 5000 inhabitants, N. of Ath, is almost surrounded by the Dender. This is a place of much trade. The neighbouring quarries furnish large quantities of paving and building stone. There are salt-refineries, distilleries, and chicory-factories. The other chief branches of traffic are coal, wood, and oil. *Leuze*, 10 miles E. from Tournay, stands near the source of the Dender, and has 6000 inhabitants, many of whom are employed in bleaching, brewing, and dyeing. *Mons. Péruwelz*, 12 miles E. by S. from Tournay, on a feeder of the Schelde, is a town of 7000 inhabitants, who are principally occupied in manufacturing hosiery, cotton and woollen cloths, lime, beer, and leather. *Roculx*, a small town containing 2450 inhabitants, is situated 8 miles N.E. from Mons. The castle of Roculx, and the surrounding gardens and grounds, which are laid out in the English style, are much admired. *St.-Ghislain*, a small fortified town 7 miles W. from Mons, in the middle of a great coal district, stands on the Haine and the Mons Canal, and has about 2000 inhabitants, who are engaged in bleaching linen, tanning, salt-refining, soap-boiling, and brewing. *St.-Ghislain* is a station on the railway from Mons to Valenciennes. Near the fortifications is a modern village called *Horna*, which was founded in 1823, and is built with straight streets on a uniform plan, and houses all of the same height; it numbers about 4000 inhabitants, who are employed in the coal and iron-mines and iron-works of the neighbourhood. Steam-engines and steam machinery are manufactured here. West of St.-Ghislain is *Boussu*, a station on the same railroad, and a small town on the Haine, with about 3000 inhabitants engaged chiefly in the export of coals. *Soignies*, a well-built town on the Senne, is 9 miles N. from Mons, on the Brussels-Valenciennes railroad, and contains 6500 inhabitants. Many of the houses are large and handsome. The town is surrounded by old ramparts. The church of St.-Vincent is said to be the oldest building in the province. There is a college in the town, an orphan asylum, a convent of the Sisters of Mercy, and several other religious and charitable establishments. Beer, spirits, and leather are manufactured; and the large limestone quarries here are a source of considerable profit. *Thuin*, on the Sambre, 10 miles by railway from Charleroi to Erquelines, stands partly on a steep rock, and contains 4300 inhabitants, many of whom are engaged in the iron-mines and great iron-works in the vicinity. *TOURNAY. Courcelles*, 5 miles N.W. from Charleroi, contains 3228 inhabitants, who manufacture nails and table-linen. *Dour*, 8 miles S.W. from Mons, has a population of about 6000, many of whom find employment in the productive coal-mines and iron-works of the district. *Fontenoy*, an inconsiderable village, 4 miles S.E. from Tournay, is historically famous for the great battle fought there May 11, 1745, between the French under Marshal Saxe, and the allied English, Austrians, and Dutch, commanded by the Duke of Cumberland, who was defeated with the loss of 15,000 men. *Jemmapes*, the first station W. of Mons, on the railway to Valenciennes, has a population of 5000, who are employed in brewing, tanning, and in the coal-mines. It is celebrated for the victory gained on the 6th of November, 1792, over the Austrians, by the French under Dumouriez and the Duc de Chartres (the late Louis-Philippe), and which led to the conquest of Belgium. *Jumetz*, 3 miles N. from Charleroi, contains 6728 inhabitants, who are engaged in the coal-mines and in manufacturing glass, beer, spirits, and leather.

HAINAULT, FRENCH, a district in the north-east of France, which formed with the Belgian province of Hainault the territory occupied by the ancient Nervii, whose capital was Bagacum, now Bavay, to the west of Maubeuge in the department of NORD. It was ceded by Spain to France by the treaties of the Pyrenees (Nov. 7, 1659) and Nimeguen (Sept. 17, 1678). Valenciennes, Maubeuge, Condé, Bouchain, Avesnes, Le-Quesnoy, and Landrecies were the principal towns of this district, which is now included in the department of Nord.

HAINBURG. [Ena.]

HAINES, a river in eastern Africa, which traverses the countries comprehended on our maps under the name of Zanguebar. It flows through an extensive valley separated by a series of sand-hills from the coast south of Magadoxo, and filled with alluvial soil of great fertility. The river, it is supposed, originates in the high countries which surround the most southern affluents of the Abai. Lieutenant Christopher was informed that north of 4° N. lat. the river is already considerable. He visited it at Girédi, a town situated 22 miles north-west of Magadoxo, inhabited by more than 7000 persons, and surrounded by extensive fields, on which Indian corn and millet yield such abundant crops that large quantities are exported to Hadramaut and Oman. The river was here about 200 feet wide, and too deep to be forded in the dry season. From this place the Haines runs nearly

parallel to the coast, at a distance of from 4 to 20 miles, and numerous villages are found on its banks, surrounded by extensive fields irrigated from the river. The volume of water carried down decreases considerably in consequence of this irrigation, and is less at the most southern point where it was seen by Lieutenant Christopher, which was due north of the town of Brava, where it was only from 70 to 150 feet broad, but from 10 to 15 feet deep. From this place the river continues in a south-western direction, and terminates, according to the natives, in an extensive lake said to be unfathomable. This lake is about 60 miles from the eastern banks of the river Jubb, or Gavind, and perhaps not much more than 20 miles from the sea. The inhabitants of the broad alluvial tract traversed by the Haines River are a mixture of Somaulis, Gallas, and negroes, among which a small number of Arabs are settled. (Christopher, in *London Geographical Journal*, vol. xiv.)

HAL. [BRABANT, SOUTH.]

HALAS. [CUMANIA.]

HALBERSTADT, a town in Prussia, in the government of Magdeburg, is pleasantly situated on the river Holzemme a feeder of the Bode, one of the tributaries of the Saale, in 51° 53' 55" N. lat., 11° 3' 53" E. long., 30 miles by railway S.W. from Magdeburg, and has about 20,000 inhabitants. It is an ancient city, said to have been founded by the Cherusci; though the actual date of its foundation is unknown. It became a bishop's see in 804. The most ancient part is the Dom Platz (Cathedral Square), formerly a castle. In 1179 the greater part of the town was burnt by Henry the Lion; it was rebuilt in 1203 and surrounded with ramparts. In the Thirty Years' War it made a brave resistance; in the Seven Years' War the French destroyed the gates and a large portion of the ramparts. In 1809 Duke William of Brunswick-Oels stormed the city, and made prisoners of the whole Westphalian garrison under Count Wellingerode. In 1813 the Westphalian General Ochs, who was posted here with 20,000 men and 14 pieces of cannon, was suddenly attacked by the Russian general Czernitscheff, who took 1000 of his men and many officers prisoners. The streets of Halberstadt are for the most part long, broad, and tolerably straight. It has various manufactures, and a considerable trade. It is the seat of a high court of justice, and has a diocesan school, with a library of 8000 volumes, a cabinet of natural history, and a collection of instruments; a gymnasium, a seminary for schoolmasters, a literary society, several charitable foundations, &c. There are seven Lutheran churches, two Calvinist, three Roman Catholic churches, and a very handsome synagogue. The most remarkable of the churches are those of *Unsere Liebe Frau* (Our Dear Lady's), which is in the Byzantine style and was completed in 1003; and the cathedral dedicated to St. Stephen, built in the noblest style of the 15th century—it is 412 feet long, 72 feet wide, and 94 feet high inside, and has 32 altars. The cathedral contains several valuable pictures as well as interesting antiquities and some paintings on glass. The town has also a handsome town-hall and a theatre. The industrial products of Halberstadt comprise woollen stuffs, leather, carpets, linen, gloves, starch, tobacco, soap, &c. There are also many breweries, large oil-mills, and an active trade in corn and wool.

HALEB. [ALEPPO.]

HALES OWEN, Worcestershire, a market-town and borough, in the parish of Hales Owen, is situated in 52° 32' N. lat., 2° 5' W. long., distant 36 miles S.E. by E. from Shrewsbury, and 117 miles N.W. from London by road. The population of the borough of Hales Owen in 1851 was 2412. The living is a vicarage in the archdeaconry and diocese of Worcester.

The town of Hales Owen is pleasantly situated in a valley, and contains many good houses. The parish church is a fine building, with a handsome spire supported by four arches. The Independents, Baptists, and Wesleyan Methodists have chapels. In Hales Owen are a Free school, founded about 1652, which has an income of above 100l. a year, and had 60 scholars in 1853; National schools, and an Infant school. Nails and hardware are extensively made. The market-day is Monday; fairs are held on Easter Monday and Whit-Monday. Some remains exist of an abbey of Præmonstratensian canons, built in the reign of King John. Near Hales Owen is the Leasowes, the birth-place and residence of the poet Shenstone, and the grounds of which were arranged by him. Shenstone was buried in Hales Owen churchyard, and the church contains a monument to his memory.

HALESWORTH, Suffolk, a market-town in the parish of Halesworth, is situated in 52° 21' N. lat., 1° 30' E. long., 31 miles N.E. by N. from Ipswich, and 100 miles N.E. by N. from London. The population of the town of Halesworth in 1851 was 2529. The living is a rectory in the archdeaconry of Suffolk and diocese of Norwich. The town is irregularly laid out; the streets are wide and lighted with gas. A small river, a feeder of the Blyth, runs through the town, up to which the Blyth and its affluent have been made navigable, and wherries from Southwold come to the quay. Agricultural produce is exported, and coal, lime, and general merchandise are imported. The parish church is a handsome gothic building. There are chapels for Independents, Baptists, and Wesleyan Methodists; National and British schools, a savings bank, and a literary institute. A county court is held. Maltng is very extensively

carried on. The market, which is the largest corn-market in Suffolk, is held on Tuesday. (*Communication from Halesworth.*)

HALIFAX, West Riding of Yorkshire, a market-town, municipal, and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Halifax, is situated in 53° 44' N. lat., and 1° 52' W. long., distant 48 miles S.W. by W. from York, 197 miles N.W. by N. from London by road, and 217 miles by the North-Western and Lancashire and Yorkshire railways. The population of the borough in 1851 was 33,582; the population of the entire parish was 149,257. The borough is governed by a mayor, aldermen, and councillors, and returns two members to the Imperial Parliament. The living of Halifax is a vicarage in the archdeaconry of Craven and diocese of Ripon. Halifax Poor-Law Union contains 20 townships and chapelries, with an area of 51,624 acres, and a population in 1851 of 120,942.

The parish of Halifax is one of the largest in England, being 75,740 acres in extent, and includes 23 townships and chapelries. The borough comprises the township of Halifax and parts of the townships of Northowram and Southowram. In 1848 the borough was incorporated by royal charter. The town, which is almost wholly surrounded by hills, is situated on the south-eastern declivity of an eminence which rises to a considerable height above the river Hebble. The Hebble flows through the eastern parts of the town, and falls into the Calder. Halifax is well lighted with gas, and has an ample supply of water from reservoirs near the town. Many great improvements have been effected of late years; and the town generally has a handsome appearance.

The parish church of Halifax is a handsome and spacious edifice, erected at different dates. Trinity church is a handsome Grecian building, with Ionic pilasters, and an elegant tower surmounted by a dome: it was built in 1795. St. James's church, built in 1831, is in the pseudo-gothic style, with turrets at the west end. Besides these there are upwards of 20 churches in the parish. The other places of worship are the Roman Catholic chapel, which was built in 1836, three chapels for Independents, two each for Baptists, Wesleyan Methodists, and New Connexion Methodists, and one each for Primitive Methodists, Quakers, and Unitarians. The number of schools within the bounds of Halifax Poor-Law Union in 1851 was 239, of which 68 were public schools with 9469 scholars, and 171 were private schools with 5501 scholars. The number of Sunday schools was 136 with 23,644 scholars, of which 32, with 5916 scholars, were under the superintendence of the Established Church. Heath Grammar school, founded in 1585, has an income from endowment of about 270*l.* a year, and had 60 scholars in 1853. In 1851 there were 19 evening schools for adults with 724 pupils, and 13 literary and scientific institutions, with about 2300 members, and about 14,000 volumes in their libraries. The infirmary is a very noble building; the first stone was laid in September 1836. It affords medical and surgical assistance both to in and out-door patients. The public baths are of a superior class. There are assembly-rooms and a theatre. Halifax possesses a savings bank. A county court is held in the town.

Halifax ranks next to Leeds and Bradford as a seat of the woollen and worsted manufactures. Its ample supply of water power; its proximity to Manchester and Leeds; an abundant supply of coal; its inland navigation by means of the Rochdale Canal, and the rivers Calder and Hebble; and its central position with respect to the leading lines of railway, have combined to increase the manufacturing and commercial importance of Halifax. In an early period of the history of the woollen manufacture, a peculiar local law, known as the Halifax Gibbet law, was enacted for the protection of clothiers from the depredations to which their goods were exposed during the process of manufacture. The magistrates were invested with power to inflict capital punishment on all persons who stole property of the value of thirteen pence halfpenny within the liberties or precincts of the forest of Hardwick. The felon was to be deliberately and publicly tried by a jury consisting of the frith-burghers within the liberty, who could only convict however if the culprit were taken in the act of thieving; if the stolen goods were found on him; or on his own confession. On the first market-day following the conviction he was executed by means of an instrument somewhat resembling the guillotine. The chief articles manufactured at Halifax are worsted stuffs, including shalloons, tammies, calamancoes, duroys, everlasting, moreens, shags, serges, merinos; also baizes, narrow and broad cloths, and kerseymeres. Bombasins, crapes, damasks, and other fabrics composed of silk and worsted, are also made, and the cotton manufacture is extensively carried on. A small portion of the population is employed in making mill-machinery and wool-cards. Several paper-mills and a large carpet manufactory are in the parish. Coal, slate, and freestone are extensively raised. There is a large trade in corn.

A weekly market is held on Saturday, chiefly for the sale of woollen cloth. The Piece Hall, which was erected in 1779 by the shalloon and other worsted manufacturers, at a cost of 12,000*l.*, is a large quadrangular stone building. It contains 315 apartments for the reception of goods. Fairs are held on June 24th, and the first Saturday in November, for cattle, horses, &c.

Daniel De Foe resided in Halifax when he wrote Robinson Crusoe; and Sir William Herschel was for some time organist at the parish church. Archbishop Tillotson was born at Haughend. Sterne Mills

perpetuate the local remembrance of the family of Laurence Sterne. Throughout the parish are numerous villages; also many fine mansions, the residences of opulent families.

(*Communication from Halifax.*)

HALIFAX, a city, sea-port, and the capital of the colony of Nova Scotia, is situated in 44° 40' N. lat., 63° 38' W. long., on the west side of a deep inlet of the sea called Halifax Harbour, which extends several miles inland on the south-east coast of Nova Scotia, and forms one of the finest ports on the eastern side of America. The town is built on the declivity of a hill, and the harbour in front of it, where ships usually anchor, is a mile wide; higher up, the inlet contracts to a quarter of a mile, and then suddenly expands into a capacious bay called Bedford Basin, which comprises an area of 10 square miles, is completely land-locked, is easily accessible, has deep water throughout, and could accommodate the whole navy of Great Britain. Halifax is the principal naval station in British America. It is defended by forts and batteries; it has a dockyard which covers an area of 14 acres, and a well-appointed naval arsenal. Mail steamers run between Liverpool, Halifax, and Boston every alternate week, Halifax being regarded as the intermediate port between Liverpool and Boston. There is regular communication by canal with the Bay of Fundy, and by steamers and sailing-vessels with all the great ports of Canada, the United States, New Brunswick, Newfoundland, and the West Indies. Halifax imports the native products of the West Indies and the United States, and the manufactures of Great Britain: and exports dried and pickled fish, lumber, flour, cattle, whale and seal-oil, and furs. The estimated value of the imports in 1851 was as follows:—From Great Britain, 401,022*l.*; North American Colonies, 181,549*l.*; West Indies, 7385*l.*; other British colonies, 15,000*l.*; United States of America, 223,835*l.*; foreign states, 165,893*l.*;—total, 994,184*l.* The exports for the year amounted to 319,720*l.* The exports included 243,847 quintals of codfish, 92,484 barrels of mackerel, 56,281 barrels of herrings, 7046 boxes of smoked herrings, 5979 barrels of salmon, and 5985 casks of fish-oil. The shipping inwards during 1851 amounted in all to 1123 vessels of 147,600 tons, employing 10,630 men. The total shipping outwards was 1016 ships of 133,864 tons, manned by 10,001 seamen. The town is regularly laid out, and has a handsome appearance, though the houses are mostly of wood. The population of Halifax county in 1851 was 39,112, of which the city probably contains about four-fifths. In the county there were 74 places of worship. The respective numbers of adherents of the six principal religious denominations were as follows:—Roman Catholics, 13,317; Church of England, 10,245; Presbyterians, 6804; Baptists, 3525; Methodists, 2457; Congregationalists, 515. Among the places of worship in the city is a large Roman Catholic cathedral. The Province Building, in the centre of the town, a well-built edifice of freestone, 140 feet long, 70 feet wide, and 42 feet high, contains the chambers of meeting for the legislative bodies, the custom-house, the offices of the provincial government, and the superior law-courts. The other principal public buildings are—the court-house, the exchange, assembly-rooms, theatre, prison, workhouse, Dalhousie College, and several public schools.

HALL. [JANT; TYROL.]

HALLAMSHIRE. [YORKSHIRE.]

HALLATON. [LEICESTERSHIRE.]

HALLE, a town on the Saale, in the district of Merseberg, province of Saxony, in Prussia, is situated at the junction of the Thuringian railway with the line to Magdeburg and Leipzig, 53 miles S.S.E. from the former city, 20 miles N.W. from the latter: population, including the suburbs, about 30,000. It is celebrated chiefly for its salt-works, and as the seat of the Frederick University. It consists of three towns, namely, Halle itself with five suburbs, and Glaucha and Neumarkt, which have magistrates of their own. The town is old, and surrounded by walls. The university was founded in 1694, and by a decree of the king of Prussia was united in 1817 with that of Wittenberg. It has always maintained a very high character, and has a number of scientific institutions connected with it, such as the botanic garden, a museum, theological and philological seminaries, a medical, chirurgical, and clinical institution for surgery, midwifery, &c., an anatomical theatre, a chemical laboratory, an observatory, a mining institution with a cabinet of minerals, &c. There are four faculties—Protestant theology, law, medicine, and philosophy; the number of professors and teachers is 69; the number of students in 1850 was 693. Halle has also two gymnasias, or high schools—the Pædagogium, with 16 professors and 101 students; and the Franksche Stiftung, with 25 teachers and 388 pupils. The university library consists of 90,000 volumes. Although the town is on the whole an ill-built place, there are several remarkable buildings, among which are St. Mary's church, built in the gothic style in the 16th century; St. Ulrich's church, built in 1339; that of St. Maurice, of the middle of the 12th century; the cathedral, built in 1520-23; the red tower, in the market-place; and the town-hall. The ancient castle, called Moritzberg, formerly the residence of the archbishops of Magdeburg, was reduced to a ruinous condition in the Thirty Years' War, and only a wing of it now remains, which has been converted into a Calvinist church. In the Glaucha suburb there is an orphan asylum, founded by a professor named Franke, who gave name also to the

stiftung, or institute, above named, which forms part of the foundation. Besides the gymnasium and large schools for the poor, it contains a medical laboratory and Bible-printing establishment. A bronze statue of the founder, by Rauch, is erected in front of the building. Halle possesses many charitable institutions. The manufactures of Halle comprise woollen stuffs, silk, leather, hosiery, buttons, hardware, and starch; but the most important industrial product is salt, made from the brine-springs close to the town, to the amount of about 300,000 cwt. annually. Halle is the seat of a mining board.

HALLE, or HALLEIN, in the circle of Salzburg, in Austria, with 5000 inhabitants, has extensive salt-works, which produce annually 450,000 cwt. of salt.

HALSTEAD, Essex, a market-town and the seat of a Poor-Law Union, in the parish of Halstead, is situated in 51° 57' N. lat., 0° 38' E. long., distant 17 miles N.N.E. from Chelmsford, and 46 miles N.E. by E. from London by road. The population of Halstead in 1851 was 5658. The living is a vicarage in the archdeaconry of Colchester and diocese of Rochester. Halstead Poor-Law Union contains 16 parishes, with an area of 36,688 acres, and a population in 1851 of 19,028.

Halstead is pleasantly situated on the slope of a gravelly eminence rising from the river Colne, and consists of the main street, which runs along the high road from London to Norwich, and of some smaller streets. The town is lighted with gas. There is a newly-erected market-house and town-hall. The parish church is large, and one of the finest in the county. It is chiefly in the perpendicular style: the chancel is decorated. It has been almost wholly rebuilt within the last five years. The church of the Holy Trinity is a handsome edifice in the early English style, erected in 1844 by subscription. The Independents and Baptists have two chapels each, and the Quakers have a place of worship recently erected. Lady Mary Ramsey's Grammar school, founded in 1594, had 20 scholars in 1852. The school endowment provides 20*l.* a year for the master, with a convenient house. There are National, British, and Infant schools, a mechanics literary institute, and a savings bank. There is a manufactory for crape, silk, and velvet. Brick-making, the paper manufactory, and straw-plaiting are carried on. Petty sessions and a county court are held. Tuesday is the market-day: the market here is important for corn. Fairs are held on May 6th and October 29th.

HALTON. [CHESHIRE.]

HALTWHISTLE, Northumberland, a market-town and the seat of a Poor-Law Union, in the parish of Haltwhistle, is situated on an eminence on the left bank of the South Tyne River, in 54° 59' N. lat., 2° 27' W. long., distant 38 miles W. from Newcastle, 284 miles N.N.W. from London by road, and 315 miles by the Great Northern, and York Newcastle and Berwick railways. The population of the township in 1851 was 1420. The living is a vicarage with two curacies annexed, in the archdeaconry of Northumberland and diocese of Durham. Haltwhistle Poor-Law Union contains 17 parishes and townships, with an area of 112,687 acres, and a population in 1851 of 7240.

The town of Haltwhistle consists of a principal street extending along the Newcastle and Carlisle road, and of some smaller streets. The houses are poor and irregularly built. Besides the parish church there are places of worship for English Presbyterians and Wesleyans and Primitive Methodists, and an Endowed Charity school. Petty sessions and a county court are held. The market-day is Thursday: fairs are held on May 14th and November 22nd; a tryst for cattle is held on September 17th. The principal manufacture is that of baize; linen-weaving, brewing, brick-making, and dyeing are carried on.

(Communication from Haltwhistle.)

HALYS, RIVER. [ANATOLIA.]

HAM, EAST AND WEST. [WEST HAM.]

HAMADAN. [ECBATANA.]

HAMBATO. [ECUADOR.]

HAMBLEDON, Surrey, a village and the seat of a Poor-Law Union, in the parish of Hambledon, is situated in a picturesque spot near the south border of the county, in 51° 8' N. lat., 0° 37' W. long., distant 8 miles S. by W. from Guildford, and 37 miles S.W. from London. The population of the parish of Hambledon in 1851 was 586, of whom 196 were in the Union workhouse. The living is a rectory in the archdeaconry and diocese of Winchester. Hambledon Poor-Law Union contains 16 parishes, with an area of 58,810 acres, and a population in 1851 of 13,549.

HAMBLEDON. [HAMPSHIRE.]

HAMBURG, a great commercial city in Germany, the capital of a small republic of the same name, is situated in 53° 32' 51" N. lat., 9° 58' 33" E. long., and has, including the suburbs of St. George and St. Paul, 148,774 inhabitants. The origin of this city is attributed to Charlemagne. Its site is an elevated spot on the right bank of the Elbe and the left bank of the Alster, and about 75 miles from the German Ocean. Though at first merely the resort of fishermen, it had attained considerable commercial importance at the beginning of the 12th century. In the 13th century it concurred in the formation of the Hanseatic League. Till 1500 it was confined to the space between the Elbe and the east bank of the Alster; but the right bank of the latter was gradually built upon, and the walls were extended so as to

inclose the new part of the town. The actual fortifications of the city were thus extended to about 4 miles in circumference, and were not further enlarged after this time, though some outworks were made and a fortified line was formed inclosing the suburb of St. George. The kings of Denmark claiming the sovereignty as counts of Holstein, Hamburg was obliged at different times to avert a threatened attack by the payment of large sums, till a convention with the house of Holstein in 1768 removed all difficulties. In 1770 the claim of Hamburg to the rights of a free city of the empire (which claim had been long resisted by the kings of Denmark as counts of Holstein) was confirmed by the emperor. The possession of the cathedral had been always claimed by the archbishops of Bremen, but it was assigned by the treaty of Westphalia in 1648 to Sweden, and afterwards passed to Hanover with the duchy of Bremen. In 1802 the cathedral and all the property hitherto belonging to Hanover in the city and territory were finally assigned to Hamburg, and its independence still further secured. Its misfortunes commenced with the occupation of Hanover in 1803 by the French, who seized Ritzebüttel, at the mouth of the Elbe, to prevent English ships from entering the river. By the English blockade of the Elbe in 1803, the commerce of Hamburg was paralysed, and its direct maritime trade interrupted. Large sums were extorted from the city during the French occupation. At the end of 1810 it was incorporated with the French empire as the capital of the department of Bouches-d'Elbe. In 1813 the French evacuated the city, which was militarily occupied by a Russian corps; the old constitution was restored; a burgher guard of 7000 men was formed, 2000 of the inhabitants volunteered to join the allies, and the Russians repaired the fortifications, which had been partly razed. But the French soon returned and attacked the city on the side of the Elbe. The Russians being too weak withdrew, and Marshal Davoust and General Vandamme entered Hamburg, and imposed a contribution of two millions sterling; being afterwards besieged, they drove out 40,000 inhabitants in the depth of winter, and seized the treasure deposited in the bank, amounting to about 700,000*l.* sterling. On the 26th of May 1814, the French having evacuated the town, the old constitution was again restored, and on the 8th of June 1815 Hamburg joined the German Confederation as a free Hanseatic city. The public spirit of the inhabitants, its internal resources, and its favourable situation for commerce have since then gradually restored its former prosperity. A great calamity befell the city in 1842. On the 5th of May in that year a dreadful fire broke out, which destroyed 61 streets and 120 lanes, passages, and courts, and left about 20,000 of the population houseless. A universal sympathy was felt for this disaster in nearly all parts of the world, which poured in contributions for the sufferers, amounting altogether to nearly 400,000*l.* sterling. Hamburg was occupied by an Austrian force in 1851, during the disputes between Holstein and Denmark.

The territory of Hamburg, including the area of the city (which is nearly an oval 4 miles in circumference), is 150 square miles, bounded on the south by the Elbe and on the other sides by the Danish territories. It has likewise some islands in the Elbe, some parcels of land on the Hanoverian side of the river, and the bailiwick of Ritzebüttel at the mouth of the Elbe, in which is the harbour of Cuxhaven. Conjointly with Lübeck it has the bailiwick of Bergedorff, and the districts called the Vierländen, 16 miles from Hamburg, with 10,000 inhabitants. The population of the city in 1850 was 115,886; of the St. George suburb, 16,731; of the St. Paul suburb, 16,157; and of the country parts, 39,300, making the total population of the republic amount to 188,074. The great majority are Lutherans.

The constitution is a mixture of aristocracy and democracy. The Senate (previous to certain changes made in 1848, and to be noticed presently) consisting of 4 burgomasters (chosen for life), and 24 senators, with 4 syndics and 4 secretaries, had the executive power, and the sole right of proposing laws; but no laws could be made and no taxes imposed without the consent of the citizens in common hall. The citizens are divided into 5 parishes, each of which chose 36 members to the council of 180, from which was chosen a board of 60, and out of that the 15 elders or aldermen. For the administration of justice there are various tribunals. In the last resort the decision is with the High Court of Appeal for all the free cities, sitting at Lübeck. In the German diet Hamburg has one vote in the deliberations, but in the select council it has a vote only in conjunction with Lübeck, Bremen, and Frankfurt. Its contingent to the army of the Confederation is 1298 men, and its contribution to the general fund 129 florins per annum. It has also an admirably-organised burgher guard of 9000 infantry, cavalry, and artillery.

A constituent assembly elected in 1848 proceeded to concoct a new constitution, to which when completed the Senate made different objections; and it was resolved by the citizens, on the proposal of the Senate, and notwithstanding the protest of the assembly, to submit this draught of a constitution to the revision of a committee composed of four senators and five citizens. The council of 60 and the bourgeois agreed to the changes proposed by this committee, the principal points of which are as follows:—1. A senate of 15, of whom 7 must be acquainted with law and finance, and 6 must be merchants; 2. A civic body of 192 members, 96 chosen from among the inhabitants of the city, 48 from the landed proprietors by landholders paying a certain amount of taxation, and 48 named by the different authorities as representatives of the tribunals, commerce, manufacture, education,

finance, &c. : 3. A committee of 20, named by the civic body from among its own members to assist the Senate in matters of urgency and difficulty : 4. Annually elected burgomasters, none of whom in case of re-election can retain office for more than two successive years. There are now only three burgomasters. The first, chosen by the Senate and by a secret vote, presides in the Senate ; the second burgomaster is similarly elected by the Senate ; the third is chosen by the citizens.

In the part of the town that escaped burning in 1842, as in most of the old fortified towns of Germany, the streets are in general narrow, irregular, and dark ; the houses old-fashioned and awkward, and yet not interesting to the lovers of antiquity. In modern times handsome houses have been erected in some streets, but they are exceptions. From the number of canals that intersect it, the antiquated form of its houses, and the trees that grow along the streets, the old part of Hamburg greatly resembles a Dutch town.

In the part devastated by the fire of 1842 a complete system of drainage has been executed ; a large extent of marshy ground on the right bank of the Elbe filled up and raised with the rubbish of the old buildings ; the whole space laid out upon a regular plan ; and a great part of it covered with streets and warehouses. The finest new buildings are in the neighbourhood of the Alster and round the small lake which it forms within the city. Many of these buildings are large, with granite foundations, and superstructures of brick and stucco. The styles of the houses are various—Lombard, Gothic, Florentine, &c., which, combined in one view, form groups of domestic architecture almost unrivalled for beauty and extent. The finest hotels are built round the Alster Lake, and here is an arcade of great architectural beauty. A new Rathhaus, or town-hall, is being erected on one side of a square facing the Exchange. The churches of St. Nicholas and St. Peter, destroyed by the fire, are being rebuilt. The Börsé, or Exchange, which escaped the conflagration though surrounded on all sides by burning houses, is a stuccoed brick building of great beauty. The central part forms a hall 48 paces long and 26 paces wide, exclusive of the colonnade, which is double at each end and treble at the sides. A broad gallery runs round the hall, communicating with reading and refreshment rooms, a bank, library, &c. The board of trade holds its sittings in this building. The city has a fine theatre, one of the largest in Germany, and throughout the city there are numerous public ball-rooms.

Hamburg is not distinguished for ecclesiastical buildings. The number of churches has been considerably reduced : the ancient cathedral was pulled down almost as soon as it was ceded to Hamburg, and since the peace four or five smaller churches have been demolished. The church of St. Gertrude, consumed in 1842, is we believe not to be rebuilt. Of the eight or nine churches that still remain the most worthy of notice is the great church of St. Michael, which was begun in 1751 and completed in 1763, except the spire, which was not erected till 1778. This church is capable of accommodating 2000 persons : the height of the steeple is said to be 456 feet. The Roman Catholics use the small church of St. Michael. Hamburg has a great number and variety of charitable institutions, the bare enumeration of which would exceed our limits, but of which it may be affirmed that they are on the most liberal plan, and managed in the most exemplary manner. There are only two learned institutions supported by the state—the Johanneum, built on the site of the cathedral, designed to qualify young men for the university ; and the Gymnasium. Hamburg has numerous literary institutions ; a city library, containing nearly 160,000 volumes, besides 1000 volumes of manuscripts ; and a commercial library of 30,000 volumes. The favourite public walk is the Jungfernstieg, a broad terrace round three sides of the Alster Lake, or basin. Near the Jungfernstieg are the best shops in Hamburg. The greater part of the ramparts have been levelled and planted, and laid out in pretty walks and drives, affording at points fine views of the river and the neighbouring country. The public cemetery is outside the Damm Gate, near the Jungfernstieg. The gates of the city are closed at dusk, after which a toll is demanded. A guard is placed at the gates whilst they are closed. Consuls from almost every state in the world reside in Hamburg. Steam-boats ply regularly to London, Hull, Amsterdam, and Havre ; and daily up the Elbe to Magdeburg. Hamburg has direct railway communication with Berlin, from which it is distant 176 miles to the north-west ; from Harburg, on the left bank of the Elbe, it communicates with Hanover (106 miles), and thence by the Cologne-Minden line with the Rhine and Belgian railroads ; and from Altona, which adjoins one of its suburbs, with Kiel (65 miles) and the Baltic. The city is connected by electro-telegraphic wires with all the great towns of Europe.

The total debt of the republic, including 81,814,000 marcs borrowed in consequence of the fire of 1842, amounted to 66,940,288 marcs current, or 3,974,579*l.* 12*s.* sterling.

In the budget for 1853 the revenue from public property, direct and indirect taxes, was estimated at 6,142,350 marcs current, or 364,702*l.* 0*s.* 7*d.* ; and the expenditure at 6,155,280 marcs, or 365,469*l.* 15*s.*

The harbour admits vessels of 14 feet draught at all times ; ships with 18 feet draught can come up at high water. At the end of 1852 there belonged to the port 369 vessels measuring 87,628 lasts of 6000*l*ba.

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each ; in this number are included 6 steamers. In the course of 1852 the arrivals from different ports of Europe numbered 3960 ships ; from Asia, 46 ; from Africa, 17 ; from America, 413 ; and from Australia, 4 ; making a total of 4440 ships measuring 280,585 lasts, and manned by 37,787 men. Of the arrivals 403 were in ballast. In the same year the departures for European ports numbered 3991 ships ; for Asia, 19 ; for Africa, 15 ; for America, 447 ; and for Australia, 8 ; making a total of 4480 ships measuring 281,728 lasts, and manned by 37,973 men. Of the departures 2136, or nearly one-half, were in ballast.

The trade of Hamburg is in a great measure passive, that is, it depends more upon the varying wants of other countries than upon its own. The free navigation of the Elbe below the town is the great cause of its commercial pre-eminence. Through Hamburg, Prussia and a great part of Germany receive foreign produce and export their own. The great articles of import into Hamburg are tea, sugar, coffee, cocoa, tobacco, raw-cotton, rice, hides, pepper, indigo, pimento, ginger, olive-oil, dye-stuffs, raisins, almonds, iron, bullion, cotton-twist, wine, brandy, rum, dried fruit, palm- and fish-oil, salt herrings, &c. These articles of course enter also into the exports. The principal native exports are corn, wool, linen, clover-seed, bark, butter, salt provisions, rags, wooden clocks, Rhenish wines, German manufactures, pitch, tar, flax, wax, &c. The total value of the imports in 1840 was 177,000,000 marcs banco, or 13,575,000*l.* sterling ; it had increased for the year 1851 to 373,277,940 marcs banco, or 27,218,183*l.* 2*s.* 6*d.* sterling. The total value of the exports in 1840 was 105,500,000 marcs banco, or 7,912,500*l.* sterling ; in 1851 it had risen to 338,163,370 marcs banco, equal to 24,657,745*l.* 14*s.* 7*d.*

The largest vessels that trade to Hamburg sometimes load and unload into lighters at Cuxhaven at the mouth of the Elbe. The channel at the mouth of the river leading to Cuxhaven is three-fourths of a mile wide at the narrowest part, between the Vogel Sands on the north, and the Schaarhorn Sands and Neuwerk Island on the south. On the island are two lighthouses, 700 yards apart ; the more southerly is 128 feet high, and stands in 53° 54' 57" N. lat., 8° 29' 40" E. long., the other is only 64 feet high. The entrance of the river is marked by a light ship, and the channel all the way up to Hamburg is marked by black and white buoys on the starboard and larboard sides respectively. A pilot is necessary in navigating the river, and a pilot galliot is stationed near Neuwerk Island.

There are no docks or quays at Hamburg. Vessels moor in the river outside of piles a short distance from the shore, and load and unload by means of lighters. Small craft lie in a sort of inner harbour formed by an arm of the Elbe which runs into the city. The business done in Hamburg in banking, exchange, and insurance transactions is very extensive. A foreigner cannot carry on any business in his own name in the city without becoming a burgher, which he can do however by paying an amount of fees not exceeding 10*l.*, and thus acquire all the rights and privileges of a native.

HAMELN. [HANOVER.]

HAMILTON (anciently Cadzow), Lanarkshire, Scotland, a parliamentary burgh and market-town, in the parish of Hamilton, is situated near the confluence of the Avon Water with the Clyde, 11 miles S.E. from Glasgow, in 55° 47' N. lat., 4° 2' W. long. The population of the burgh in 1851 was 9630. The town is governed by a provost, three bailies, and eight councillors ; and jointly with Airdrie, Falkirk, Lanark, and Linlithgow, returns one member to the Imperial Parliament.

The town, which is lighted with gas, is irregularly built, but possesses some good buildings. The Episcopal church is much admired. The parish church is a Grecian edifice ; the United Presbyterians have four chapels, and the Roman Catholic and Free Church congregations have each a large chapel. The new academy, replacing the old Grammar school, is a handsome building. A mechanics institution and a savings bank are in the town. Handloom weaving is the chief occupation of the inhabitants. Young females are generally engaged in tambour or sewed muslin work. A few still manufacture Hamilton lace. In the neighbourhood of the town are extensive barracks.

Hamilton Palace is a superb building, and contains many valuable paintings. The building called Chatelherault, the ancient castle of Cadzow, and the remains of the Old Caledonian Forest, are among the objects of antiquarian interest in the town and its vicinity.

(Communication from Hamilton.)

HAMMERFEST. [TRONDJHEM.]

HAMILTON. [BERMUDAS ; CANADA.]

HAMM. [ARNSBERG.]

HAMMERSMITH. [MIDDLESEX.]

HAMOAZE. [PLYMOUTH.]

HAMOON. [SEISTAN.]

HAMPDEN. [BUCKINGHAMSHIRE.]

HAMPRESTON. [DORSETSHIRE.]

HAMPSHIRE, or as it is styled in some official documents, the county of SOUTHAMPTON, and more familiarly HANTS, a southern maritime county of England, lies between 50° 34' and 51° 22' N. lat., 0° 43' and 1° 54' W. long. It is principally on the mainland of England, but includes the ISLE OF WIGHT. Hampshire is bounded N. by Berkshire, E. by Surrey and Sussex, S. by the English Channel, and W. by

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Wiltshire and Dorsetshire. The length of the mainland part of the county from north to south varies from 37 to 46 miles; the breadth varies from 28 to 41 miles. The Isle of Wight is about 23 miles long from east to west, and 14 miles broad from north to south. It is separated from the main part of the county by an arm of the sea, averaging about 3 miles over, but in the narrowest part not more than a mile. A small detached part of the county 9 miles long, and for the most part less than half a mile wide, extending from near Haslemere in Surrey, to Midhurst in Sussex, was annexed to Sussex by the Act 7 & 8 Vict., cap. 61. The area of the county, including the Isle, is 1658 square miles, or 1,070,216 acres. The population of the county in 1841 was 354,682; in 1851 it was 405,370.

Coast-line, Surface, Hydrography, Communications, &c.—The coast of Hampshire (not including the Isle of Wight) is low towards the east side of the county, where there is a wide but not very deep bay or inlet, divided by Hayling Island and Portsea Island into three parts; Chichester harbour on the east, Langton harbour in the middle, and Portsmouth harbour on the west. Portsea Island, 4 miles long from north to south, and about 3 miles broad, contains the borough of Portsmouth and the town of Portsea, with their extensive suburbs.

From the entrance of Portsmouth Harbour the coast runs north-west to the entrance of the inlet or estuary called Southampton Water. In this part are some low cliffs. Southampton Water penetrates about 7 miles inland to the town of Southampton, at the junction of the Test and the Itchin: its breadth, when the tide is up, is from one mile and a half to two miles; at low water about half a mile. From the entrance of Southampton Water a low coast runs south-west until opposite to the western extremity of the Isle of Wight. Along this low coast are extensive salt-works, and at its extremity, upon the point of a long sandy neck, stands Hurst Castle. From Hurst Castle the coast runs west, forming the shallow bay of Christchurch, terminated at its western point by Hengistbury Head, from which the coast still runs west to the border of Dorsetshire. From Hurst Castle the coast is generally high and abrupt.

The surface of the county is rather irregular. The South Downs enter the county from Sussex on the south-east, near Petersfield, and cross it in a north-west direction into Wiltshire. The North Downs enter the county from Surrey, near Farnham, and extend across it by Odiham and Kingsclere into Wiltshire. The Alton Hills form a connection on the east side of the county between the South and North Downs, and run from Petersfield northward past Alton. These hills are in the chalk formation.

A large part of Hampshire is within the basin of the Southampton Water; a small portion on the north and north-east sides of the county is in the basin of the Thames; a small portion on the south-east side is in the basin of the Arun, and a small portion of the west side is in the Wiltshire and Dorsetshire basin.

The principal streams which drain the Southampton basin are the Anton or Test, which has a course of 35 miles, the Itchin 25 miles, and the Hamble, 10 miles. One branch of the Test rises near Hurstbourne Tarrant (between Newbury and Andover), and another near Whitchurch; their united stream flows by Stockbridge and Romsey to Southampton. The Itchin rises in the hills around Alresford, and flows past Winchester to Southampton. The Hamble rises near Bishop's Waltham, and joins the Southampton Water some miles below Southampton. The Itchin is navigable up to Winchester, but the navigation does not coincide with the natural bed of the river.

The New Forest is situated in the south-west corner of the county. It is drained by two small streams, the Ex or Beaulieu River and the Boldre Water, besides some smaller streams. The basin of the Thames is separated from the rest of the county by the North Downs, and drained by the Wey, the source of which is in Hampshire, and by the Auborne and the Loddon, which have their course along the border. The basin of the Arun is separated from the rest of the county by the Alton and Petersfield hills and the South Downs. It is drained by the Rother, which rises in this county and flows past Midhurst into the Arun. The Wiltshire and Dorsetshire basin comprehends a narrow strip of the county to the west of the New Forest. It is drained by the Avon, which, entering the county just below Downton, Wilts, about 6 miles from Salisbury, runs south past Fordingbridge, Ringwood, and Christchurch, into the sea, about 22 miles. A small portion of the Dorsetshire Stour, and of the Great Leonards Water, a tributary of the Stour, is in the county or upon its boundary; the Stour joins the Avon below Christchurch; their estuary forms Christchurch haven.

The county has two principal canals. The Andover Canal commences at Andover, and is carried in a generally southern direction past Stockbridge and Romsey to Redbridge, 4 miles above Southampton, where it enters the Anton. Its whole length is 22½ miles. It has a branch to Salisbury. The Basingstoke Canal commences at Basingstoke, and is carried in a very winding course 22 miles east on one level to the Loddon, which it crosses into the county of Surrey, its further course through which to the navigable part of the river Wey (near its junction with the Thames) is 15 miles. Part of the canal from Arundel by Chichester to Portsmouth is in this county.

Three principal mail-roads cross the county, namely, the road from London to Portsmouth, that to Southampton and Poole, and the great western road through Salisbury. At Andover a road branches off

from the great western road to Amesbury, in Wiltshire. Besides these there are other roads of less importance, along the coast, from Winchester, &c., which communicate with different parts of the county.

The main line of the London and South-Western railway enters the county at Farnborough, and proceeds in a nearly western direction to Basingstoke, where it turns south and proceeds to Southampton, and thence south-west through the New Forest, and by Ringwood to Woolbridge (in all about 76 miles), where it quits the county. From Bishopstoke a branch line of 16 miles runs south-east to Gosport, and another in the opposite direction to Salisbury, which quits the county at West Dean, 15 miles. From Basingstoke a branch runs north to Reading, of which about 7 miles are in this county. At Emsworth the Portsmouth branch of the London, Brighton, and South-Coast railway enters the county, in which its course is about 9 miles. A short branch runs along the back of Portsmouth harbour, and connects the South-Western and South-Coast lines. The Reading, Guildford, and Reigate railway runs for a short distance along the north-eastern border of the county. A branch to Alton in this county, 13 miles long, leaves the main line at Ash station, and passes Farnham.

Geological Character.—That vast district of chalk which overspreads so large a portion of Wiltshire, and of which Salisbury Plain forms a part, extends into Hampshire and occupies a considerable part of it. It is bounded on the north by a line drawn from Inkpen Beacon, near Great Bedwyn, Wiltshire, by Kingsclere and Basingstoke to Odiham; on the east by a line drawn from Odiham by Alton, and along the Farnham road to the neighbourhood of Bishop's Waltham; and on the south by a line drawn from the neighbourhood of Bishop's Waltham and north of Bishopstoke into Wiltshire. The extent of this chalk district from north to south is about 22 miles; from east to west its Hampshire extent varies from 22 to 32 miles, but its whole extent through Hampshire and Wiltshire together is much greater. The breadth of the North Downs range is 2 or 3 miles, that of the South Downs about 4 miles. Portdown Hill is an outlying mass of chalk.

The country to the north of the great chalk district and of the North Downs belongs to the London basin; the country to the south of the great chalk district and of the South Downs belongs to the Isle of Wight basin; and these are almost entirely occupied by the strata above the chalk. The country to the east of the great chalk district and embraced between the North and South Downs, is occupied by the strata which underlie the chalk, and which extend into Surrey and Sussex, and form the district of the Weald of the south-east of England. In the London basin the Bagshot sand is found at Frimley Heath, on the border of Surrey, and is surrounded by a belt of the London clay; the rest of this basin in Hampshire is occupied by the plastic clay, except near Kingsclere, where, for a short distance, the chalk marl and greensand crop out from beneath the chalk. The greater part of the New Forest, the country around the Southampton Water, and the whole line of the coast eastward from the Avon, and including Portsea and Hayling Islands, are occupied by the London clay; the country west of the Avon and a belt varying from 3 to 7 miles south of the chalk, are occupied by the plastic clay. No minerals are procured from this county to any extent, except near Petersfield, where gray chalk is quarried.

Forests.—There are several forests in this county, namely, the New Forest in the south-west, Alice Holt and Woolmer Forest in the east, and the forest of Bere in the south-east. William the Conqueror or his immediate successors afforested the tract extending from Godshill, near Fordingbridge, to the sea, and from Ringwood to Hardley, near Southampton Water, and comprehending 92,365 acres. The forest comprehends nearly 64,000 acres, and is the property of the crown, subject to rights of common and other ancient claims. By the Act 14 & 15 Vict. cap. 76, passed August 7th 1851, the commissioners were empowered to remove the deer, and to inclose and plant 10,000 acres, in addition to 6000 acres previously inclosed. The chief value of the New Forest is for the raising of oak and beech timber for the use of the navy. A diminutive breed of horses, and a peculiar breed of swine, bearing considerable resemblance to the wild boar, are found in a half-wild state in the forest.

The forest of Bere extends northward from Portdown Hill, and its bounds comprehend about 16,000 acres, of which one-third is inclosed. Alice Holt and Woolmer Forest lies between the Portsmouth and Southampton roads. It contains altogether nearly 15,500 acres, more than half of which belongs to the crown. The growing timber in Alice Holt is of considerable value. In the marshy bottoms of Woolmer Forest many trees have been found and dug up with the peat, and many hundreds of Roman coins, several of them those of Marcus Aurelius and the empress Faustina, were dug up in the bed of Woolmer Pond, when dried up in 1741 by the heat.

Waltham Chase, a waste of 2000 acres, belonging to the bishop of Winchester, is on the north-west side of the forest of Bere, near Bishop's Waltham. It is connected in our criminal annals with the atrocities of the deer-stealers, called the 'Waltham Blacks;' and with the statute known as the 'Black Act,' passed for their suppression.

Climate, Soil, Agriculture.—The climate of Hampshire is generally mild and favourable to vegetation. The southern part of the Isle of Wight is considered to have the mildest climate in Great Britain, and is resorted to on that account by invalids during the winter. But a great part of Hampshire consists of poor sands and gravelly soils or

chalk hills, having between them low bottoms, with no ready outlet for the water, which has produced marshes and peat-bogs. In such places the nature of the soil has a great effect on the climate. The northern part of the county, where it borders on Berkshire and Surrey, consists chiefly of the poor dark sand, mixed with an ochery loam, which is well known as the Bagshot-heath soil. The whole of this part of the county is naturally very unproductive. Much of it however, which was covered with heath and lay in common, has been inclosed and divided. Some of it has been brought into cultivation at a great expense, and a considerable portion has been planted with fir-trees.

South of this district, as far as Winchester and a few miles beyond it, the chalk prevails. The soil which lies over this chalk varies in depth, and, where it is sufficiently deep, produces good crops of barley, wheat, and oats. Where the soil is thin and very near the chalk, it is scarcely fitted for the plough, but remains in the state of down; and the natural grasses which grow there, when kept closely cropped by sheep, are sweet, and make the best sheep pastures. In the valleys and along the lower slopes of the chalk-hills the soil is of a tough, tenacious nature, being a mixture of stiff clay and of chalk washed down the hills by the rains. On the eastern side of the county bordering on Surrey and Sussex, is a small tract of land, which is provincially called malmy land, forming the Vale of Petersfield. It has a gray, tender, sandy soil of some depth, lying on a soft sandstone, which is almost impervious to water.

In October 1853 the extent of arable land in the county was returned at 608,219 acres; of which 96,228 grew wheat; 62,881, barley; 57,075, oats; 1907, rye; 14,097, peas and beans; 2801, potatoes; 88,847, turnip or rape; 100,114, clover, lucerne, &c.; and 123,520 acres were meadow and pasture. The woods and plantations covered an extent of 105,839 acres. The wastes and commons amounted to 89,630 acres.

There are no breeds of cattle, horses, or sheep, peculiar to Hampshire, unless it be the small New Forest ponies. The sheep are—the common small forest breed, or heath-sheep; the Dorset and Leicester sheep, in the richer meadows; and the South Down, on the chalky hills. Hampshire has long been famous for the curing of bacon; yet the native breed of pigs in this county is by no means remarkable for its qualities. Improved breeds are produced by crosses of the Berkshire, the Suffolk, Essex, and Chinese pigs. The reputation of the Hampshire bacon is owing entirely to the care with which it is cured. In October 1853 there were in the county 24,076 horses, 19,350 milch cows, and 13,148 other cattle. The number of sheep and lambs was 489,227, and of swine 61,860.

Divisions, Towns, &c.—The most ancient division of the county is into hundreds, of which there were 50 at the time of the Domesday Survey. There are now 39 hundreds, besides the city of Winchester with the liberty of Soke, the borough of Portsmouth with the district of Portsea and Portsea Guildable, the town and county of Southampton, and 11 liberties, including the liberties of East and West Medina in the Isle of Wight. From the great number of the hundreds and liberties they have been arranged in 'divisions' for administrative purposes. These divisions with their situation in the county and inclosed subdivisions, are as follows:—

1. Alton, east, contains the hundreds of Alton, Bishop's Sutton, and Selborne, and the liberty of Alresford.
2. Andover Division, west, contains Andover, Barton Stacey, Pastrow (upper half), Thorngate (upper half), and Wherwell.
3. Basingstoke Division, north-east, contains Basingstoke, Bermondspit, Holdshott (lower half), and the town of Basingstoke.
4. Droxford Division, south-east, contains Bishop's Waltham, Hambledon, and Meonstoke.
5. Fareham Division, south, contains Bosmere, Fareham, Havant, Portsmouth, and Titchfield, and the liberty of Alverstoke and Gosport.
6. Kingsclere Division, north, contains Chuteley, Evingar, Kingsclere, Overton, and Pastrow (lower half).
7. Lynton Division, south-west, contains Christchurch (upper half), New Forest (upper half), and the borough of Lynton.
8. Odiham Division, north-east, contains Crondall, Holdshott (upper half), and Odiham hundreds, with the town of Odiham and liberty of Bentley.
9. Petersfield Division, east, contains East Meon and Finch Dean.
10. Ringwood Division, south-west, contains Christchurch (lower half), Fordingbridge and Ringwood hundreds, Breamore and Westover liberties, and the borough of Christchurch.
11. Romsey Division, west, contains King's Sombourn (lower half), Redbridge, Thorngate (lower half), and the town of Romsey.
12. Southampton Division, west, contains Mainsbridge hundred and the liberties of Beaulieu and Dibden.
13. Winchester Division, central, contains Bountisborough, Buddleigate, Fawley, Mitcheldever, and Mainsborough.
14. Isle of Wight Division, south, contains the liberties of East and West Medina and the town of Newport. Separate Jurisdictions: city of Winchester and liberty of Stoke; borough of Andover; borough of Portsmouth, with Portsea; town and county of Southampton.

Hampshire, not including the Isle of Wight, contains one city—WINCHESTER; 6 parliamentary boroughs—ANDOVER, CHRISTCHURCH, LYNTON, PETERSFIELD, PORTSMOUTH, and SOUTHAMPTON; and 13 other market-towns—ALRESFORD, ALTON, BASINGSTOKE, BISHOP'S WALTHAM, FAREHAM, FORDINGBRIDGE, GOSPORT, HAVANT, KINGSCLERE, ODHAM, ROMSEY, STOOKBRIDGE, and WHITCHURCH. These are described under their respective titles. The other towns are as under:—

Emsworth is situated at the head of Emsworth Channel, on the

border of the county, 26 miles S.E. from Winchester: population in 1851 of the parish of Warblington, 2302. Oyster-fishing is carried on; sail-cloth, sacking, rope, twine, and fishing-nets are manufactured. Coal is largely imported, and timber, flour, &c., are exported. There are in Emsworth a neat proprietary chapel; a district church, in the Norman style, erected in 1840; chapels for Independents and Baptists, and National schools. Fairs are held on Easter Monday and July 18th.

Overton, formerly a market-town, is situated on the right bank of the Anton, or Test River, about 2 miles from its source. Overton has an ancient church, which was repaired and enlarged in 1832; the church has a massive square tower: there are places of worship for Wesleyan Methodists and Independents, and a Free school. A fair on July 18th for sheep and lambs is well attended. There is a silk-throwing establishment.

Titchfield, situated in the valley of the river Aire, 18 miles S. by E. from Winchester, population of the parish 3956 in 1851, formerly had a market. In the church, the date of which is 1243, are some fine monuments, including one to Sir Thomas Wriothesley, chancellor to Henry VIII. In Titchfield are an Independent chapel and National schools. There are corn-mills and breweries; bricks and parohment are made. Fairs are held on May 14th and September 25th. The ruins of Titchfield House are near the town. An abbey was founded here in 1232: at the dissolution Chancellor Wriothesley obtained from Henry VIII. the abbey and lands, and erected a fine mansion.

The following are some of the more important villages, with the population of the several parishes in 1851, and a few other particulars:—

Anglesea. [GOSPORT.] *Appleshaw*, 18 miles N.W. from Winchester, population 318, is chiefly noticeable for its sheep and cattle fairs, which are important. *Barton Stacey*, 8½ miles N. by W. from Winchester, population 553, has a cruciform church, a good specimen of the early English style, with an elegant perpendicular tower. There are here also a chapel for Methodists, an Endowed Free school for 12 children, and a National school. *Beaulieu*, 22 miles S.S.W. from Winchester, population 1177, is situated on the left bank of the river Beaulieu. Beaulieu Abbey, founded in 1204 by King John, gave refuge to Margaret of Anjou, Henry VI.'s queen, after the battle of Barnet, and to Perkin Warbeck, in Henry VII.'s reign. Beaulieu church was formerly the refectory of the abbey; it contains a curious stone pulpit. The parish contains many old ruins and interesting buildings. Fairs for horses and cattle are held on April 15th and September 4th. *Bishopstoke*, 7 miles S. from Winchester, population 1249, on the river Itchin. The church is a handsome stone-building with a square tower. There are a Dissenting chapel and a school for boys and girls. From the station of the South-Western railway, which is close to the village, the lines to Salisbury and Gosport branch off. *Boldre*, 24 miles S.S.W. from Winchester, population 2374; the parish church, a stone building, was partly rebuilt in 1697. A school for 20 boys and 20 girls was founded, and endowed out of the profits of his writings, by the Rev. William Gilpin, vicar of Boldre, and author of various works on picturesque scenery and art. *Bolley*, 11 miles S. by E. from Winchester, population 798, on the left side of the river Hamble, has a small church, situated about a mile south from the village, and places of worship for Independents and Baptists. The river Hamble is navigable for boats, and has on its bank extensive flour-mills. The traffic in timber and flour gives employment to many of the inhabitants. Eight fairs for cheese and cattle are held in the course of the year. *Bournemouth*, a bathing village in Poole Bay, 38 miles S.W. from Winchester, population of the parish of Holdenhurst, in which it is situated, 1330, has a church of early English style, erected in 1844, a National school, a reading-room and library, baths, large hotels, and many elegant mansions. The place has much increased of late years. *Bramshot*, 26 miles E. by N. from Winchester, population 1325, has a small cruciform church, of early English style, with a low tower surmounted with a spire; a chapel for Wesleyan Methodists, and a National school. In the neighbourhood are paper manufactories and flour-mills. *Broughton*, 13 miles W. by N. from Winchester: population 1009 in 1841; in 1851 it was 1010. The church is an ancient edifice, with a wooden tower, and there are chapels for Baptists and Wesleyan Methodists, an Endowed school for 40 boys, and several minor charities. *Burghclere*, 17 miles N. from Winchester, population 809, has a Norman church, decayed, and a gothic church built in 1838; the new church consists of nave, transepts, and chancel, and has a square tower. It occupies an elevated site. There is a Free school. *Crondall*, 25 miles N.E. from Winchester, population of the tithing 475; of the entire parish 2431. The parish church is a commodious structure, partly Norman. There are two Endowed schools and a National school. Remains of an ancient encampment are at Tewkesbury Hill, in the vicinity. *Eling*, at the head of Southampton Water, 14 miles S.S.W. from Winchester: population of the parish, which includes a large portion of the New Forest, 5852. The parish church dates from the 11th century; it is built of stone and flint, and has a square tower; the church has been lately repaired. At Marchwood, in the parish, are large powder magazines belonging to government. In the parish are several National, British, Infant, and Charity schools. *Fawley*, 22 miles S. from Winchester, population 1801; the parish church is an ancient edifice of stone, with a square tower; the western door has a fine Norman arch. The Baptists and Wesleyan Methodists have chapels,

and there are National and Infant schools. *Froxfield*, 15 miles W. by S. from Winchester, population 729; the parish church, which has been recently repaired, is a neat edifice, with some Norman portions. There are National and Infant schools, and a Free school. Remains of Roman earthworks and traces of an ancient encampment are in the vicinity. *Hambledon*, 18 miles S.E. from Winchester, population 2052, has an early English church, with a square tower. There are Endowed and National schools. Several handsome family residences are in the neighbourhood. *South Hayling*, a bathing village at the south end of Hayling Island: population, 824. The church is a fine building with two aisles and a large chancel; the font is Norman. There are a chapel for Independents and a National school. At South Hayling are some remains of an ancient monastery, and near the village an encampment with a moat may be traced. *Highclere*, 20 miles N. by W. from Winchester, population 525, has a small church with a square tower. There are National schools for boys and girls. Highclere Castle, the seat of the Earl of Caernarvon, is a magnificent building, finely situated in an extensive and picturesque park. Parts of the edifice are of Norman date. The castle has been recently altered and repaired under the care of Mr. Barry. On the site of the ancient keep a high massive tower has been erected. *Hordle*, on the coast, 32 miles S.W. by S. from Winchester: population, 832. Many fossils and shells have been found in the high cliffs which here skirt the English Channel. From the cliffs may be obtained beautiful prospects of the country inland, of the Channel, and of the Isle of Wight. Hurst Castle, erected by Henry VIII. for the defence of this part of the coast, is now used as a coast-guard station. *Hythe*, 19 miles S. by W. from Winchester, population of the ecclesiastical district 680, is on the right side of Southampton Water, nearly opposite the town of Southampton, with which there is regular communication by passage-boats. The church was erected in 1823. There are an Independent chapel and a National school. *Lynnhurst*, 10 miles W. by S. from Southampton, population 1527, is the capital of the New Forest, and seat of the Verderer's courts. The Forest courts are held at the Queen's House, where a stirrup, said to have been used by William Rufus, is preserved. There are a small church, rebuilt in 1710 by George II., a Baptist chapel, and a National school. *East Meon*, *Meon Stoke*, and *West Meon*, are three villages about 2 miles from each other: West Meon being about 11 miles E.S.E. from Winchester, population 901; East Meon 1543; and Meon Stoke 431. The churches of East Meon and Meon Stoke are ancient structures; that of West Meon, rebuilt in 1843, is in the decorated style, with a western embattled tower. *Milford*, 33 miles S.S.W. from Winchester, population 1782, is pleasantly situated on the coast: the church, an ancient stone structure, has a square Norman tower, surmounted with a spire. There are a Baptist chapel, a National school, and a Girls' Charity school. *Millbrook*, 13 miles S. by W. from Winchester, population 6121, at the head of Southampton Water, has greatly increased owing to its vicinity to Southampton. It has very extensive iron-foundries, a steam-boiler factory, and an agricultural implement manufactory. *Mitcheldever*, 7 miles S. by E. from Winchester, population 1082; the church, rebuilt by Sir Francis Baring at a cost of 10,000*l.*, is octangular, and surmounted with an elegant dome; the embattled tower, of the perpendicular style, formed part of the former building, the greater part of which was burnt down in 1806. In the interior are some interesting monuments and tablets, chiefly to members of the Baring family, whose seat, Stratton Park, is in the vicinity. *Porchester*, 20 miles S.S.E. from Winchester: population, 729. The ruins of Porchester Castle are of considerable antiquity and picturesque appearance; the castle stands on the northern margin of Portsmouth harbour, and comprises an area of upwards of 400 feet square. Two Norman towers, at the eastern and western entrances, a keep, and some other towers, still remain. During the French war one of the towers was used as a prison. The church was erected in 1135. There are a chapel for Wesleyan Methodists and a National school. Porchester has numerous visitors during the summer season. *Selborne*, 19 miles E. by N. from Winchester, population 1114, has an ancient church in the early English style, an Independent chapel, and a Free school. A priory of Black Canons was founded at Selborne in 1233. The beautiful scenery of this locality has been rendered famous by the 'Natural History of Selborne' of the Rev. Gilbert White, who was a native of Selborne, and resided in it the greater part of his life. *Monk*, or *West Sherborne*, and *Sherborne St. John*, two adjoining villages, about 20 miles N.N.E. from Winchester: population of Monk Sherborne 581; of Sherborne St. John 796. The church of Monk Sherborne is Norman; the porch is of later date. Of the priory buildings of Monk Sherborne a tower still exists. The church of Sherborne St. John has a square tower surmounted with a copper spire. In this parish is a curious mansion called the Vine, which in the 16th century was reckoned one of the best residences in the county. An ancient domestic chapel connected with the mansion has on each side carved stalls, and in the east windows are some good specimens of stained glass. The park is well wooded. There is here a Free school. *Silchester*, on the border of the county, next to Berkshire, 25 miles N.N.E. from Winchester, population 456, is remarkable for the remains of the Roman station, noticed at the end of this article. Numerous coins and other Roman antiquities have been found here. The parish church is a neat Norman structure. There are National

schools. *Soberton*, 15 miles S.E. from Winchester, population 1147; the church is a small early English structure, with a square tower. There are here a Roman Catholic chapel and National schools. Several corn-mills are in the vicinity. *King's Sombourne*, 8½ miles W. by N. from Winchester, population 1242, has, besides the parish church, a Wesleyan Methodist and an Independent chapel, and National schools one of these, for boys, under the care of the Rev. R. Dawes, now Dean of Hereford, attained a considerable reputation. Mr. Dawes caused a convenient school-house to be built, appointed a master qualified to give instruction of a higher order than is usually afforded in such schools, a trifling payment was required, and Mr. Dawes exercised a vigilant superintendence. In a short time the school was attended not only by the children of the poor, but by those of the farmer tenants, and by children of tradesmen from the neighbourhood. Here stood formerly a palace of John of Gaunt, duke of Lancaster. *Strathfeldaye*, 25 miles N.E. by N. from Winchester: population, 864. The mansion and estate presented by Parliament to the late Duke of Wellington is at the eastern end of the parish. The spacious park in which the mansion is situated contains also the parish church and rectory-house. The river Loddon flows through the grounds, and forms several sheets of water before the house. The church is a neat modern structure, with an hexagonal tower. There are National schools and an Infant school. *Twyford*, 3 miles S. from Winchester, population 1272, situated on the left side of the river Itchin, has an ancient church with an embattled tower; a district church recently built on Colden Common; a Roman Catholic chapel at Branbridge, and National schools for boys and girls. *East Tytherly*, or *Tytherly*, 16 miles W. from Winchester, population 399, is chiefly noticeable as the seat of the attempt made to carry into practice at Harmony Hall the 'social' co-operative scheme of Robert Owen. The attempt, like his previous experiment at New Lanark, proved a signal failure. The buildings are now used for a school. There are here a church and an Endowed Free school. *Upham*, 8 miles S.S.E. from Winchester, population 550, has a church, a Methodist chapel, and a National school. Young, the author of the 'Night Thoughts,' was born here. *Nether Wallop*, 13 miles W. by N. from Winchester, population 952, has an old gothic church, with a square tower, chapels for Baptists and Methodists, and a National school. On the summit of Danebury Hill is a circular encampment, the area of which is about 12 acres. *Weyhill*, on the edge of Salisbury Plain, 16 miles S.S.W. from Winchester, population 419, is noticeable for its extensive fair held on October 10th and five following days: horses, sheep, cheese, hops, and leather are sold to a very large amount. It is said that 140,000 sheep are sometimes disposed of on the first day of the fair. *Wickham*, 15 miles S. by E. from Winchester, population 1049, has a neat gothic church, with a small square tower, and National schools. William of Wickham, or Wykeham, the celebrated Bishop of Winchester, was born in this place. *Wooton St. Lawrence*, 20 miles N.N.E. from Winchester, population 922, has a Norman church, with a square tower. There are here an Independent chapel and a Free school.

Divisions for Ecclesiastical and Legal Purposes.—Hampshire is included in the diocese of Winchester and the ecclesiastical province of Canterbury, and constitutes (inclusive of the Isle of Wight) the archdeaconry of Winchester. County courts are held at Alton, Andover, Basingstoke, Bishop's Waltham, Christchurch, Fording-bridge, Lymington, Newport (Isle of Wight), Petersfield, Portsmouth, Romsey, Southampton, and Winchester. By the Poor-Law Commissioners Hampshire is divided into 23 Unions, namely: Alresford, Alton, Andover, Basingstoke, Catherington, Christchurch, Droxford, Fareham, Fordingbridge, Hartley Wintney, Havant, Hursley, Kingsclere, Lymington (New Forest), Petersfield, Portsea Island, Ringwood, Romsey, South Stoneham, Southampton, Stockbridge, Whitchurch (Isle of Wight), and New Winchester. Alverstoke, Farnborough, and Headley are Gilbert incorporations. Southampton and the Isle of Wight are each under a local Act. The whole comprises 336 parishes and townships, with an area of 946,498 acres, and a population in 1851 of 399,874. Local Boards of Health have been established for Fareham parish, Havant Shirley district, the town and county of the town of Southampton, and West Cowes township. The northern and southern divisions of the county return each two members to the Imperial Parliament. The Isle of Wight returns one member. The boroughs of Andover, Lymington, Southampton, Winchester, and Portsmouth return each two members; Christchurch and Petersfield return one each. Newport (Isle of Wight) returns two members.

History, Antiquities, &c.—Before the Roman invasion this county was inhabited by three tribes—the Regni, who occupied the coast, as well as the counties of Sussex and Surrey; the Belgæ, who inhabited the middle portion, and extended into Wiltshire; and the Atrebatæ, or Atrebatii, who probably occupied the northern part on the confines of Berkshire. Winchester and Silchester appear to have been British towns antecedently to their being occupied as Roman stations. This part of the island was reduced by the Romans, probably under Vespasian, who is distinctly recorded by Suetonius (Vespas. c. iv.) as having subjugated the Isle of Wight, called by the Romans Vectis. It was comprehended in Britannia Prima, and was crossed by several Roman roads, and contained several Roman stations. The Roman station Clausentum, mentioned in the *Iter VII.* of Antoninus, is generally admitted to have been near Southampton. At Bittern Farm

abundance of Roman remains have been found, and modern antiquaries seem to agree in fixing the station at this spot, which is on the east side of the Itchin, by a bend in which it is nearly surrounded. There are here considerable remains of Roman military works. A quantity of Roman coins and of fine red pottery, a glass urn, and sculptured and other stones have been dug up. The area of the station is about half a mile in circumference: Southampton probably arose from its ruins. Another station mentioned by Antoninus is Venta (a Roman modification of the more ancient British name *Caer Gwent*, 'the white city'), distinguished from some other places of the same name as *Venta Belgarum*. It is the modern Winchester, the first part of which name is a corruption of the British *Gwent*, or the Roman *Venta*. This was an important station: the walls with which the Romans inclosed it yet form the chief part, though frequently repaired and much altered, of the town walls.

But the most remarkable remains of a Roman station are at Silchester, a village on the border of the county, 6 miles due north from Basingstoke. It was certainly a station of importance, though it is difficult to determine whether it was the *Calleva Atrebatum* or the *Vindomis* of the 'Itinerary.' The remains of this station are among the most entire in the kingdom. The walls form an irregular octagon, and are about a mile and a half in compass; they inclose a space of about 100 acres, divided into seven fields, together with the parish church and churchyard, a farm-house and its offices. The inclosure contains several springs, and slopes to the south: the foundations of the streets may yet be traced running across it in parallel lines, and in the centre is an open space supposed to have been the forum, where the foundations of a large building and other remains have been dug up. There are four gates, facing the four cardinal points: some other openings have been made since the ruin of the town. The walls, which are from 15 to 20 feet in height, are formed by layers of flat stones of variable dimensions, and of rubble-stone consolidated by cement: the whole is surrounded by a ditch. At a short distance north-east of the walls are the remains of an amphitheatre.

The remains of a Roman station, supposed to have been the *Brige* of Antoninus, were observed by Mr. Gale at Broughton, not far from Stockbridge. The walls of Porchester Castle contain some portions of Roman architecture, and are probably on the site of one of the stations denominated *Portus*, either *Portus Magnus*, or, more probably, *Portus Adurni*, mentioned in the 'Notitia Imperii.' Roman roads may be traced leading from *Venta* to *Sorbiodunum* (Old Sarum); to Silchester and to Porchester; and from Silchester in various directions.

This county was the scene of contest in the Saxon invasion. Hampshire was included in the kingdom of Wessex; and *Venta*, called by the Saxons *Wintancester*, became the seat of government. Here *Cerdic*, the founder of the kingdom of Wessex, was buried, and here, on the conversion of the West Saxons to Christianity, a bishop's see was established. In the contests of the Saxon princes the Isle of Wight was taken by *Wulfhere*, king of Mercia, and annexed by him to the kingdom of Sussex: it was however soon after reconquered by *Ceadwalla*, king of Wessex. Upon the predominance of the West Saxon kings over the other Saxon potentates being permanently established by *Egbert*, Winchester became the metropolis of England.

When the Northmen attacked the island, Hampshire was exposed to their ravages. In the reign of *Ethelbert*, grandson of *Egbert* (A.D. 860-66), a body of them advanced to Winchester, which they partially laid waste: they were routed however as they returned to their ships, and much of the booty recovered. At *Basing*, near *Basingstoke*, *Ethelred I.*, king of Wessex, and his brother *Alfred*, were defeated by the Danes, A.D. 870. A year or two after, in the reign of *Alfred*, the invaders made another attack on Winchester, damaged the cathedral, and murdered the ecclesiastics belonging to it. In the reign of *Ethelred II.* the Danes ravaged the Isle of Wight. In the civil dissensions of the reign of *Edward the Confessor*, the same island was infested by *Godwin*, earl of Kent, and his son *Harold*, then in rebellion; and in the subsequent reign of *Harold II.* it was laid under contribution by *Tostig*, the king's rebellious brother. Winchester continued to be the principal seat of royalty in the reign of *William the Conqueror*.

The New Forest became the scene of several disasters to the family of *William the Conqueror*, which were popularly regarded as judgments on him for his arbitrary conduct in the formation or extension of the forestal jurisdiction. His son *Richard* lost his life here by what *Camden* describes as a 'pestilential blast': his grandson *Henry*, son of *Robert*, was entangled among the branches and killed while hunting; and his successor *William Rufus* was shot by a random arrow by *Walter Tyrrel* in 1100.

In the civil war between the supporters of *King Stephen* (then a prisoner) and the *Empress Maud*, Winchester Cathedral and *Wolsey Castle*, the residence of *Henry of Blois*, bishop of Winchester and brother of *Stephen*, were in the hands of the king's party, and Winchester Castle and other parts of the city in the hands of the empress. The empress's friends were gradually dispossessed of all they held, except the castle; and, when this was hard pressed, it is said that the empress escaped by being carried through the opposing army, wrapped in a sheet of lead, like a corpse for interment. Her natural brother and chief supporter, the *Earl of Gloucester*, was taken soon after at

Stockbridge and exchanged for the captive king. At the commencement of the French war of *Edward III.*, in 1338, Southampton was attacked and taken by the French with their allies the *Genoese* and *Spaniards*. In 1415, when *Henry V.* was about to embark at Southampton for France, a conspiracy against his life was detected; for which the *Earl of Cambridge* and others were executed in that town. In the reign of the same monarch the Isle of Wight was once attacked and a second time threatened by the French. About the close of the reign of *Henry VIII.* another attack was made by the same people, but repulsed. *Mary I.* was married at Winchester to *Philip of Spain* in 1554.

Of these early times the county contains several relics. [BISHOP'S WALTHAM; CHRISTCHURCH; SOUTHAMPTON.] *Porchester Castle*, at the head of *Portsmouth* harbour, is of great antiquity and doubtful origin. It is probable that the site has been occupied by a fortress from a period anterior to the Roman conquest; and the present structure exhibits traces of Roman, Saxon, and Norman architecture. It is a quadrangle inclosing an area of 4 or 5 acres. The walls are from 8 to 12 feet thick and 18 feet high, having in many places a passage round them, defended by a parapet. It is inclosed by a ditch (double on the east side), and has 18 towers including those of the keep. The keep forms the north-west angle of the castle, and incloses a quadrangle of 115 feet by 65 feet. The parish church of *Porchester* is within the outer court of the castle; it is a large Norman cross church, of which the south transept has been destroyed. *Calshot* and *Hurst* castles, erected in the time of *Henry VIII.*, are now occupied as coast-guard stations. Both are on small headlands jutting into the sea; *Calshot* at the entrance of *Southampton Water*, and *Hurst* near *Lymington*. *Netley Castle*, near *Netley Abbey*, of about the same date, is now a ruin.

The chief monastic remains besides those mentioned elsewhere [CHRISTCHURCH; ROMSEY; WINCHESTER] are *Netley* and *Beaulieu* abbeys, and the *Priory of St. Dionysius*, near Southampton. *Netley Abbey* is a short distance from the bank of the *Southampton Water*, about 3 miles E. from Southampton. It appears to have been founded in the 13th century, and was of the *Cistercian* order. At the time of the dissolution its possessions were valued at 160*l.* 2*s.* 9*d.* gross, or 100*l.* 1*s.* 8*d.* clear yearly value. The ruins stand on the declivity of a hill rising gently from the water, and are so environed by wood as to be scarcely observable except on a near approach. The chapel was in the form of a cross; the southern transept and the choir are the most perfect portions of the remains. Many parts of the ruins are finely mantled with ivy. *Beaulieu Abbey* (also *Cistercian*) was founded in 1204 by *King John*: its yearly revenue at the dissolution was 428*l.* 6*s.* 8*d.* gross, or 326*l.* 13*s.* 2*d.* clear. The stone wall which surrounded the precincts of the abbey is in several places nearly entire, and is clothed with ivy. The remains include the abbot's apartments, converted after the dissolution into a family seat, having a well-proportioned vaulted hall; a long building, supposed from the extent and height of the apartments to have been the dormitory; the ancient kitchen, and the refectory. The refectory, a plain stone building, with strong buttresses and a curiously-raftered oak roof, forms the parish church of the village of *Beaulieu*. *St. Dionysius's* (commonly called *St. Denis's*) *Priory*, is on the bank of the *Itchin* above Southampton. It was founded by *Henry I.* for *Augustinian* or *Black Canons*. The ruins are of small extent, and appear to have formed the west end of the priory church.

In the beginning of the reign of *Charles I.* the *Duke of Buckingham* was stabbed at *Portsmouth*, and in the civil war of that reign this county was the scene of partial hostilities. The strong posts of the Isle of Wight were early in the contest secured for the Parliament, and the island was thus preserved from subsequent disturbance. But the most remarkable event in the contest that occurred in this county was the defence of *Basing House*, near *Basingstoke*, by its possessor, *John Paulet*, marquis of Winchester. The investment commenced in August 1643, and continued, probably at intervals, for two years. *Cromwell*, in October 1645 took the house by storm, and burned it to the ground. In 1647, *Charles I.*, after his escape from *Hampton Court*, remained concealed at *Titchfield House* till he gave himself up to *Colonel Hammond*, governor of the Isle of Wight. He was imprisoned for some time at *Carisbrook*, and afterwards at *Hurst Castle*.

Statistics.—According to the *Census Returns* of 1851, there were then in the county 818 places of worship, containing 214,674 sittings. Of these places of worship 389 belonged to the Church of England, 187 to five sections of Methodists, 116 to Independents, 69 to Baptists, 13 to Roman Catholics, 7 to Mormons, 6 to Quakers, 6 to Unitarians, and 25 to minor bodies. The number of Sunday schools was 576 with 44,328 scholars. Of these Sunday schools 322 belonged to the Church of England, 98 to Independents, 58 to Wesleyan Methodists, 45 to Baptists, 21 to Primitive Methodists, 20 to Bible Christians, and 12 to minor bodies. The number of day schools in the county was 1508 with 57,960 scholars; of these 487 were public schools with 39,906 scholars, and 1021 were private schools with 18,054 scholars. Of evening schools for adults there were 33 with 677 scholars. Of literary and scientific institutions the county possessed 30, with an aggregate membership of 4239. The libraries connected with these institutions contained in all 19,305 volumes.

In 1852 there were 13 savings banks in the county, at Alresford, Alton, Andover, Basingstoke, Fareham, Gosport, Havant, Lympington, Newport (Isle of Wight), Petersfield, Portsmouth, Southampton, and Winchester. The total amount owing to depositors on November 20th 1852 was 576,650*l.* *cs.* 5*d.*

HAMPSHIRE, NEW. [NEW HAMPSHIRE.]

HAMPSTEAD, Middlesex, a village in the parish of St. John, Hampstead, is situated on a considerable eminence, about 4 miles N.W. from London, in 51° 33' N. lat., 0° 10' W. long. The parish has been constituted a Union under the Poor-Law Board, and contains an area of 2252 acres, and a population in 1851 of 11,986. The living is a perpetual curacy in the archdeaconry of Middlesex and diocese of London. The salubrity of the air, and the extensive and pleasant prospects obtained from the heath, which is on the summit of the hill on which the village is built, have rendered Hampstead a favourite place of residence and of holiday resort. Many handsome villas have been erected in the vicinity, and on the line of the Hampstead road to London. The village is lighted with gas and paved. Hampstead church, erected in 1745, was enlarged in 1844. It is in the Italian style, and will accommodate 1600 persons. In the parish are two district churches, a proprietary chapel, places of worship for Baptists, Independents, English Presbyterians, Wesleyan Methodists, Unitarians, and Roman Catholics, and several National, Infant, Presbyterian, and Roman Catholic schools. The village contains a savings bank, a literary institution, a public library, and a dispensary. At Haverstock Hill in this parish, is the extensive new building for the Orphan Working School. (*Communication from Hampstead.*)

HAMPSTEAD, NORRIS. [BERKSHIRE.]

HAMPTON. [MIDDLESEX.]

HAMPTON, LITTLE. [SUSSEX.]

HANAU, the capital of the province of Hanau in the Electorate of Hesse-Cassel in Germany, is situated in an extensive plain on the river Kinzig, near its junction with the Main, 12 miles by railway E. from Frankfurt-am-Main, and 86 miles S.S.W. from Cassel, and has a population of about 16,000 including the suburbs. It consists of an old and a new town. In the former is the magnificent castle, the gymnasium, the theatre, the hospital, and the synagogue. The new town has straight broad streets, and in the middle of it a large market-place, forming an oblong parallelogram, with handsome fountains in the four corners, and the large town-hall at one end. The cathedral has a leaning tower, like that at Pisa. Hanau is the leading manufacturing town in Hesse-Cassel: its industrial products comprise silks, ribands, cottons, carpets, leather, gloves, hosiery, porcelain, jewellery, carriages, &c. There is also a considerable trade in wine, timber, and casks. In the vicinity are the electoral palace of Philipruhe and the baths of Wilhelmabad. On October 30, 1813, Napoleon I. in his retreat from Leipzig totally defeated at Hanau an army of Bavarians and Austrians, commanded by Prince Wrede.

HANDSWORTH. [STAFFORDSHIRE.]

HANLEY, Staffordshire, one of the pottery towns, is situated near the centre of the pottery district, in 53° 2' N. lat., 2° 9' W. long., distant about a mile N. from Stoke, and 149 miles N.W. from London. The township of Hanley is united with that of Shelton into one market-town, the largest in the district, of which the population in 1851 was 25,369. It stands on the south-western slope of a gently-rising eminence. The streets, which are of good width, have side pavements for foot passengers, and are lighted with gas. The town contains some elegant houses and spacious shops. The market-hall is a convenient building. The chapel at Hanley is a commodious brick building, with a tower 100 feet high. The Wesleyan and New Connexion Methodists, Independents, and Baptists have places of worship, and there are National and British schools, a government school of design, and a mechanics institute. The population are chiefly engaged in the earthenware manufacture. There is a large paper-mill. Wednesday and Saturday are the market-days.

HANOVER, THE KINGDOM OF, is situated between 51° 18' and 53° 52' N. lat., 6° 35' and 11° 41' E. long. It is bounded N.W. by the German Ocean; N. by the Elbe (which separates it from Holstein, Hamburg, and Mecklenburg); E. and S.E. by Prussia and Brunswick; S.W. by Hesse-Cassel, Lippe, and Prussia; and W. by Holland.

Area and Subdivisions.—The entire area of the kingdom of Hanover is about 14,830 square miles: the population in 1852 was 1,819,253. The following table shows the principal divisions (landdrosteien) of the kingdom, with the extent and population of each:—

Landdrosteien.	Capitals.	Area in Eng. Square Miles.	Population, Dec. 3, 1852.
Hanover	Hanover	2,330	349,958
Hildesheim	Hildesheim	1,722	367,883
Lüneburg	Lüneburg	4,340	338,764
Stade	Stade	2,624	279,834
Osnabrück	Osnabrück	2,414	261,965
Aurich	Emden	1,156	185,129
Clausthal	Clausthal	244	35,720
Total	14,830	1,819,253

Surface, Hydrography, Communications.—The southern principalities of Grubenhagen and Göttingen are mountainous: in the former are the **HARZ**, in the latter the Sollingerwald Mountains. The greatest elevation is the Königsberg in the Harz range, 3300 feet high. Lower ranges, uniting the Harz and Sollingerwald, traverse the greater part of Hildesheim and Calenberg; but from the cities of Hildesheim, Hanover, and Osnabrück, the whole country is one vast plain sloping gently to the sea-coast, with only occasional and not considerable elevations. The mountains abound in mineral wealth, and are covered with forests of red pine and fir, with some oaks and other timber. Between the mountains are the most fertile valleys, and where the country slopes from the mountains to the plain there is excellent arable land. Then follows a sandy tract, the Heath of Lüneburg, from 50 to 70 miles in breadth, which crosses the kingdom from east to west, and, where left to itself, is covered with heath, and in some places with fir. It is an elevated flat, broken only towards the north by sand-hills. In the lower tracts are great marshes, or peat moors, as the Bourtanger and the Saterland Moor on the Ems, and the Hoch Moor, which occupies the north-western angle of the kingdom. The low-country by the sea-coast is below the sea-level, and is protected by embankments and dykes similar to those of Holland. All this part of the country is alluvial, and numerous marine substances are found preserved in it.

The principal rivers are the **ELBE**, which receives the Jetze, Ilmenau, Este, and Oste; the **WESE**, the chief affluent of which in Hanover is the Leine; and the **EMS**, which receives in its course the Lütke; all these rivers empty themselves into the German Ocean. There are only two large lakes; the Steinhudermeer and the Dümmersee, which latter abounds in fish. In East Friesland is the subterraneous Lake Jordan, the surface of which is so thickly overgrown with vegetation that waggons can pass over it.

Hanover has several railways, all of which centre in the capital. The Hanover and Bremen line connecting those towns is 76 miles long. The Hanover and Hamburg railway, which runs to Harburg opposite Hamburg, is 106 miles long; and has a branch between Lehrte and Hildesheim 14 miles long, and a short branch to Harburg. The Hanover and Brunswick line has about 30 miles in Hanover. The Hanover and Minden line has about 35 miles in Hanover. Some other lines are in course of construction or projected.

Geology and Mineralogy.—The mountain regions belong mostly to the Silurian system: under this is granite, which in several places forms the surface rock. Flinty-slate and clay-slate, known as grauwacké, are the most prevalent strata. Above these are shales and limestone rocks; and in the hills between the Weser and the Leine carboniferous strata occur. The great sandy moors and plains are composed of the clays and sands of the Wealden formation, and abound in fossil animal and vegetable remains. Over these wide districts numerous granite boulders, many of very large size, are scattered.

The mineral riches of the kingdom are very important; mining forming a principal branch of the national industry. The more valuable metals are chiefly found in the Harz Mountains; the mines are worked by the government, and some in conjunction with the government of Brunswick. Gold is found, but in extremely small quantities. Lead, rich in silver, is worked largely in the neighbourhood of Clausthal and on the Brunswick border. Copper mines are worked in the same localities, and the ore is very productive. Zinc is also obtained. Iron-ore is widely diffused, and the ore is rich, but the works are much less productive than they might be rendered under a better system of working. Coal is found in several places between the Leine and the Weser. There are considerable salt mines.

Climate, Soil, Productions.—The climate is on the whole mild and temperate, differing of course according to the relative situation of mountain or plain, &c. The lower parts are moist, and fogs are frequent; but the winters are milder than in the interior. On the sea-coast violent hurricanes are not unfrequent during the winter. The prevailing winds are the north-west in winter, the east in spring, and the south-west in summer. The mean annual temperature of the kingdom is about 46° Fahr., at Lüneburg it is 48°, in the Harz district it is only 43°. The average annual fall of rain is about 23·5 inches.

On the whole, the soil is of inferior quality. The most fertile districts are the flat alluvial tracts at the mouths of the Elbe and Weser, and generally in those parts occupied by the Wealden clays. Next to these are the banks of the rivers and the narrow valleys and lower slopes of the mountain districts, especially where the limestone rocks prevail. Much of Arenburg is only fit for grazing. The broad belt of sandy heath is for the most part barren, but many hundred thousand acres of land susceptible of cultivation still lie waste; and a large part of the inferior soil is, owing to insufficiency of manure and the backward condition of agriculture generally, far from being rendered as productive as it might be. The excessive subdivision of the land, with the consequent smallness of the farms and inadequacy of capital, is said to be a principal cause of this inferiority in the state of agriculture. Still agriculture is the chief source of subsistence to the inhabitants, and more attention has been paid to its improvement by landowners and other influential persons within the last few years. Of the entire area of the country about two-fifths are returned as arable and meadow land; a somewhat larger amount is occupied

by waste land, lakes, and rivers; and the remainder, equal to 1,484,000 acres, is occupied by forests. The richest corn provinces are—Hildesheim, Göttingen, the south of Kalenberg, the lower part of Grubenhagen, the marsh lands on the Elbe, Jetze, Oste, Weser, Leine, and Aller, part of Osnabrück and East Friesland. Rye is generally grown for bread. Oats and barley are largely grown, and a good deal is exported to England. Potatoes are universally cultivated. Turnips are also generally grown. The country produces flax, tobacco, hops, fruit, pulse, &c.

In the marsh-land the breeding of cattle is more followed than agriculture. East Friesland has the finest breed of cattle: it possesses a very favourite breed of large-sized cows and oxen, has numerous sheep, and excellent horses, of which several thousand are annually exported to Italy and elsewhere. The total number of horses in Hanover is estimated at about 300,000; of cattle, 950,000; sheep, 1,650,000, producing annually some 3,225,000 lbs. of wool, of which two-thirds are exported. The immense heaths in the duchy of Lüneburg are partly used as sheep-walks, and when the heath is in blossom the keepers of bees go with their hives from the villages to the heath: the honey so obtained is valued at nearly 50,000*l.* per annum.

The Harz forests are chiefly of fir and pine; in Kalenberg, Bremen, and the Upper Weser they are chiefly of beech and oak. Large quantities of timber are annually exported.

Manufactures and Trade.—Manufactures are not carried on to any considerable extent. Thread and linen, hempen-cloth, bagging, &c., are manufactured, partly for exportation, at Osnabrück and some other places; and woollens and calicoes at Göttingen, Münden, and some other towns. There is no other manufacture of any consequence. The commerce of the kingdom, though considerable, is far from being what might be expected from its favourable situation and fine navigable rivers. It is chiefly confined to the exportation of the produce of the country and the importation of colonial articles, English manufactures, French silks, jewellery, and wines, fruits, &c. The principal commercial port is Emden; and Münden, at the junction of the Werra and the Fulda, has an active trade with the interior of Germany. There are four annual fairs at Hanover, and two at Osnabrück, to which goods are brought from the fairs of Brunswick, Leipzig, and Frankfurt.

Religion, Education.—The religion is the Protestant: of the inhabitants, 1,494,033 are Lutherans; 95,220, Calvinists; and 1071 of other sects, chiefly Mennonites and Moravians. There are 217,367 Roman Catholics, chiefly resident in Osnabrück and Hildesheim; and 11,562 Jews. There is a minister of religious worship and public instruction. The affairs of the Lutheran and Calvinistic (or Reformed) Churches are under separate consistories. The Roman Catholic Church is under two bishops. A good deal of attention is paid to education. A superior board in Hanover directs all matters relative to the schools. Hanover has a university at GÖTTINGEN; an academy for the equestrian order; several special academies or colleges, and central and normal schools; 17 gymnasias, attended by about 2250 pupils; 13 grammar schools, with 2000 scholars; and 3430 popular schools, attended by 215,000 scholars, in the towns and country, of which schools 3086 are Protestant and 344 Roman Catholic. There are besides numerous poorhouses, workhouses, and charitable institutions. Justice is administered by six district courts, one for each of the landdrosteien except Clausthal, and by the magistrates of the royal, manorial, and other minor courts.

Hanover is a limited monarchy, with two chambers. Besides the ministry there is a council of state. The revenue is chiefly derived from the royal demesnes and forests, the mines and salt-works, the tolls on the Elbe and Weser, the receipts on the railways, the post-office, direct (land, house, and income) taxes, indirect taxes, export, import, and transit duties, and state lotteries. The total estimated revenue for 1853-4 was 8,005,099 dollars (about 1,200,000*l.*); the total expenditure was estimated at 8,332,718 dollars (1,249,900*l.*); leaving a deficiency of 327,619 dollars (49,000*l.*). The national debt amounts to 36,522,887 dollars (5,473,000*l.*).

The military establishment is 18,500 infantry, 3720 cavalry, 1450 artillery, in all 23,670 regulars, besides the militia, or landwehr. All men able to bear arms, from the age of 17 to that of 50 without exception, are liable to serve in the landsturm, or local militia. There are 10 garrison towns. The manufactures connected with the army are—one of small-arms at Herzberg, one of gunpowder at Hersen, and a cannon-foundry in Hanover.

History.—In the remotest times of which we have any record the countries between the Elbe and the Weser were inhabited by small independent tribes of hunters and herdsmen. The Cherusci, celebrated for their victory over the Roman general Quintilius Varus, dwelt about the Harz and far into Westphalia; the Chauci were at the mouth of the Weser; the Longobardi, or Lombards, on both sides of the Elbe. When Charlemagne first introduced the Christian religion the country was in the power of the Saxons. Though subsequently, as the imperial power declined, many powerful lords, both spiritual and temporal, arose with almost despotic authority, yet the condition of the people improved; the mines of the Harz and the salt springs of Lüneburg were discovered, and a considerable traffic began, by which Bardowick and Ganderheim in particular profited. Otho the Great gave in 970 the investiture of the duchy of Saxony to Hermann Billung, a wealthy

lord in Lüneburg, in whose family it remained till the death of the last descendant, Magnus, in 1107. His successor, Henry the Black, duke of Bavaria, and brother of Guelf, or Welf, a prince of the north of Italy, marrying a princess of the house of Billing, obtained with her the duchy of Lüneburg, and afterwards acquired Brunswick, Göttingen, and other principalities.

The broils and troubles which continued for nearly a hundred years after the death of his son, Henry the Lion, rendered general the habit of living for security in fortified towns. Numerous little republics rose, several of which became considerable cities. The Hansatic League found great favour here, and of the 85 towns composing that celebrated confederation 13 were in the present kingdom of Hanover. We cannot trace the various partitions of territory which took place in consequence of the division of the Guelf family into different branches, all of which have however become extinct except those of Brunswick Wolfenbüttel and Brunswick Lüneburg, the latter of which succeeded to the throne of England on the death of Queen Anne in 1712. In consequence of this event the electors of Hanover continued to be kings of Great Britain till, on the death of William IV., the crown of Great Britain devolving on Queen Victoria, and the succession to the throne of Hanover being limited to the male line, the two countries were separated; and the Duke of Cumberland, eldest surviving brother of King William, ascended the throne of Hanover by the name of Ernest Augustus.

Hanover co-operated with Great Britain in the war of 1741, and in the Seven Years' War, which latter was peculiarly disastrous to it, as the country was through the whole time the arena of hostile armies, and suffered both from friends and foes. The tranquillity which Northern Germany enjoyed for nearly thirty years after the peace of Paris, 1763, and the vast increase of the commerce of England in North America, doubled the trade of Bremen, Hamburg, and Altona with the interior of Germany, which was still further augmented from 1792 to 1803 by the ruin of the commerce of France and Holland; and this trade being carried on from those sea-ports through Hanover, gave an extraordinary impulse to the prosperity of that kingdom.

From the spring of 1793 Hanover took part in the war with France, but in 1795 was included in the convention between France and Prussia for the neutrality of the north of Germany. Bonaparte took possession of Hanover in 1803, and treated it like a conquered country. In 1806 Prussia announced that Hanover had been ceded by France in exchange for Anspach, Cleves, and Neufchâtel, and was for ever incorporated with Prussia. Bonaparte however again took possession of it in the following year, and retained it till after the battle of Leipzig in 1813, when the whole electorate was restored to the lawful sovereign, who assumed in 1815 the title of King of Hanover, that of elector having ceased by the dissolution of the German empire. In 1819 a constitution was introduced with a general assembly of the estates of the kingdom in one chamber; and in 1833 a new constitution was agreed to by the estates, and sanctioned by King William IV., who however made various changes in fourteen of the articles. This constitution was abrogated by a proclamation of his successor Ernest on his accession to the throne, a proceeding which led to very serious disturbances. The present constitution is virtually the same as that of 1819.

HANOVER, a landdrostei, or province, in the kingdom of Hanover, in Germany, comprises the former principality of Kalenberg or Calenberg, and the counties of Hoya and Diepholz. It is bounded N. by the territories of Bremen and the province of Stade, from which it is separated by the Weser and the Aller; E. by the provinces of Lüneburg and Hildesheim; S. by Brunswick, Lippe, and Prussian Westphalia; and W. by Westphalia, the Hanoverian province of Osnabrück, and the grand duchy of Oldenburg. The area of the province is 2930 square miles, and the population, according to the census of December 3, 1852, amounted to 349,958.

The principality of *Kalenberg*, which forms the southern portion of the province, comprises the basin of the Lower Leine, which river drains its central and eastern part; and a part of the basin of the Weser, which crosses the south-west of the principality and again touches its north-western border. The southern part of the principality is traversed by numerous offsets from the Harz Mountains, the highest ridges being the Deister Hills to the south-west of the city of Hanover, and the Süntel Hills farther west, near a detached territory of Hesse-Cassel. The plain between these two ranges is celebrated for one of the exploits of the Saxon hero, Wittekind, who here surprised and annihilated one of Charlemagne's armies in A.D. 782. A large sepulchral mound and remains of the Saxon entrenchments still mark the scene of the engagement. The northern districts are level, in parts marshy, but in general well adapted for agriculture, with the exception of Gess Moor, a large region of bog which extends to the north of the town of Hanover, between the Fuhse, the Leine, and the Aller. Another moor lies westward of this, between the Leine and the Weser. Wheat, rye, barley, oats, flax, potatoes, and colza are the principal crops. Some beet-root for making sugar, tobacco, and hemp are also grown. There is a good breadth of meadow and pasture land, and a considerable number of horned cattle and sheep are reared. Timber is abundant in the mountainous districts in the south-west of the province. Great quantities of turf are cut in the bogs for fuel. The principality takes its name from the village of

Kalenberg, on the left bank of the Leine, 12 miles S. from Hanover. On the right bank of the river are the ruins of an old castle, once the residence of the princes of Kalenberg. HANOVER is the chief town of the province and of the kingdom. *Hamelu*, a town on the left bank of the Weser, in the south-west of the province, 25 miles from Hanover, has about 7000 inhabitants. It is situated in 52° 5' 29" N. lat., 9° 20' 18" E. long., and is an important position, as it commands the navigation of the Weser. It is surrounded by a wall, and was formerly defended also by a citadel called Fort George, on the left bank of the river, but this the French blew up in 1806. The town though small has some large public buildings, including two Lutheran churches, a Calvinist meeting-house, and a monastery. Its position on a navigable river and on one of the high roads leading from Hanover to the Rhine, make it a place of some commercial activity. The inhabitants find occupation in the river trade, in the salmon fishery of the Weser, and in the tan-yards, breweries, distilleries, and pipe and tobacco factories of the town. A good river harbour was formed here in 1734 by the construction of a large sluice.

About 12 miles higher up the Weser, and inclosed by Brunswick, is the isolated district of *Bodenwerder*, belonging to the province of Hanover. The little walled town of Bodenwerder is built on an island in the Weser, and has about 1500 inhabitants. A little higher up the Weser, on its left bank, and touching Westphalia, is another outlying district of the province named *Polle*, with a small town of the same name and of about 1000 inhabitants.

The county of *Hoya* lies west of the principality of Kalenberg, and comprises the most north-western part of the province between the Weser, Oldenburg, and the republic of Bremen. The river Hunte separates it for a few miles from Oldenburg. The other rivers are the Aue, which runs east across the southern portion of the county, and joins the Weser on the left bank a little above Niemburg; and the Dehme, another feeder of the Weser, which drains the north-west district. The surface of the county is almost a dead flat, consisting for the most part of marshy and sandy wastes. The best land is along the rivers, where the soil consists of a rich fertile loam. The farm products are similar to those mentioned above. Horned cattle, light horses, pigs, and sheep are reared. Honey is abundant, especially in the moors, where the heath is said to be very attractive to the bees. There is a considerable portion of forest land, from which and the peat bogs the inhabitants obtain fuel. Linen and linen-yarn are the only industrial products properly so called. The county is named from the old castle and town of *Hoya*, situated on the left bank of the Weser, 40 miles N.W. from Hanover. Hoya is a market-town with about 2000 inhabitants, and some trade on the Weser, which is here crossed by a bridge. The capital of the county is *Nienburg*, situated 35 miles by railway N.W. from Hanover, on the right bank of the Weser, which is here crossed by a stone bridge. It was formerly fortified, but its defences have been dismantled. There are two churches, an hospital, and about 5000 inhabitants, who manufacture vinegar and linen, and trade in wood and coal.

The county of *Diepholz* is a small territory lying south-west of the county of Hoya, and like it presents a heathy marshy surface, interspersed with some fertile spots on which hemp and flax are grown, and diversified in the west and south by a few undulations. It is drained by the Hunte, which forms the outlet of the Dummersee, the largest lake in the whole province, situated close to the Oldenburg frontier. Near the lake there is good pasture land. Many of the marshes in this part of the province have been drained by canals after the Dutch fashion, and converted into arable land. The chief town of the county, *Diepholz*, stands on the right bank of the Hunte, 35 miles W. from Nienburg, and has about 2500 inhabitants.

The province is traversed by various railroads leading from the city of Hanover to Brunswick, Harburg, Bremen, Minden, Hildesheim, and Gottingen. [HANOVER, Kingdom of.]

HANOVER, the capital of the kingdom of Hanover, is situated in 52° 22' N. lat., 9° 42' E. long., in an agreeable, well-cultivated plain, on the river Leine, which is navigable from the city to its junction with the Weser; it contains with the suburbs about 40,000 inhabitants.

The city consists of three parts—the Old Town, the Egidian New Town, and the New Town on the left bank of the river. In the Old Town the streets are for the most part crooked and narrow, and the houses old-fashioned and irregular, but the two other parts are handsome and regularly built, the city having been much improved since it has become the permanent residence of the king. Outside of the walls are two suburbs, the Linden and the Gartengemeinde. The most interesting public buildings are the royal palace, with the opera-house and palace church, the viceroy's palace, the landstände-haus (meeting-house of the chambers), the mint, the arsenal, the royal mews, the town-hall (a fine old gothic edifice, with a good library of 40,000 volumes), and the royal library with the archives. Hanover has also Lutheran, German, and French Calvinist, and Roman Catholic churches, and a synagogue. Among the charitable institutions are the Orphan Asylum, infirmaries, hospitals, and poor-houses. For the purposes of education there are the Georgianum (a collegiate establishment for the sons of nobles), a lyceum, an industrial school, many elementary schools, and a seminary for schoolmasters; also scientific, artistic, and other societies. The manufactures are nume-

rous, but not of much consequence; the trade is extensive. The commercial institutions are an exchange, a chamber of commerce, and a market for mining produce. In the neighbourhood are the royal country palace of Montbrillant and the royal palace of Herrenhausen, the grounds of both of which are very famous.

Hanover was founded at the latter end of the 11th century, and in 1203 was assigned to the eldest son of Henry the Lion. In 1641 Duke Christian Louis took up his abode in the palace which had been lately erected, and it has ever since been the residence of the prince, and the capital of the country. In 1725 the alliance between England, France, and Prussia was concluded here: and in 1745 the convention which preceded the peace of Dresden. The walls, with five gates, and broad ditches, were partly levelled in 1780, and laid out in streets, and the remainder converted into a handsome esplanade, on which are the marble bust of Leibnitz, placed under a cupola in the antique style, and the Waterloo Column, 162 feet high, with the figure of Victory on the summit.

HANWELL. [MIDDLESEX.]

HARAMAT MOUNTAINS. [ABYSSINIA.]

HARBOROUGH, MARKET. [MARKET HARBOROUGH.]

HARBOUR ISLAND. [BAHAMAS.]

HARBURG, a sea-port town in the kingdom of Hanover, province of Lüneburg, is situated on the left bank of the southern arm of the Elbe, opposite Hamburg, 106 miles by railway N. from the city of Hanover, and has about 8000 inhabitants. It is surrounded by walls and defended by a citadel, which also commands the passage of the Elbe. There are two churches, an hospital, a gunpowder factory, sugar refineries, tanyards; manufactories of woollen stuffs, linen, and hosiery; and an active transit trade with Hamburg and the countries south of the Elbe. The timber trade of Harburg also is extensive. A steam ferry affords frequent and rapid communication with Hamburg. As sea-going vessels could not formerly be brought alongside the quays, goods were usually trans-shipped at Hamburg or Altona and brought thence to Harburg in lighters; but simultaneously with the construction of the railway from Hanover to Harburg (which, it may be added, connects the port with all the principal commercial towns of Germany) the harbour was deepened and enlarged so as to afford accommodation for 500 vessels, which may now land their cargoes on the wharfs. The depth of the channel between Harburg and Altona is 10 feet at low and 15 feet at high water. The port extends to the railway goods-station, and merchandise is lifted by a crane out of the hold of vessels and placed on the train. The improvement of the harbour, the completion of the railway, and the declaration of the freedom of the harbour in 1850 gave a great impetus to the commerce of Harburg, which still continues to improve, although the freedom of the port was suppressed in 1853 by the commercial treaty with Austria and Prussia. The distance to Hamburg across the Elbe is four miles and a half.

HARDINGSTONE, Northamptonshire, a village and the seat of a Poor-Law Union, in the parish of Hardingstone, is situated in 52° 13' N. lat., 0° 52' W. long., distant 2 miles S. by E. from Northampton, and 62 miles N.W. from London. The population of the parish in 1851 was 1196. The living of Hardingstone is a vicarage in the archdeaconry of Northampton and diocese of Peterborough. Hardingstone Poor-Law Union contains 19 parishes and one hamlet with an area of 32,560 acres, and a population in 1851 of 9,156. Besides the parish church, which is partly of early English style, there are a National school for boys and an Infant school. In the parish, on an eminence near the road from London to Northampton, is one of the crosses erected in memory of Queen Eleanor by Edward I. It is octangular and richly ornamented.

HAREWOOD. [YORKSHIRE.]

HARFLEUR. [SWINE INFÉRIEURE.]

HARLECH. [MERIONETHSHIRE.]

HARLOW. [ESSEX.]

HARO. [CASTILLA LA VIEJA.]

HAROLD'S CROSS. [DUBLIN, County of.]

HARPER'S FERRY. [VIRGINIA.]

HARRINGTON. [CUMBERLAND.]

HARROGATE, HARROWGATE, or HIGH HARROGATE, West Riding of Yorkshire, a small town and watering place in the parish of Knaresborough, is situated in 54° N. lat., 1° 31' W. long., distant 20 miles W. by N. from York, 203 miles N.N.W. from London by road, 196 miles by the Great Northern line of railway, and 222 miles by the London and North-Western line. The population of the town of Harrogate was 3678 in 1851. The living is a perpetual curacy in the archdeaconry of Richmond and diocese of Ripon. The local government is in the hands of 21 commissioners.

Harrogate rose into notice in the early part of the last century, in consequence of the reputed efficacy of its medicinal springs. It is now one of the principal watering places in the north of England. Harrogate is usually thronged with visitors during the season, which commences in May and continues till September. The town is lighted with gas. The church at High Harrogate, a neat early English structure, was consecrated about 20 years back. The Independents, Wesleyan Methodists, and Wesleyan Reformers have places of worship: there are in Harrogate British and National schools, and an Infant school; and at Bachelors Gardens, about a mile and a half

distant, is a small Endowed school. A mechanics institute is in the town. The Bath Hospital will accommodate about 100 patients. This institution is for the benefit of poor invalids. The mineral springs are of different qualities, sulphureous, chalybeate, and saline aperient. The principal sulphur well is in Low Harrogate, about half a mile from High Harrogate.

HARROLD, Bedfordshire, a market-town in the parish of Harrold, is situated near the Northamptonshire border on the banks of the river Ouse, in 52° 13' N. lat., 0° 36' W. long., distant 9 miles N.W. from Bedford, and 59 miles N.N.W. from London by road. The population of the parish of Harrold in 1851 was 1083. The living is a vicarage in the archdeaconry of Bedford and diocese of Ely. The parish church, which has been recently repaired, has a handsome spire. There are a chapel for Independents, a National school, and almshouses for six widows. The market-house is a neat building. Lace is manufactured to a small extent: malting, brewing, brick-making, and glove-making are carried on. Tuesday is the market-day: fairs are held on the second Tuesday of May and October 11th.

HARROW. [MIDDLESEX.]

HARTFORD. [CONNECTICUT.]

HARTINGTON. [DERBYSHIRE.]

HARTISMERE, a hundred in the county of Suffolk which has been constituted a Poor-Law Union. Hartismere hundred is bounded N. by Norfolk, S. by the hundred of Stow, E. by the hundred of Hoxne, and W. by the hundred of Blackbourn. The hundred contains an area of 49,895 acres, and a population in 1851 of 16,441. Hartismere Poor-Law Union contains 32 parishes and townships, with an area of 53,530 acres, and a population in 1851 of 18,850.

HARTLAND. [DEVONSHIRE.]

HARTLEPOOL, Durham, a sea-port and market-town in the parish of Hartlepool, is situated in 54° 41' N. lat., 1° 11' W. long., distant 20 miles E.S.E. from Durham, 253 miles N. by W. from London by road, and 264 miles by the Great Northern, and York Newcastle and Berwick railways. The population of the borough and parish in 1851 was 9503. The living is a perpetual curacy in the archdeaconry and diocese of Durham. The town is governed under a charter of Queen Elizabeth by a mayor, recorder, and 12 capital burgesses. For sanitary purposes it is under the management of a Local Board of Health.

Hartlepool is built on a small peninsula jutting out into the sea a few miles from the mouth of the river Tees: the peninsula is partly formed by a pool called the Slake, which is dry at low water, into which flows a small beck. A monastery at this place is mentioned by Bede. The Normans called the place Hart-le-pool, the pool or slake of Hart, whence the modern name. King John erected it into a borough by charter in 1200, and granted to Robert Bruce, who was its superior, a weekly market and a yearly fair. In the 13th century the walls were erected, and a haven of nearly 12 acres formed. Of the walls some portions still remain. The old haven is disused. The present harbour is formed by a pier run out on the south side of the town: it is easily accessible, and affords a safe retreat in rough weather. Laden vessels under 100 tons can be accommodated in the harbour. A lighthouse stands on Garrison point, and life-boats are maintained by subscription.

The town consists of one principal and several smaller streets. The town-hall was erected about a century ago. Extensive docks have been recently constructed, and in connection with railways which enter the town afford great facilities for the trade of the district, particularly in the shipment of coal. The West Harbour Dock, about half a mile westward from the town, is extensive, affording accommodation for a large number of vessels. There is an extensive take of fresh fish at Hartlepool. Turbot is sent to the London markets. Many tons of fish are salted for exportation. Saturday is the market-day. Fairs are held on May 14th, August 21st, October 9th, and November 27th. Hartlepool is visited in summer by numerous families for bathing.

The parish church, dedicated to St. Hilda, is chiefly in the early English style. It occupies an elevated site at the south-east end of the town; the south door has some late Norman enrichments. At the west end is a tower with an embattled parapet and crocketed pinnacles; it is supported by very large and bold flying buttresses. The Baptists, Independents, United Presbyterians, Wesleyan and Primitive Methodists, and Roman Catholics have places of worship. A Seamen's Bethel is maintained in Victoria Dock. There are two Free schools, National schools, a Roman Catholic school, a mechanics institute, a news-room, and a savings bank. A county court is held in the town. On the town moor are the remains of a breast-work, and along the shore the remains of some batteries.

The number and tonnage of vessels registered as belonging to the port of Hartlepool on December 31st, 1853, were:—Under 50 tons 3, tonnage 17; above 50 tons 124, tonnage 26,777; steam-vessels 6, tonnage 124. The vessels which entered and cleared at the port during 1853 were:—Coasting trade, inwards, sailing-vessels 327, tonnage 25,407; steam-vessels 16, tonnage 605; outwards, sailing-vessels 6584, tonnage 854,174; steam-vessels 30, tonnage 7533. Colonial and foreign trade, inwards, sailing-vessels, British 409, tonnage 75,868; foreign 652, tonnage 98,858; outwards, British 639, tonnage 124,368; foreign 1624, tonnage 214,344. Foreign trade, steam-vessels, British,

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inwards 17, tonnage 3802; outwards 21, tonnage 4988. The amount of customs duties received at the port in 1851 was 6690*l.* 2*s.* 2*d.*

When Bruce declared his pretensions to the Scottish crown his English possessions were forfeited, and the borough of Hartlepool was granted to the Clifford family, by which it was long held. It was plundered by the Scots in 1312, and again taken by them in 1315, a year after the battle of Bannockburn. Hartlepool furnished five ships and 145 seamen to the fleet of Edward III. before Calais. In the northern rebellion under the Earls of Northumberland and Westmoreland, in the time of Elizabeth, Hartlepool was taken by the rebels. The Scottish army, which came to the aid of the Parliamentarians in the civil war of Charles I., took Hartlepool in 1644: it was retained by them till 1647, when they evacuated it, and it was occupied by a garrison of Parliamentarians.

HARTLEY. [NORTHUMBERLAND.]

HARTLEY-WINTNEY, Hampshire, a village and the seat of a Poor-Law Union in the parish of Hartley-Wintney, is situated in the north-eastern corner of the county, in 51° 18' N. lat., 0° 53' W. long., distant 26 miles N.E. from Winchester, and 38 miles S.W. by W. from London by road. The population of the parish of Hartley-Wintney in 1851 was 1582. The living is a vicarage in the archdeaconry and diocese of Winchester. Hartley-Wintney Poor-Law Union contains 13 parishes and townships, with an area of 37,168 acres, and a population in 1851 of 11,230. Coach-building and tanning are carried on. Fairs are held on Shrove-Tuesday and June 29th.

HARWICH, Essex, a seaport, market-town, and municipal and parliamentary borough, in the parish of Dovercourt, is situated on the extremity of a spit of land that projects into the estuary formed by the Stour and the Orwell, in 51° 57' N. lat., 1° 17' E. long.; 15 miles N.E. by E. from Colchester, and 66 miles N.E. from London: the population of the borough was 4451 in 1851. The parliamentary borough, which was created in 1318 by Edward II., returns two members to the Imperial Parliament; a privilege which it has more than once forfeited. The municipal borough is governed by 4 aldermen and 12 town councillors, one of whom is mayor.

The town stands on an elevated site in a pleasant and healthy situation. It chiefly consists of three principal streets, which are well paved and lighted with gas. The church of St. Nicholas, a large brick structure in the perpendicular style, with stone buttresses and steeple, was erected in 1821. The parish church of Dovercourt, which is in the decorated style, is situated two miles from Harwich on the Colchester road. There are chapels for Independents, Wesleyan Methodists, and Baptists. An esplanade, from which fine views of the harbour and the German Ocean are obtained, extends above a quarter of a mile southward from the town to Beacon Hill. A little east of the esplanade is a martello tower, and between this and the town on the north are two lighthouses to guide vessels into the harbour. Roman cement is manufactured in large quantities at Harwich from a particular kind of stone which is found imbedded in the London clay, and is dredged at the entrance of the harbour. There is a manufactory of fossil manure called coprolite. Ship-building and the fisheries give employment to many hands. There is a well-supplied royal dockyard at Harwich, and the property under the Ordnance department is extensive. Steamers ply to London during the summer. There is also daily communication by steam-vessel with Ipswich. A branch railway to Harwich from the Manningtree station of the Eastern Counties line is nearly completed. In the town are National schools for boys and girls; a Corporation Free school for 32 boys; a savings bank; baths; a royal yacht club and reading-rooms; and a custom-house. Fairs are held on May 1st and October 18th; weekly markets on Tuesday and Friday.

The harbour, which is formed by the junction of the Stour and the Orwell, is protected on the east by Landguard Point, a promontory from the Suffolk coast, and on the south by the Beacon Cliff. Between these two points lie the entrances to the harbour, which are commanded by Landguard Fort, erected in the reign of James I. The continued removals of the cement stone from the London clay, of which the Beacon Cliff is composed, have caused successive falls in the cliff to such an extent that since the beginning of the 18th century the low water-mark has gained full 600 feet on the Essex shore, and the harbour has been almost totally deprived of the shelter of the natural breakwater formed by the cliff. Landguard Point, against which the barrier formed by the Beacon Cliff tended to shoot the ebb tide, has by the deposit of shingle and beach advanced full 800 feet south of its former termination, and the main channel, which lies close under the Suffolk shore, was thus reduced to very narrow dimensions. In accordance with the Report of a Commission appointed in 1844, Harwich has been made a harbour of refuge. The works have cost upwards of 100,000*l.* The commissioners state that "Harwich harbour is remarkably well situated for the convenience of a north sea squadron, and for the protection of the mouth of the Thames. It is the only safe harbour along this coast, and is in the direct line of traffic between the Thames and the northern ports of the kingdom as well as of the trade from the north of Europe."

The number and tonnage of vessels registered as belonging to the port of Harwich on December 31st, 1853, were as follows:—Under 50 tons 72, tonnage 2170; above 50 tons 54, tonnage 5171. The number and tonnage of vessels entered and cleared at the port during

1853 were:—Coastwise, inwards, 584, tonnage 41,988; outwards, 424, tonnage 19,000: colonial and foreign trade, inwards, 80 vessels, 6185 tons; outwards, 178 vessels, 10,644 tons.

HARZ MOUNTAINS, the most northern mountain range in Germany, occupies an area of above 1000 square miles, between 51° 30' and 52° N. lat., 10° and 11° 30' E. long. It lies nearly parallel to the Frankenwald and Thüringerwald, and about 60 miles from it, and runs east-south-east and west-north-west. Its length is about 55 miles, its mean width about 19 miles.

On the north and south the Harz Mountains rise with a rather steep ascent; on the east they sink into an elevated plain, and on the west pass gradually into the hilly tract which joins it in that direction. A line drawn from Ilsenburg over the Brocken, the Achtermannshöhe, and the Bruchberg, divides the whole range into two parts, of which the eastern and lower is called the Lower Harz, and the western and higher the Upper Harz. The same line separates the waters which run to the Elbe and Weser respectively. No continuous ridge is observable. The range consists of an assemblage of irregular mountain summits, with generally level tops, and nearly all covered with earth and with trees. A few of the summits, which consist of granite and hornblende, are bare, and rise higher and with a steep ascent. The highest summits are—the Brocken, 3740 feet, the Königsherg, 3420 feet, the Bruchberg, 3420 feet, the Achtermannshöhe, 2880 feet, and the Warmberg, 3080 feet above the sea-level. The valleys, some of which are wide, and others very narrow, lie in every direction. The forests are mostly composed of pine, except to the east, where the mountains are lower, and covered with elms, ash, oak, and beech. The higher parts are covered with snow from October to May.

The nucleus of the Harz is granite, which however is generally covered with porphyry and silurian rocks as grauwacké, clay-slate, limestone, gypsum, and sandstone. In the western districts are rich lead-mines, which produce a considerable quantity of silver, and some copper mines: in the eastern districts iron-ore is abundant. There are some remarkable caverns in the range, as the Baumanns-Höhle near Elbingerode, a series of six chambers 800 feet long, the entrance to which is 136 feet above the bed of the little river Bode, which runs at the foot of the mountain: this cavern is much visited on account of the fine stalactites it contains.

The connection between the Harz Mountains and the Thüringerwald is formed at the western extremity of both ranges by an elevated table-land lying south of the Harz, called the Eichsfeld, whose surface is perhaps 1500 feet above the sea-level. The western extremity of the Harz Mountains is connected with a hilly country, which extends beyond the Weser to the Egge range, east of Paderborn. The hills which occupy this district rarely rise to the elevation of mountains, except in the Solling, where the Moosberg attains 1680 feet.

HASLEMERE. [SURREY.]

HASLINGDEN, Lancashire, a market-town, and the seat of a Poor-Law Union, in the parish of Whalley, is situated in 53° 43' N. lat., 2° 20' W. long., distant 36 miles S.E. from Lancaster, 204 miles N.W. by N. from London by road, and 206 miles by the North-Western and East-Lancashire railways. The population of the town of Haslingden in 1851 was 6154. The living is a perpetual curacy in the archdeaconry and diocese of Manchester. Haslingden Poor-Law Union contains 10 townships, with an area of 26,711 acres, and a population in 1851 of 50,424.

Haslingden is situated on an eminence; the newer part of the town being built about the base of the hill. The town is lighted with gas. The town-hall is a new building. The parochial chapel, a large and handsome edifice, was rebuilt, except the tower, near the close of last century. The font is about 300 years old. There are places of worship for Baptists, Independents, Wesleyan and Primitive Methodists, Quakers, and Mormons; National schools, a school supported by Wesleyan Methodists, and a mechanics institute with a library. Petty sessions and a county court are held in the town. The woollen, cotton, and silk manufactures are extensively carried on. Flannel is largely manufactured. Several coal mines and stone quarries are in the vicinity. Wednesday and Saturday are the market-days. Two great fairs are held on May 8th and October 3rd.

(Communication from Haslingden.)

HASSELLT. [LIMBURG.]

HASTINGS, Sussex, a market-town, municipal and parliamentary borough, cinque port, and the seat of a Poor-Law Union, is situated in 50° 51' N. lat., 0° 35' E. long., distant 70 miles E. by N. from Chichester, 64 miles S.E. by S. from London by road, 76 miles by the London and South-Coast railway, and 74 miles by the Tunbridge Wells and Hastings branch of the South-Eastern railway. The population of the municipal borough of Hastings in 1851 was 16,966; that of the parliamentary borough was 17,011. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. For sanitary purposes the borough is under the management of a Local Board of Health. The livings are in the archdeaconry of Lewes and diocese of Chichester. Hastings Poor-Law Union contains 13 parishes, with an area of 12,645 acres, and a population in 1851 of 21,215.

Hastings is a town of considerable antiquity. Mr. Dallaway, in his 'History of Western Sussex,' says that "In 893 the Danes in 250

ships, commanded by the pirate Hastings, landed at the mouth of the river Rother, near Romney Marsh, and immediately possessed themselves of Apuldore, where, and at Hastings (so called from their leader) they constructed forts and ravaged all the coast to the westward of the country." A more probable opinion however is that suggested by Mr. Kemble in his 'Saxons in England,' that it was the fortress, and probably at one time the town, of a tribe called the Hæstingas. In 924 it was of sufficient importance to have a mint. Hastings has returned two members to Parliament since the reign of Edward III. As one of the cinque ports it ranks next in importance to Dover.

The town is pleasantly situated on the sea-coast, in a hollow, sheltered on every side, except the south, by lofty hills. It consists principally of two streets, separated by the Bourne, a small stream which here falls into the sea. To the westward of the town, upon a lofty cliff, are the ruins of an ancient fortress. The town is lighted with gas, and paved. The more recent streets, squares, and terraces are well built, and have many good houses. The climate is mild, and the place has of late years been much resorted to during the bathing season by invalids and others, for whom commodious hotels, baths, libraries, and reading rooms, a theatre, an arcade, &c., have been provided. A spacious terrace, called the Marine Parade, runs along the sea-front of the town, joining the Grand Parade of St. Leonard's-on-Sea. There are two ancient churches, All Saints, erected in the early part of the 14th century, and St. Clements, erected in the 14th and 15th centuries. The church of St. Mary-in-the-Castle is modern. The Wesleyan Methodists, Independents, Countess of Huntingdon's Connexion, Baptists, and Roman Catholics have places of worship. There are National, British, and Infant schools. Saunders's school, founded in 1708, the endowment of which was stated to be 70*l.* a year in 1837, is under the patronage of the corporation. A Grammar school, founded in 1844, had 5 boarders and 40 day pupils in 1852. There are a mechanics institution, a savings bank, and numerous benevolent associations. The town-hall is a neat structure supported on arches, with a market-place beneath it. The other public buildings are a custom-house, a jail, dispensary, &c. The prosperity of the town is now to a great extent dependent on visitors. The chief occupation is that of fishing, which employs about 90 boats, and a considerable number of the male population. Many persons are engaged in boat-building, and in lime-burning. A market for corn is held on Saturday; one for poultry and provisions is held daily; and a fish-market is generally held every day on the beach. Fairs are held on Whit-Tuesday, July 26th, and November 23rd.

St. Leonard's-on-Sea, was originally above a mile to the west of Hastings, but the towns are now in fact united. In the Census returns, the population of St. Leonard's is included with that of the borough of Hastings. St. Leonard's is a new town, which was commenced about 1828 for visitors who found difficulty in procuring accommodation at Hastings. The chief feature in St. Leonard's is the Marina, a handsome range of buildings about 500 feet in extent, with a covered colonnade of the same length, which stretches along the sea-front of the town. There are many other well-built terraces and detached villas, besides assembly-rooms, bath-houses, and spacious hotels. The church will accommodate 900 persons. The Wesleyan Methodists and Independents have chapels; and there are National and Infant schools, a literary and scientific institute, and a mechanics institute. The Grand Parade is joined to the Marine Parade of Hastings, and together they form one of the finest sea-walks in the kingdom. In the vicinity are many picturesque walks.

HATFIELD. [ESSEX.]

HATFIELD, or **BISHOP'S HATFIELD**, Hertfordshire, a market-town and the seat of a Poor-Law Union, in the parish of Hatfield, is situated in 51° 46' N. lat., 0° 12' W. long., distant 7 miles W.S.W. from Hertford, 19 miles N.N.W. from London by road, and 17½ miles by the Great Northern Railway. The population of the parish of Hatfield in 1851 was 3862. The living is a rectory in the archdeaconry of St. Albans and diocese of Rochester. Hatfield Poor-Law Union contains 4 parishes, with an area of 23,157 acres, and a population in 1851 of 6274.

The town of Hatfield lies on the slope of a hill on the high north road, and consists of a principal street intersected by a smaller one. The bishops of Ely had a palace here, which with the manor was seized by Henry VIII.: the palace was the residence of Prince Edward, afterwards Edward VI., immediately before his accession. The Princess (afterwards queen) Elizabeth was here under the charge of Sir Thomas Pope during the latter part of the reign of her sister Mary, and held her first privy council here. The palace and manor were given by James I. in exchange for Theobalds, at Cheshunt, to Sir Robert Cecil, afterwards earl of Salisbury, in whose family they have since continued. The gateway and west end of the old palace are still standing. Hatfield House was built by Sir Robert Cecil, and is a fine specimen of the architecture of the Elizabethan period. It was almost destroyed by fire in 1835, but was rebuilt by the present Marquis of Salisbury. The grounds are very fine. The parish church, an edifice of the 13th century, consists of a nave, chancel, and aisles, with an embattled tower, which has been surmounted with a handsome new spire. The Independents and Methodists have places of worship. National and Infant schools, a reading-room, and a literary

institute are in the town. There is a market on Wednesday for corn and provisions, and two fairs are held yearly.

(Communication from Hatfield.)

HATHERLEIGH. [DEVONSHIRE.]

HATHERSAGE. [DERBYSHIRE.]

HATTERAS, CAPE. [CAROLINA, NORTH.]

HAUGHLEY. [SUFFOLK.]

HAUTEFORT. [DORDOGNE.]

HAUTEVILLE. [AIN.]

HAVANNA (*Habana*), a flourishing commercial town, with the best harbour in the West Indies, or perhaps in the world, stands on the north coast of the island of Cuba, in 23° 8' 15" N. lat., 82° 22' 5" W. long., and has a population, including the garrison, of 150,000, about 25,000 of whom are slaves, and the remainder whites and free blacks, in the ratio of 2 to 1. A channel half a mile long, 850 yards broad, 8 to 10 fathoms deep, and without bar or obstruction of any sort, leads to the harbour, which is formed by a magnificent bay nearly three miles long and half as much in width, sheltered by hills from every wind, and capable of accommodating 1000 ships of the largest size, vessels of the greatest draught coming close up to the quays. The city is built along the entrance to and on the west side of the basin. In the city the streets are narrow and dirty, but in the suburbs, which are now larger than the city, they are wide and well laid out. Of late years too all parts of the town are much improved in cleanliness, and less unhealthy in summer than formerly. The entrance to the harbour is defended by two strong fortresses, El Morro and La Punta, and a continuous series of batteries runs along both shores. The city also, which is entered by three gates, is defended by a strong citadel; and fortifications have been erected on all the neighbouring heights. In general the houses are of only one story, but of very solid construction; the windows are unglazed, and always kept open on account of the heat of the climate. Among the finest public buildings are the cathedral (in which the remains of Columbus now lie, having been removed hither from San Domingo in 1795) and eleven other churches. Other large structures, more remarkable for solidity than elegance, are—the two hospitals, the residence of the captain-general near the citadel, the naval arsenal, the post-office, and the great tobacco factories. Havanna is the seat of a bishop, has a university, an ecclesiastical college, a theatre, a botanic garden, a circus for bull-fights, and three fine promenades—one along the ramparts, one within the town, and a third without the walls (Paseo Extra-Muros.)

A glance at the map shows the great importance of Havanna in a political point of view, commanding as it does both the inlets to the Gulf of Mexico. Among the commercial cities of the western hemisphere it ranks inferior only to New York, and for a long period it engrossed the whole foreign trade of Cuba, but since 1809, when the old colonial system of Spain was relaxed, Matanzas has obtained a considerable share of the commerce of Cuba. The principal articles of export are sugar, coffee, copper-ore, raw tobacco and cigars of the best quality, molasses, and the precious metals. Other exports are—mahogany, cedar, rum, cocoa, cotton, wax, hides, fruits and preserves, honey, dye-stuffs, &c. The imports comprise flour, corn, salt, provisions, cotton manufactures, linen, hardware, silk, wine, bullion, spices, leather, butter, lard, cheese, deals, caaks, hoops, &c. The trade of Havanna extends to all the countries of Europe and America, but chiefly to Spain, the United States, and England. The exportation of sugar from Havanna and Matanzas in 1849 amounted to 847,676 boxes; in 1850 to 1,041,661 boxes; and in 1851 to 1,242,252 boxes of 400 lbs. each. Besides cigars, chocolate, some woollen goods, and straw hats are manufactured. Between 1000 and 2000 ships are engaged in the trade of Havanna. The town is joined to Matanzas by railroad. It was founded in 1511 by Velasquez on what was called the port of Carenas. [CUBA.]

HAVANT, Hampshire, a small market-town and the seat of a Poor-Law Union, in the parish of Havant, is situated near the head of Langston harbour, in 50° 50' N. lat., 0° 59' W. long., distant 22 miles E. by S. from Southampton, 66 miles S.W. by S. from London by road, and 88 miles by the London, Brighton, and South-Coast railway. The population of the parish of Havant in 1851 was 2416. The living is a rectory in the archdeaconry and diocese of Winchester. Havant Poor-Law Union contains 6 parishes, with an area of 14,379 acres, and a population in 1851 of 7214. The parish church is a cruciform edifice, with a tower rising from the intersection; some parts of it are of Norman date. It contains a fine brass of William of Wykeham's chancellor: in the chancel is some good modern stained glass. The Independents have a chapel, and there are National, Infant, and British schools, and a savings bank. Some parchment is made in the town. The market is on Saturday, and there are two yearly fairs.

HAVEL. [BRANDENBURG.]

HAVERFORDWEST, the capital of Pembrokeshire, South Wales, a market-town, sea-port, municipal and parliamentary borough, a county in itself, and the seat of a Poor-Law Union, occupies a picturesque situation on the West Cleddy River, in 51° 47' N. lat., 4° 47' W. long., distant 251 miles W. by N. from London. The population of the town and county of the town of Haverfordwest in 1851 was 6580. The borough is governed by 4 aldermen, and 12 councillors, one of whom is mayor; and, in conjunction with the boroughs of

Fishguard and Narberth, returns one member to the Imperial Parliament. The livings are in the archdeaconry and diocese of St. David's. Haverfordwest Poor-Law Union contains 63 parishes and townships, with a population in 1851 of 38,633.

Haverfordwest was a principal station of the Flemings who settled in the district in the reign of Henry I. Of the ancient castle of Haverfordwest the keep has been converted into a jail for the county and town. The guildhall and market-house are good buildings. The town is irregularly laid out, but contains many good modern houses; it is lighted with gas and paved. There are several picturesque walks around the town. The residents are in general shopkeepers, mechanics, and persons of moderate fortunes. There are four churches, two of which have been recently repaired at a considerable expense; chapels for Baptists, Independents, Moravians, Wesleyan Methodists, and Welsh Methodists; National and British schools; a literary institute; a savings bank; a dispensary; and several charitable societies. A county court is held. Haverfordwest is a creek of Milford Haven. Stone-coal, broken small and made into balls with clay, is much used for fuel. Markets are held on Tuesday and Saturday, and eight fairs in the course of the year. Near Haverfordwest are some remains of a priory of Black Canons.

HAVERING-ATTE-BOWER. [ESSEX.]

HAVRE, or HAVRE-DE-GRACE, LE, a large commercial town and fortified sea-port in the department of Seine-Inférieure in France, stands in a low marshy spot on the southern shore of the English Channel, at the embouchure and on the right bank of the Seine, in 49° 29' 16" N. lat., 0° 6' 37" E. long.; at a distance by railway of 143 miles N.W. from Paris, 55 miles W. by N. from Rouen; and has 26,410 inhabitants in the commune, but if the population of the suburbs Granville, Ingouville, and Sanvic, which were incorporated with Havre by a law passed in 1852, be added, the total population cannot be much short of 40,000. On the decline of Harfleur in the second half of the 15th century, and the blocking up of its port by the sandy deposits of the Seine, the importance was seen of having a safe resort for the French navy, and, above all, of blocking up 'the gate of the Seine' through which the English had so often penetrated into the heart of France. Accordingly, on a spot where then stood a fishing village with a humble thatched chapel dedicated to Notre-Dame-de-Grace, Louis XII. in 1509 laid the foundation of Havre, threw up some fortifications, and built two short jetties. His successor François I., by the sums he expended on the town, and the great privileges he conferred upon it, is however to be looked on as the true founder of Havre. In his reign the new city was in great measure built, the harbours improved, the town-hall and the ramparts erected, and the Tower of François I., which still exists, constructed for the defence of the harbour. In 1562 the Prince de Condé betrayed the town to Queen Elizabeth, who garrisoned it with 6000 troops under Dudley, earl of Warwick. The English were forced to capitulate in 1563, but carried away as a memorial of their occupation the archives of the town, which are now deposited in the Tower of London. Louis XIII. added to the fortifications, and built a citadel, which was afterwards rebuilt on a new plan by order of Cardinal Richelieu. Under Louis XIV. the extent of the town was nearly doubled; part of the fortifications and the old gate of Ingouville were demolished, a new quarter built, and the citadel converted into an immense military quarter, which comprises an arsenal, governor's residence, ammunition stores, and large barracks, forming together a spacious and handsome square round the Place d'Armes. The modern fortifications, which are only a nuisance from the obstruction they present to the extension of the town, consist of ramparts and three wet ditches. The ramparts are surmounted by a parapet, and parts of them are planted with fine trees.

The town is entered by 5 gates with drawbridges; of these gates the Porte-Royale, in form of a triumphal arch, is the most remarkable. The old part of the town, which is built round the harbour, presents regular but narrow streets. The wooden houses, of which it was formerly composed, are gradually giving way to more solid and more sightly structures. The new part is built on a regular plan; the streets are wide, cross each other at right angles, and present several handsome houses. The principal street in Havre is the Rue de Paris, which presents more commercial activity than is seen even in Paris. There are few buildings that call for special notice; besides those already mentioned may be named the church of Notre-Dame, the custom-house, the exchange, the great tobacco factory on the Quay d'Orléans, the bonding warehouses, the public library, which contains 15,000 volumes, the new theatre, and the Frascati baths on the sea-shore. Statues of Bernardin St.-Pierre and Casimir Delavigne, natives of the town, were erected in 1852 in the Place François I. in front of the principal entrance to the museum. Tribunals of first instance and of commerce are held in the town, which has also a chamber of commerce, a naval school of the first class, several insurance offices, &c. Foreign consuls reside in Havre.

The harbour consists of three wet docks, and an outer port, separated by locks, and capable of containing 450 ships. A fourth dock has been constructed for steamers, which on account of the narrow entrance could not get into the old docks, and used to lie in the outer harbour. The docks are surrounded by broad solidly built quays affording every convenience for loading and unloading vessels,

A narrow channel, which is formed by two long jetties running nearly east and west, and built between two banks of shingle, leads from the outer harbour into the embouchure, whence, by two passages between sandbanks, two roadsteads are reached; in these there is always deep water and good holding ground, but no shelter. At low water, when the outer port and the channel are dry, the water from a large reservoir (which is kept open till full tide and then closed by floodgates) is discharged to sweep away the sandy deposits which would otherwise soon block up the harbour. A singular local phenomenon respecting the tide, which rises at Havre to 20 and 27 feet, gives an important advantage to the harbour. It results from the position of the harbour with respect to the Seine that the tide having reached its maximum continues full for three hours in consequence of the strong current of the river damming up the water in the channel formed by the jetties; and this exception to the general tidal law gives vessels leaving the harbour time to reach the sea, even against a head wind, in a single tide. The fine quays which border the docks are always lined with vessels, and present great activity of business.

The trade of Havre produces in ordinary years customs duties amounting to about a million sterling, representing a total movement of merchandise to the value of over 20,000,000*l.* In 1849 the customs duties of the port of Havre rose to 29,243,956 francs, in 1852 to 34,611,401 francs (1,384,456*l.* sterling). Besides vast quantities of foreign and colonial produce for the supply of Paris and the north of France, such as coffee, sugar, spices, the imports consist of raw cotton for the manufacturing districts of Rouen, St. Quentin, &c., of indigo, dyewoods, tobacco, rice, hides, timber, iron, tin, tea, &c. The most important imports are sugar, coffee, and raw cotton. The principal exports are silks, broadcloth, cotton manufactures, lace, gloves, shoes, trinkets, plated and tin wares, perfumery, wine, brandy, glass, furniture, books, &c. In 1842 there entered the harbour 607 ships of 221,000 tons burden from ports out of Europe. In 1848 and 1849 the arrivals from foreign ports were respectively 1378 ships measuring 327,989 tons, and 1643 ships measuring 377,436 tons; the departures in 1848 were 1369 ships measuring 317,724 tons, in 1849 they were 1589 ships measuring 367,689 tons. The coasting trade in and out in these two years employed 5171 and 5163 vessels, measuring 366,522 and 356,340 tons respectively. The total tonnage of the commerce of Havre in 1848 and 1849 therefore amounted to 1,011,235 and 1,101,465 tons respectively. In 1852 the foreign and coasting trade employed altogether 9615 vessels measuring 1,254,607 tons, and employing 88,101 men. Above 450 vessels belong to the port, including 50 of 400 to 500 tons engaged in the whale fishery, and 40 large and small steamers. There is regular communication by powerful steamers with Rouen, London, Southampton, Bayonne, Hamburg, Lisbon, &c., and by packet-ships with New York, Bahia, Vera Cruz, and New Orleans. Small steamers ply to Honfleur, Caen, Rouen, and Paris. On Cape La-Hève, which is 2 miles N.N.W. from the town, and rises to the height of 390 feet above the sea, there are two lighthouses 325 feet apart and 50 feet high, with powerful fixed lights. There is also a brilliant harbour light on the extremity of the western jetty.

The manufactures of Havre comprise vitriol, pottery, lace, paper, oil, carpenters' tools, bricks and tiles, ship-cordage, tobacco, furniture, &c. There are also several sugar-refineries, and breweries. Outside the town and close to the shore are five ship-building yards, which have turned out some of the best sailing-vessels and swiftest steamers belonging to France.

Separated from Havre only by the fortifications is the handsome suburb of *Ingouville*, which is built on a high hill overlooking the town, the harbour, and the sea, and containing many pretty country seats belonging to the merchants of the town. It has about 10,000 inhabitants, many of whom are engaged in manufactures. Havre itself stands on low ground, and has often suffered from the sea in violent hurricanes.

In August 1854 it was announced that Havre was to be the capital of the newly-formed department of Seine-Maritime.

HAWAII. [SANDWICH ISLANDS.]

HAWARDEN. [FLINTSHIRE.]

HAWASH, RIVER. [ABYSSINIA; ADAL.]

HAWICK, Roxburghshire, Scotland, a burgh of royalty and market-town in the parish of Hawick, is situated on the right bank of the Teviot, at its junction with the Slitrig, which flows through the town, in 55° 25' N. lat., 2° 47' W. long. It is 9 miles S.W. from Jedburgh and 53 miles S. from Edinburgh by the Edinburgh and Hawick branch of the North-British railway. The population of the burgh in 1851 was 6683. It is governed by two bailies and 29 councillors.

The town consists chiefly of one long street parallel to the Teviot, which is here crossed by a stone bridge. Two bridges cross the Slitrig, one of which has been recently built. The streets are lighted with gas and paved. The old parish church was built in the middle of the last century: it is nearly in ruins, but a new church has been erected in the Norman style. There are places of worship for the Free Church Presbyterians, United Presbyterians, Episcopalians, Independents, Baptists, and Roman Catholics. The Parochial and Grammar schools are united, and there are an Episcopalian school and a Subscription school. There are public baths and wash-houses, a mechanics institute, a public library, a savings bank, and

manufactures of hosiery, woollen goods, woollen yarns, machinery, candles and gloves. There are four yearly fairs.

Hawick suffered much in the border warfare of former days; and both in the town and the rural parts of the parish are several towers or houses apparently designed for fortifications. About three miles above Hawick is Brankholm, the site of the Brankholm, or Branksome, of Sir Walter Scott's 'Lay of the Last Minstrel.' At the end of the town is a moot-hill.

HAWKHURST. [KENT.]

HAWKSHEAD. [LANCASHIRE.]

HAWNES. [BEDFORDSHIRE.]

HAY, or, as it is frequently called WELSH HAY, or the HAY, Brecknockshire, a market-town and the seat of a Poor-Law Union in the parish of Hay, is picturesquely situated on the right bank of the river Wye, in 52° 4' N. lat., 3° 7' W. long., distant 14 miles N.E. from Brecknock, and 164 miles W. by N. from London by road. The population of the town of Hay in 1851 was 1238. The living is a vicarage in the archdeaconry of Brecon and diocese of St. David's. Hay Poor-Law Union contains 24 parishes and hamlets, with an area of 59,010 acres, and a population in 1851 of 10,957.

The town of Hay is lighted with gas, and paved. The parish church was rebuilt in 1838, in the early English style. The Baptists, Independents, Wesleyan and Calvinistic Methodists, and Quakers have places of worship. There are National and British schools, and a savings bank. A county court is held. The market-day is Thursday; six fairs are held in the course of the year. Of the ancient castle of Hay, which was burned by King John in 1216, there still remain a tower, a gateway, and part of the walls.

HAYFIELD, Derbyshire, a village and the seat of a Poor-Law Union in the parish of Glossop, is situated in 53° 22' N. lat., 1° 56' W. long., distant 44 miles N.N.W. from Derby, and 171 miles N.W. by N. from London. Glossop station of the Manchester and Sheffield railway, which is 5½ miles from Hayfield, is 207 miles from London. The population of the chapelry of Hayfield in 1851 was 1757. The living is a perpetual curacy in the archdeaconry of Derby and diocese of Lichfield. Hayfield Poor-Law Union contains four parishes and townships, with an area of 17,068 acres, and a population in 1851 of 10,125. The parochial chapel is an ancient structure with a tower. In the village are a Methodist chapel, Church schools, and a Free school. Several cotton-mills and paper-mills are near Hayfield. Some woollen cloth is made.

HAYLE. [CORNWALL.]

HAYTI. [HISPANIOLA.]

HAZEBROUCK. [NORD.]

HEADFORD. [GALWAY.]

HEADINGTON, Oxfordshire, a village and the seat of a Poor-Law Union in the parish of Headington, is pleasantly situated in 51° 46' N. lat., 1° 12' W. long., distant 2 miles E.N.E. from Oxford, and 52 miles W.N.W. from London by road. The population of the parish of Headington in 1851 was 1653. The living is a vicarage in the archdeaconry and diocese of Oxford. Headington Poor-Law Union contains 23 parishes and townships, with an area of 24,890 acres, and a population in 1851 of 15,480.

Headington is supposed to have been a royal residence under the Saxon dynasty. The church is of the 13th century, but the tower was rebuilt in 1689: there is a lofty shaft of a cross in the churchyard. The Baptists have a chapel, and there is a National school. In the vicinity is the Warneford Lunatic Asylum. Near the village is Headington quarry, from which much of the stone has been taken for the public buildings at Oxford.

HEADLEY, Hampshire, a village, and the seat of a Gilbert Poor-Law Incorporation, in the parish of Headley, is situated in 51° 6' N. lat., 0° 49' W. long., distant 24 miles E. by N. from Winchester, and 45 miles S.W. from London by road: the population of the parish in 1851 was 1424. The living is a rectory in the archdeaconry and diocese of Winchester. Headley Gilbert Incorporation contains three parishes, with an area of 15,328 acres, and a population in 1851 of 2854. The parish church is an early English structure, and there are in the village an Endowed school and a National school.

HEAGE. [DERBYSHIRE.]

HEANOR. [DERBYSHIRE.]

HEBRIDES, THE (or Western Islands of Scotland), are islands scattered in the Atlantic Sea, along the western coast of North Britain, between 55° 35' and 59° N. lat., 5° and 8° W. long. They are 300 in number, but many are very small and sterile, and only about 80 are inhabited. Of the 300 some are mere rocks; throwing these out of computation there are about 170 islands worthy of a place in the map. These islands are commonly divided into the Northern and Southern Hebrides, the most western point of the mainland of Argyleshire, the promontory of Ardnamurchan (56° 45' N. lat., 6° 14' W. long.) being considered the point from which the line of division between them runs westward into the Atlantic.

The surface of the Hebrides is stated to exceed 3184 square miles. Some of the larger islands, especially those which approach the mainland, are mountainous: such are those of Arran, Jura, Mull, and Skye, in which some of the elevated masses rise more than 3000 feet above the sea. In the rest the most elevated parts do not in general exceed 1500 feet; and in some, as in Tyree and in the southern islands, the

hills do not rise to more than 300 feet. The coasts are rocky, and in many parts high, especially along the western shores towards the Atlantic; except the innermost angles of the bays and inlets, where they are frequently low and sandy. The shores are indented by many large bays and inlets, which form harbours of every description, some of which are very secure and capacious. There are numerous rivers, which however are generally small; all of them abound in salmon-trout and eels. On many of the islands there are numerous lakes; the whole number of lakes being upwards of 1500. The islands of Bute and Islay are considered fertile, as are also several districts in the islands of Arran, Mull, and Skye. But a comparatively small proportion of the whole surface is under cultivation. Of the area which the islands comprehend, little more than 200,000 acres are arable or meadow land; 600,000 acres mountains, morasses, and lakes; 70,000 acres pasture ground, commonly on hills, and of little value; 25,000 acres are barren sands; 22,000 acres are occupied by peat-mosses; and 30,000 acres are dry at ebb-tide, and serve as kelp-shores.

The backward state of these islands is to be attributed to the want of timber, to their distance from markets, and to the difficulty of intercourse on account of the boisterous seas which surround them, and the storms which frequently prevail nine months of the year. These are produced by the south-west winds, which bring torrents of rain almost annually from August to the beginning of March. Early in March, and often also in October and November, a north-east or north-north-east wind prevails; and although the coldest that blows here it is generally dry and pleasant. The climate is upon the whole mild. Grasses and corn ripen quickly: in Uist, Lewis, and Tyree, big, or bere, is frequently cut down ten weeks after being sown.

The great mass of the population resides within a mile of the sea-shore. The traveller meets with scarcely an inhabited house 1000 yards from the sea-mark, or 300 feet above the level of the ocean, except in the islands of Bute, Islay, and Arran. From their language and customs it is evident that the inhabitants of the Western Hebrides are of the same stock with those of the Highlands. In most of the islands they depend on the fishing of herrings, cod, and ling, with which the surrounding sea abounds, or by burning kelp. There is little agricultural industry, except in Islay, Bute, and Arran.

The Hebrides belong politically to four Scotch counties, ARGYLSHIRE, BUTESHIRE, INVERNESS-SHIRE, and ROSS-SHIRE. The islands are mentioned by Ptolemaeus under the name of Ebudes, and by Pliny (iv. 16) under that of Hebudes. Pliny makes the Hebudes thirty in number.

(McCulloch, *Highlands and Western Islands.*)

HECLA. [ICELAND.]

HEDINGHAM. [ESSEX.]

HEDJAZ. [ARABIA.]

HEDON. [YORKSHIRE.]

HEIDELBERG, an ancient city in the grand-duchy of Baden, is situated in one of the most beautiful parts of Germany, on the left bank of the Neckar, over which there is a covered stone bridge of nine arches, in about 49° 24' N. lat., 8° 41' E. long.; 23 miles by railway N.N.E. from Carlsruhe, 54 miles S. from Frankfurt-am-Main, and has about 16,000 inhabitants. The town stands on a narrow ledge between wooded vine-clad hills and the river. On the south is the Königstuhl, or Kaiserstuhl, on the summit of which a lofty tower has been erected. There is one long main street, into which a great number of narrow and gloomy streets and lanes open. On a hill above the town is the vast ruin of the castle of the Electors Palatine, who held their courts here till 1709. In the cellar of the palace is the celebrated Heidelberg tun, which contains 600 hogsheads. Heidelberg has three Lutheran churches, one Calvinist, and one Roman Catholic church, and a synagogue. The interior of the church of the Holy Ghost is divided by a partition wall, the Roman Catholics worshipping on one side, the Lutherans on the other. The town is famous for its university, which is the oldest in Germany except that of Prague. It was founded in 1386 by the elector Ruprecht II., and soon acquired a high reputation, to which its valuable library and numerous manuscripts greatly contributed. A new era for the university commenced in 1802, when it was assigned, together with the town and surrounding territory, to the grand-duke of Baden. It has faculties of Lutheran theology, law, medicine, and philosophy; in 1850 there were 71 professors and teachers, and 603 students. The library of the university of Heidelberg contains 150,000 printed volumes and 4000 manuscripts. Heidelberg has also a gymnasium, which had 205 pupils in 1850. There are no manufactures except on a small scale. Its trade is however improving, and the great beauty of the country about it (which is cultivated like a garden), and the cheapness of living, have caused a great number of foreigners to settle here. Heidelberg suffered terribly in the wars of the 17th century; it was taken by the imperialists under Tully in 1622, eleven years afterwards by the Swedes, by the French in 1674, again in 1683, and lastly in 1693.

HEIGHINGTON. [DUREAM.]

HEILBRONN. [NECKAR-KREIS.]

HEILIGENSTADT. [ERFURT.]

HELDER. [HOLLAND.]

HELENA, ST., an island in the Atlantic Ocean, 1200 miles W. from the coast of South Africa, and about 1800 miles E. from the

coast of Brazil, in South America. The circumference of the island is about 28 miles, and the area is 30,300 acres. The population in 1851 was 5490, of whom about one-third were Europeans, and the rest blacks, coloured persons, and Chinese. Rugged and almost perpendicular cliffs, from 600 to 1200 feet high, encompass the island, broken in several places by deep chasms which open to the sea-shore, and form narrow valleys winding up to the table-land in the centre of the island. One of the principal of these openings is called James-Valley, on the north-west coast of the island; and at the opening of it to the sea is James-Town, the only town and port of the island, which is defended by strong batteries, and is the residence of the government establishment. James-Town is in 15° 55' S. lat., 5° 49' W. long. In the upper part of James-Valley is the table-land of Longwood, situated in the eastern part of the island, and consisting of 1500 acres of fine land, nearly 2000 feet above the sea, sloping gently towards the south-east. Longwood House was the place of Napoleon's confinement from 1815 till his death in 1821, and his tomb is at a short distance from it. In 1841 his remains were removed to Paris. In the centre of the island rises Diana's Peak, 2693 feet above the sea. A calcareous ridge, which runs across from east to west, sloping abruptly on the south, divides the island into two parts, the larger and finer of which is on the north side of it. The climate of St. Helena is one of the healthiest under the tropics, and is found beneficial to invalids from India, and even from Europe. Rain falls in every month, but the wet season is usually from June to August. The interior of the island is covered with a rich verdure, and is watered by upwards of 200 springs. The soil of the valleys is very rich, and produces all the fruits and flowers of Europe and Asia. Although only about 150 acres are actually under cultivation, it appears that about 6000 acres in all are capable of being cultivated to advantage. Horned cattle, sheep, and goats feed on the rich pastures. Pretty cottages in picturesque situations are scattered about the island. The total revenue in 1851 was 17,177*l.*; the total expenditure was 16,427*l.*

The island of St. Helena was discovered by the Portuguese in 1502. It was afterwards taken possession of by the Dutch, who ceded it to the English East India Company in 1673, and it became a resting-place for their ships between India and Europe. In 1833 it was vested in the crown. It is still visited by ships returning from India, who take in fresh provisions and water. The number of merchant vessels which entered the port during the five years previous to 1852 averaged 896; in 1851 the number was 888, in 1852 it was 896. A duty of 1*d.* per ton is levied on all ships touching at the port for the support of an hospital for seamen. There is also a military hospital. There are three government schools, namely, a head-school, at which Latin, French, English, Mathematics, &c. are taught; an under-school, and a country-school. The Benevolent society supports four schools, and the Baptist Mission has four schools. The total number of scholars in 1851 was 620. An inspector of schools is employed by the government.

HELENSBURGH. [DUMBARTONSHIRE.]

HELICE. [ACHÆA.]

HELIER, ST. [JERSEY.]

HELIGOLAND, or HELGOLAND, an island in the North Sea, is situated in the centre of a circle, the circumference of which at a distance of about 40 miles passes through the estuaries of the Eyder, the Elbe, and the Weser. It has an area of about 5 square miles, with a population of 2500. The island consists of a cliff of red marl 170 feet high, and a lowland united by a rocky isthmus 500 paces in length. The ascent to the cliff is by a flight of 180 steps. The summit is a tolerably level plain about 4200 paces in circumference. The lowland, which is uninhabited, has two good harbours, one on the south side of the island, and another on the north side. The inhabitants live in a village on the cliff. They are descended from the Frislanders, and subsist chiefly by fishing for haddock and lobsters, and by acting as pilots. The English took the island from the Danes in 1807, and it was formally ceded to them in 1814. On the cliff are four batteries which are manned by a garrison of British soldiers, but no taxes are levied, nor is the internal government of the island interfered with. The lighthouse which stands on the cliff near the village is in 54° 11' 34" N. lat., 7° 53' 13" E. long. The British establishment on the island costs altogether about 1000*l.* a year.

In former ages the island was of much greater extent than it now is, and it is said to have been the seat of worship of a deity named Hertha, or the Earth: from this circumstance most probably it derives its name which means Holy Land. An island marked on some maps and called Sandy Island, was united to Heligoland previous to 1770. Sandy Island has now almost entirely disappeared in the wash of the sea, which is fast consuming Heligoland also. When Napoleon in his wars against England endeavoured to exclude British goods from the continent of Europe, Heligoland became of importance, not only as a naval station, but as a smuggling depôt. The island is much frequented in summer for the sake of its excellent sea-bathing.

HELLESPONT. [DARDANELLES.]

HELMOND. [BRABANT, NORTH.]

HELMSLEY, or HELMSLEY BLACKMOOR, North Riding of Yorkshire, a market-town and the seat of a Poor-Law Union in t

parish of Helmsley, is situated on a gentle eminence sloping towards the river Rye, in 54° 15' N. lat., 1° 2' W. long., distant 25 miles N. from York, and 222 miles N. by W. from London by road. The population of the township in 1851 was 1481. The living is a vicarage in the archdeaconry of Cleveland and diocese of York. Helmsley Poor-Law Union contains 31 townships and chapels, with a population in 1851 of 6832.

The town is neatly built, most of the houses being of stone and slated. The church is a fine old structure, in part of Norman date, with a tower. National schools are supported by Lord and Lady Faversham. There is also a library and a reading-room. A county court is held. The market-day is Saturday: fairs are held on May 19th, July 16th, and October 2nd, chiefly for sheep and cattle. In the vicinity are several coal-mines.

Helmsley Castle, with its keep, is an interesting relic of former times. It was built in the time of Edward I. and Edward II. It was held for Charles I. in 1644, and besieged by Fairfax, to whom it at length surrendered. The remains of Rievaulx Abbey, about 2½ miles N.W., and of Ryland Abbey, about 4 miles S.W. from the town, are very interesting and picturesque ruins. In the immediate neighbourhood is the fine mansion of Duncombe, the seat of Lord Faversham. The mansion was completed in 1718 from a design by Vanbrugh.

HELMSTEDT. [BRUNSWICK.]

HELMUND, RIVER. [AFGHANISTAN.]

HELSINGFORS, a fortified sea-port town and naval station of Russia, capital of the government of Finland, is situated on a double-headed promontory to the west of the mouth of the river Wanna, in about 60° 10' N. lat., 25° E. long., 270 miles W. from St. Petersburg, about 60 miles N. by E. from Revel, and has a population of 16,000, exclusive of military and marines. It was founded by Gustav I. of Sweden, taken and burnt by the Russians in 1728, again taken by the Russians in 1803, and ceded to them, along with the whole of Finland, at the peace with Sweden in 1809. In 1822 it was still a small insignificant place. Since then the town may be said to have been founded anew, and built on a regular plan: masses of rock have been blown up, and inequalities levelled; long broad streets laid out at right angles, and public squares have been built; so that the town already surpasses every other town in Finland in appearance. The houses are large and spacious, and painted externally yellow and green. Among the public buildings the most striking are the residence of the governor, the senate-house, university buildings, the assembly-rooms on the esplanade, the barracks, and the hospital. The university buildings, the senate-house, and a magnificent church form three sides of the principal square. A new church, built in the form of a Greek cross on a mass of granite, having on each side a handsome Corinthian portico, and surmounted by a dome in the centre, forms a conspicuous object from a distance.

Helsingfors became the capital of Finland in 1819, in which year the former capital, Abo, was destroyed by fire. The University of Abo was transferred to Helsingfors by ukase of the emperor Nicholas in 1827. It is called the Alexander University, and has 4 faculties, 22 professors, and in ordinary times about 400 students. In connection with the university are a botanical garden, which is about a mile from the town; a museum, rich in mineralogical and zoological collections; a library (part of which was brought from Abo), kept in an apartment of the senate-house, and containing 8000 volumes; and on an eminence near the town an astronomical and magnetic observatory. A large bathing-house and a manufactory for mineral waters have been built outside the town. Helsingfors is the residence of the Lutheran archbishop of Finland. The town has a considerable trade in Baltic produce: the exports are principally corn, fish, deals, and iron; the industrial products are sailcloth and linen.

The naval harbour of Helsingfors, the most important station of the Russian Baltic fleet, after Cronstadt, is capable of containing 60 or 70 men-of-war, and is formed by a small bay of the Gulf of Finland, the entrance to which is secured by a chain of seven or eight small islands, the largest of which is only five acres in area. The defences on these islands form what are called the fortifications of *Seaborg*. There is only one entrance by which large ships can reach the harbour; shoals or dams from one island to another blocking up all the other passages. The immediate entrance lies between the islands of Langern (which is 200 yards from the southern extremity of the town) and Vester-Svert, and is about 200 yards across; it is commanded by the fire from the two islands, besides being raked by the batteries on the Oster-Lilya-Svert, which lies south of the opening between the two former. These three northern fortresses not only defend the channel but also command points on the mainland, where an enemy after taking the town might attempt to plant his batteries. Three other islands to the southward (Vargen, Gustav-Svert, and Oster-Stuor-Svert), similarly situated, and if possible still more strongly defended, command the entrance from the Gulf, the whole front presented by the successive works being about a mile in length. The fortifications on these granite rocks are said to be of the most formidable description: the ramparts are scarped out of the rock itself; the batteries are armed with the heaviest ordnance; and each series of works has its own stores of all kinds and bomb-proof cover. Casemates are formed for 6000 or 7000 small arms, and the united fortresses

are said to mount 800 cannon and to be garrisoned by 12,000 men; and there are magazines, arsenals, and barracks both upon one of the islands (Gustav-Svert) and upon the mainland. The naval docks off the harbour have been cut in the solid granite promontory on which the town stands. The harbour itself is further defended on the land side by the two forts of Braberg and Ulricaburg built within the port.

(Fraser's Magazine for May, 1854; S. S. Hill, *Travels on the Shores of the Baltic*, London, June, 1854.)

HELSTON, Cornwall, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Wendron, is situated on the left bank of the Loo, in 50° 6' N. lat., 5° 15' W. long., distant 40 miles S.W. from Bodmin, and 276 miles S.W. by W. from London. The population of the borough and chapelry of Helston in 1851 was 3355; that of the parliamentary borough was 7328. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. Helston Poor-Law Union contains 18 parishes and townships, with an area of 71,520 acres, and a population in 1851 of 28,899.

Helston was made a borough by King John in 1201. King Edward I. made it one of the coinage towns; and from his reign till the passing of the Reform Act, it sent two members to Parliament. The town was in the reign of Henry VIII. one of the decayed towns for the repair of which an Act of Parliament was passed. The streets are lighted with gas, and paved, and the town presents a neat appearance. There are a market-house and town-hall. The ancient coinage-hall still stands. The church, dedicated to St. Michael, was erected in 1763. The Wesleyan and Association Methodists and Baptists have each a chapel. The town possesses an Endowed Grammar school, which in 1852 had 22 scholars; a National, a Commercial, and a Wesleyan school; also a savings bank, a dispensary, and a literary institute. Helston is the centre of an important agricultural and mining district: it has markets on Wednesday and Saturday, and there are nine fairs or great markets in the year. Shoes are extensively made in the town, and are sold at the markets and fairs, or sent to Redruth.

HELVELLYN. [CUMBERLAND.]

HELVOETSLUIS. [HOLLAND.]

HEMEL HEMPSTEAD, Hertfordshire, a market-town and the seat of a Poor-Law Union, in the parish of Hemel Hempstead, is situated in 51° 45' N. lat., 0° 23' W. long., distant 24 miles W. by S. from Hertford, and 23 miles N.W. from London by road. The population of the town of Hemel Hempstead in 1851 was 2727. The living is a vicarage in the archdeaconry of St. Albans and diocese of Rochester. Hemel Hempstead Poor-Law Union contains 6 parishes and chapels, with an area of 25,320 acres, and a population in 1851 of 13,120.

Hemel Hempstead stands on the side of a hill sloping down to the fertile valley of the Gade, and consists chiefly of one street of considerable length. The town-hall, a long narrow building, has under it an open market-place. The town is partially lighted with gas. The church is a commodious structure of the 12th century; the aisles and chancel are Norman; pointed windows have been inserted. The Baptists, Independents, Wesleyan Methodists, and Quakers have chapels, and there are National, Industrial, and Infant schools, a mechanics institution, a savings bank, and a well-conducted infirmary. The market on Thursday is one of the largest in the county for corn. Straw plat is extensively sold at this market. Fairs are held four times in the year. There are large paper-mills, an iron-foundry, a type-foundry, and some corn-mills. Brick-making, lime-burning, brewing, and malting are carried on.

HEMSWORTH, West Riding of Yorkshire, a village and the seat of a Poor-Law Union in the parish of Hemsforth, is situated in 53° 36' N. lat., 1° 20' W. long., distant 23 miles S. by W. from York, and 173 miles N.N.W. from London. The population of the parish in 1851 was 997. The living is a rectory in the archdeaconry and diocese of York. Hemsforth Poor-Law Union contains 24 townships and chapels, with an area of 33,011 acres, and a population in 1851 of 8017. The parish church is an ancient structure partly in the decorated style. The Wesleyan Methodists have a place of worship. There are National and Infant schools. The Free Grammar school, endowed in 1546 by Archbishop Holgate, had 60 scholars in 1851, and an income of 1704. a year. An hospital for 20 poor brethren and sisters, with a master, was also founded by Archbishop Holgate.

HEMYOCK. [DEVONSHIRE.]

HENDON, Middlesex, a village and the seat of a Poor-Law Union in the parish of Hendon, is situated near the right bank of the river Brent, in 51° 35' N. lat., 0° 13' W. long., distant 7 miles N.W. from London. The population of the parish in 1851 was 3333. The living is a vicarage in the archdeaconry of Middlesex and diocese of London. Hendon Poor-Law Union contains 8 parishes, with an area of 33,449 acres, and a population in 1851 of 16,917. The church, an ancient and commodious edifice, contains some curious monuments and inscriptions. At Mill-Hill are a district church, a chapel connected with the Mill-Hill Grammar school, and a Wesleyan Methodist chapel. The Protestant Dissenters' Grammar school at Mill-Hill, established in 1807, had 99 scholars in 1853. National schools are at Hendon

and Mill-Hill, and an Infant establishment in connection with the Union. There are 16 almshouses with an endowment; another endowment provides clothing for 50 children.

HENDRED, EAST. [BERKSHIRE.]

HENFIELD. [SUSSEX.]

HENHAM-ON-THE-HILL. [ESSEX.]

HENLEY-IN-ARDEN. [WARWICKSHIRE.]

HENLEY-ON-THAMES, Oxfordshire, a market-town and the seat of a Poor-Law Union in the parish of Henley, is situated on the left bank of the river Thames, in 51° 32' N. lat., 0° 54' W. long., distant 24 miles S.E. from Oxford, and 85 miles W. by N. from London by road. The population of the town in 1851 was 2595. The living is a rectory in the archdeaconry and diocese of Oxford. The borough is governed by 10 aldermen, 2 burgesses, and 14 burgesses, one of whom is mayor. Henley Poor-Law Union contains 24 parishes and townships, with an area of 57,795 acres, and a population in 1851 of 17,895.

Henley was anciently called Hanlegang and Hanneburg. The town is delightfully situated on a gentle ascent from the left bank of the Thames, amid hills covered with extensive beech-woods and other plantations. It consists chiefly of four principal streets, which are lighted with gas and paved. At the intersection of the streets is a plain stone cross and conduit. On the east side is a handsome stone bridge of five arches over the Thames. The church has a good tower, and several interesting portions both of decorated and perpendicular character. The Wesleyan Methodists and Quakers have places of worship. The Endowed Grammar school, founded in 1605, had 46 scholars in 1853. There are also a Commercial school, endowed by Lady Periam; National, Industrial, and Infant schools. The town-hall in the High-street is supported by sixteen Doric columns; beneath it is a market-house. The town possesses a savings bank and some almshouses. The market is on Thursday; fairs are held on March 7th and at the end of September. Henley is the head-quarters of the aquatic sports of the upper part of the Thames, and the scene of an annual regatta.

HENNEBON. [MORBIHAN.]

HENSTEAD, Norfolk, a hundred which has given name to a Poor-Law Union, is bounded N. and E. by the hundred of Blowfield, S. by the hundreds of Depwade and Clavering, and W. by the hundred of Humbleyard. It comprises 20 parishes, with an area of 19,331 acres, and a population in 1851 of 5781. Henstead Poor-Law Union contains 37 parishes, with an area of 41,986 acres, and a population in 1851 of 11,545.

HERACLEA. [BASILICATA; LUCANIA.]

HERAT, a city of Western Afghanistan, and the capital of a small independent state of the same name, is situated on the Heri River, in a plain 2500 feet above the sea-level and proverbial for fertility; distant 360 miles due W. from Cabul, 190 miles S.E. from Mushed, the capital of Persian Khorasan; and had a population of about 45,000 in 1838. The importance of Herat in a military point of view is very great, occupying as it does an opening in the great range of the Paropamisus, or Ghor Mountains, which alone affords facilities for a well-equipped army to march upon the frontier of Hindustan from the north-west. The city has been described as the 'Gate of India.' Within the limits of its territory all the great roads leading to India from the west converge; all the necessaries for an army—provisions, lead, iron, sulphur, saltpetre, &c.—may be procured in abundance. The importance of this position seems to have been thoroughly comprehended by Alexander the Great, who spent several months completing the subjection of Aria (which name still survives in the modern designation of the city and the province) before his march upon India.

Herat occupies the site of the ancient *Aria*, or *Aria Civitas*, which was built or more probably repaired by Alexander the Great, and is supposed to be the same as the *Artakoana* of Arrian, the *Artakana* of Strabo and Ptolemy, and the *Alexandria Arion* of Pliny, all of which are given as names of the chief town of the ancient province of Aria situated on the Arina, now called Heri. Of its ancient history little more is known than that it was included in the Persian empire. On the conquest of Persia by the followers of Mahomet in the middle of the 7th century of the Christian era, Herat was subjected to the khalifs with the rest of Khorasan, to which it then belonged. About the middle of the 12th century it became the residence of the Ghouride sultans. In 1220 it was seized by Genghis Khan, who demolished the city. In the following century it was again destroyed by the Mongols. In 1381 it fell with the whole of Khorasan into the hands of Tamerlane, under one of whose followers it again became the capital of an independent state, and rose to great eminence and prosperity. In the beginning of the 16th century the city was taken by the Turkomans, and in 1511 by the Shah Ismael Sophi, who re-united it to Persia. In 1749 it was taken from Persia and annexed to Afghanistan by Ahmed Khan, the founder of the Duranee dynasty. Mahmood, appointed governor of Herat by his step-brother, Shah Zeman, grandson of Ahmed Khan, again made Herat the capital of an independent state, and by the ability of his wuzer, Futteh Khan, twice ascended the throne of Cabul. This independence, though threatened by Persia on one side and by the Ameers of Cabul and Kandahar on the other, Herat still maintains. The Persians attacked the city in 1815, but were defeated by Futteh Khan, the able wuzer

of Mahmood, who however seized upon the city himself, and dismissed the acting governor, a brother of Mahmood's. In the following year Futteh Khan was barbarously deprived of sight by Kamran, son of Mahmood, and soon after murdered. The civil wars that arose out of this cruel act between the sons of Futteh Khan and Mahmood deprived the Duranee family of all their possessions except Herat. [AFGHANISTAN.] Mahmood died in Herat in 1829, and was succeeded by his son Kamran. The Persians again, instigated it was said by Russia, threatened Herat in 1833; but the death of Abbas Meerza prevented the prosecution of the siege by his son Mahommed Meerza, the general in command. But Mahommed, now Shah of Persia, returned in 1833, and laid close siege to the city with a large force, aided by the advice of Colonel Simonich, a Russian officer, and by a regiment of so-called Russian deserters. The siege, one of the most memorable of modern times, lasted ten months, from November 22, 1837, to September 9, 1838. It was unsuccessful, chiefly through the heroic courage and constancy of Eldred Pottinger, an English officer, who happened at the commencement of hostilities to be sojourning in the city, and who was allowed by Kamran and his wuzer Yar Mohammed to take a share in the defence. At the end of the ten months the Shah, terrified by a demonstration made by a small British force in the Persian Gulf, withdrew his army after reducing the city and its defences almost to ruins. On Kamran's death in May 1843 Yar Mohammed made himself master of Herat to the exclusion of Kamran's son; and the better to secure his power he made a sort of submission to the Shah, and entered into friendly relations with the Barukzye chiefs of Cabul and Kandahar. Yar Mohammed died in June 1851, and was succeeded by his son, who about a year after was attacked by the Kandahar Sirdars with a large force, which was defeated by the Herattees after eight hours' fighting, the forces on each side numbering about 12,000 men.

The following description of the city before its siege by the Persians in 1837-8, is chiefly taken from that given by Arthur Conolly and adopted by Mr. Kaye. It is given in the past tense, for the aspect of the city and its environs was greatly changed by that disastrous siege:—Herat was surrounded by a fair expanse of country laid out in corn-fields, vineyards, and gardens, and studded with little fortified villages, which were built by the side of small running streams that increased the beauty and fertility of the plain. The city was nearly a square in shape, the sides facing the cardinal points and less than a mile in length, and the site was a slope descending gradually from the north-east to the south-west. It was strongly fortified on every side by a solid earthen wall, surrounded by a wet ditch and pierced by five gates, each defended by a small outwork. But the real defences of the place were two covered ways on the exterior slope of the embankments, one within and the other without the ditch. On the northern side surrounded by a wet ditch stood the citadel (formerly called Kella-i-Aktyar-Aldyn, now the Ark) built of brick, with lofty ramparts and numerous towers, but from neglect a place of inconsiderable strength. Within, four long bazaars, roofed with arched brickwork, meeting in a small domed quadrangle in the centre of the city, divided it into four quarters, each containing about 1000 houses and 10,000 inhabitants. The principal of the bazaars terminated in the Kandahar Gate; it was 1300 yards long, 6 yards wide, and covered by a succession of small domes, springing from ill-formed arches that crossed the streets. Mosques, caravanserais, public baths, and reservoirs varied the wretched uniformity of the narrow dirty streets, which being roofed across were often little better than conduits, where every conceivable description of filth was suffered to collect and putrify. Without drains to carry off the rain that falls within the walls, it stagnates in ponds dug in different parts of the city. The refuse of the houses, dead cats and dogs, lie in the streets upon heaps of the vilest filth. The Khan's residence is a mean building. The principal mosque is a large structure of the 13th century. Outside the walls are some magnificent ruins of a religious edifice, and an enormous mound erected by Nadir Shah. Herat is in peaceful times a place of great commercial importance and a mart for the products of India, China, Tartary, and Persia. The native manufactures include carpets, dressed sheepskins, cloaks and caps, shoes, saddlery, harness, sabres, &c. The population numbered about 45,000 in 1838, including about 1000 Hindoos, several Armenian families, and a few Jews. The great majority of them were Mohammedans of the Sheeah sect, who were treated with the most remorseless tyranny by their Afghan masters, whose numbers did not exceed a fourth part of the population.

(Kaye, *History of the Afghan War*; A. Conolly, *Journey to the North of India*; *L'Art de Vérifier les Dates*; *Dictionary of Greek and Roman Geography*.)

HÉRAULT, a department in France, on the coast of the Mediterranean, which derives its name from the river Hérault, is bounded N.E. by the department of Gard, S.E. by the Mediterranean, S.W. by the department of Aude, and N.W. by the departments of Tarn, Aveyron, and Gard. It lies between 43° 11' and 43° 58' N. lat., 2° 38' and 4° 11' E. long. The greatest length from east to west is 84 miles, from north to south 49 miles. The area is 2393 square miles: the population in 1841 was 367,343, by the census of 1851 it was 389,286, being 162·67 to the square mile, or 11·91 below the

average population to the square mile for all France. The department is formed out of a portion of Lower Languedoc.

The department is traversed in the north and north-west by the Lower Cévennes, which attain the height of 4198 feet in the Espinouse range on the confines of Tarn, and of 4264 feet in the chain of Larzac, or Larjac, extending northward from Lodève into the department of Aveyron. From the main chain several ranges of hills of moderate elevation branch off towards the south, gradually subsiding as they approach the sea. The cultivable soil of the north and north-west consists of a chalky clay which produces only rye. The higher mountains are in general barren, or covered with woods. The plains in the interior, some of which are of large extent, consist of a light gravelly soil, very favourable to the growth of the vine and the olive. Along the lower courses of the Orb, the Hérault, and the Vidourle, and generally in the south of the department, the soil is a strong, deep, rich loam, and very productive of all the cereal grains. Here and there, all through the department, there are extensive wastes, locally called 'garrigues,' thinly covered with shrubs, dwarf oak, heath, broom, cistus, and aromatic plants, and producing tolerable coarse pasture. The department presents abundant evidence of volcanic action at some distant period, particularly in the extinct craters of Agde and of St. Thibéry, near Pézenas, and in the basaltic hills near Montpellier. Mont St. Loup near Agde is a volcanic hill and crater, which rises 752 feet above the sea-level; and nearer the sea is another volcanic circus called Conques. The crater of St. Thibéry some miles north from Agde is surmounted by three cones, the highest of which rises 636 feet above the sea.

The coast-line, extending from the mouth of the Aude to that of the Vidourle, measures 66 miles in length. The shore-lakes, or salt-lagunes of Thau, Maguelonne (so-called from the ancient city of Maguelonne, which stood on the peninsula of Maguelonne, and of which there remains a very interesting church), Pérols, and Mauguio extend eastward from Agde to the Vidourle; they are separated from the Mediterranean by a narrow bank, in which however there are a few openings called 'graus.' The Canal-des-Etangs, which joins the Canal-du-Midi at Cette, passes through these shore-lakes. The Canal of Cette connects the shore-lake of Thau with the sea. In the west of the department are the lagunes of Vendres and Capetang; the latter is land-locked and stagnant. The marshes round these two lagunes have been drained to a considerable extent, and converted into arable land. The neighbourhood of all the lagunes is marshy and unhealthy; agues and rheumatic fevers prevail in the summer and autumn, though to a less extent than formerly, owing to the partial drainage and cultivation of the marshes. Except in the vicinity of the lagunes, the department enjoys a pure air and a most healthy climate.

The rivers of the department all rise in the Cévennes, and flow directly into the Mediterranean or into the shore-lakes. The principal are—the *Vidourle*, on the confines of Gard [GARD]; the *Lez*, which passes east of Montpellier, and becoming navigable takes the name of Canal-de-Grave; the *Hérault*, rising in the north-west of Gard, and running south, enters the department to which it gives name at Ganges; here, having received the Ergue on the right bank, it passes Montagnac and Pézenas, and enters the sea through the port of Agde after a course of 80 miles, only 7 miles of which are navigable; the *Orb*, which, springing from the mountains west of Lodève, and flowing first south, then west till it meets the Jaur at Olargues, and finally south-south-east, passes Béziers, having previously received the Bernasobre from the west, and enters the sea near St. Geniès; and the *Aude*, which touches the western boundary. [AUDE.] Near the coast, most of the towns are joined to the Canals du-Midi and des-Etangs by short canals, thus establishing a communication with the Rhône, the Garonne, and the Bay of Biscay.

The department is crossed by the high road from Paris to Spain, through Perpignan, by 5 other state and 17 departmental roads. Montpellier, the capital, communicates with Cette and Nîmes by railroad; and a railway is projected from Bordeaux through Toulouse to Cette. [GARD; CETTE.]

The department contains 1,513,615 acres, of which 386,897 are arable land; 256,213 are under vineyards; 191,869 are covered with woods; 21,096 are meadows and grass land; 71,065 are under orchards, olive and mulberry plantations, nurseries, and different kinds of culture; 58,593 are covered with lagunes, rivers, canals, and marshes; and about 500,000 acres consist of the waste land or garrigues described above.

Wheat, rye, barley, and oats are produced in quantity more than sufficient for the consumption. There is a considerable breadth of artificial meadows; and large crops of lucerne, sainfoin, and clover are grown. For quantity of wine produced, Hérault stands at the head of the wine-growing departments of France, the average annual produce being 46,552,000 gallons. The red wines of St. Georges, St. Christol, and St. Drézéry, the muscadel wines of Frontignan, Lunel, and Béziers, and the white wines of Marseillan and Pinet are considered the best. Fruits, especially raisins, olives, almonds, figs, and chestnuts, and all kinds of pulse are grown. The mulberry is cultivated for the production of silk; aromatic and medicinal herbs, and madder and other plants used for dye-stuffs are grown. The principal material of the woods are the chestnut and green and white oak.

Sheep, cattle, and mules are numerous; game is very abundant; and fish, including the johndoré, tunny, oyster, lobster, anchovy, mackerel, eel, &c. are taken in immense quantities in the shore-lakes and in the sea.

The industrial products comprise woollen-cloths, silks, hosiery, calico, muslin, flannel, blankets, brandy, chemical products, pottery, tiles, honey, perfumes, leather, oil, beer, paper, &c. There are also numerous dye-houses, and establishments for the rearing of silkworms and reeling silk. Ship-building is carried on at Cette and other towns on the coast. Mines of coal and copper, quarries of marble of different colours and much used for ornamental architecture, building- and mill-stone, slate, gypsum, and granite are worked. A vast deal of salt is made by evaporation on the lagunes and on the shore of the Mediterranean, this department being one of the chief sources for the supply of that article to France. The exports consist of most of the articles enumerated, but chiefly of wine, dried fruits, and brandy. The imports are wool, cotton bales, staves, colonial produce, raw hides, cork, &c. The principal sea-ports are Cette and Agde. There are 545 wind- and water-mills, 11 iron forges and foundries, and 861 factories of different sorts. About 100 fairs are held annually.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Montpellier . . .	14	113	148,649
2. Béziers	12	99	134,605
3. Lodève	5	72	56,700
4. St.-Pons	5	44	49,332
Total	36	328	389,286

1. Of the first arrondissement, and of the whole department, MONTPELLIER is the capital. *Aniane*, a pretty little town, 16 miles N.W. from Montpellier, is situated in a rich plain on the left bank of the Hérault, and has 2542 inhabitants, who manufacture cream of tartar, verdigris, black soap, chemical products, cotton-yarn, leather, and lime. This town owes its origin to the abbey built by St. Benoit d'Aniane, who died here A.D. 821: the abbey (now the parish) church is an elegant structure; the abbey buildings are turned into a cotton-factory. *Frontignan*, a small town with 2000 inhabitants, situated on the shore-lake of Maguelonne, and on the Montpellier-Cette railroad, is famous for the excellent muscadel wines and raisins produced in its neighbourhood. Near Frontignan is *Balaruc*, famous for its warm springs, which have enjoyed a long celebrity for the cure of paralytic and scrofulous affections. The bathing establishments, furnished hotels for the accommodation of visitors, and a general hospital for poor patients, forming a pretty village, stand on the northern shore of the lagune of Thau. There are two seasons, May and June, September and October. *Ganges*, 25 miles N. from Montpellier, is prettily situated in a fertile plain closed in by high hills, and on the left bank of the Hérault. It is surrounded by pretty country houses, and commanded by an old castle. The population amounts to 4564, who manufacture silk- and cotton-yarn, silk stockings, silk gloves, and leather. Near the town there is a very extensive grotto, which is said to surpass in beauty the famous grotto of Antiparos. A good deal of raw silk is produced in the canton of Ganges. *Lunel-la-Ville*, 14 miles E. from Montpellier, and on the railroad from that city to Nîmes, stands near the right bank of the Vidourle, in a district famous for its sweet wines, and has 6385 inhabitants. The most attractive objects in the town are the barracks, a fountain in form of an obelisk, and the public promenade. It has communication by the Lunel Canal, which terminates in the shore-lake of Mauguio, with the Rhône, the Mediterranean, and the Canal-du-Midi. There are several brandy, spirit, and liqueur distilleries; and the trade in corn, flour, wool, wine, raisins, manufactured goods, and colonial produce is considerable. *Marseillargues*, or *Marsillargues*, 16 miles E.N.E. from Montpellier, on the Vidourle, is situated in a very fertile district: it has a fine old castle, and 3529 inhabitants. *St. Martin-de-Londres*, 17 miles N.N.W. from Montpellier, is a small place of only 1100 inhabitants, but interesting for the remains of its feudal fortifications, and for the view from it of the old castle of La-Roquette, which stands on an eminence near the Pic-St. Loup, a volcanic mountain nearly 2000 feet high. Silk hosiery and charcoal are manufactured here. *Mauguio*, 7 miles from Montpellier, stands on the shore-lake of Mauguio, has some brandy distilleries and 2131 inhabitants. In the middle of the town there is a hill surmounted by a windmill, from which Aigues-Mortes and Cette, on the coast of the Mediterranean, and to the northward the Cévennes are visible. *Mèze*, 19 miles S. from Montpellier, stands in a productive vine district on the shore-lake of Thau, where it has a good harbour for small craft. It is a pretty town with 4348 inhabitants, who manufacture liqueurs, brandy, and salt, and trade in these articles and in wine, corn, &c. The ancient abbey of Vallemagne (the beautiful gothic church and cloisters of which, erected in the 13th century, are still entire) stands near Mèze, and forms one of the finest structures of the kind in France.

2. In the second arrondissement the chief town, *Béziers*, stands on a hill above the Orb and the Canal-du-Midi, in 43° 20' 31" N. lat.

3° 19' 10" E. long., 46 miles S.W. from Montpellier, and has 17,376 inhabitants in the commune. The streets are narrow and ill-laid out, but the houses are in general well built of stone. Béziers contains several buildings interesting for their architecture or their antiquity; the principal are the cathedral of St.-Nazaire; the churches of St.-Aphrodise and La-Madeleine; the former episcopal palace, which now serves for the residence of the sub-prefect and for courts of justice; the public library; the house of Pierre-Paul Riquet, the engineer of the Canal-du-Midi; the market-house; and the barracks. The town has tribunals of first instance and of commerce, and a college. The manufactures comprise woollen-cloth, silk hosiery, brandy, spirits, liqueurs, chemical products, thrown silk, soap, leather, paper, glass, &c.; the commerce of the town consists of these articles and of corn, wool, iron, wine, oil, fruits, &c. A steam-engine raises the waters of the Orb to a considerable height into a reservoir on the terrace, near the cathedral, whence the different quarters of the town are supplied. The Canal-du-Midi is carried through nine locks close to the town. The town of Béziers is ancient; it contains a few Roman remains, and is noted for the massacre of the Albigenses, July 22, 1209. *Agde* is noticed in a separate article. [AGDE.] Among the other more important places we notice the following; the population given in each case is that of the commune. *Bédarieux*, a well-built manufacturing town on the left bank of the Orb, which separates it from one of its suburbs, stands 18 miles N. from Béziers, and has a college, a council of prud'hommes, and 9012 inhabitants. Fine and coarse woollens, cotton and woollen hosiery, hats, soap, olive-oil, leather, and paper are manufactured. There are also dye-houses, glass works, and a copper foundry. The trade in wine and in the articles just named is extensive and important. *Capetang*, which gives name to the lagune of Capetang, stands on the Canal-du-Midi, and has 2000 inhabitants. *Florensac*, situated near the left bank of the Hérault in a rich district of vineyard and meadow land, has a population of 3454. *St.-Gervais*, a small town of 2573 inhabitants, is situated in a well-watered valley shut in between hills, 23 miles N. from Béziers. There are excellent coal mines near the town, and also marble quarries, and limekilns. *Montagnac*, the birthplace of Latude, celebrated for his long captivity in the Bastille, stands on the left bank of the Hérault, and has brandy distilleries, some unimportant manufactures, and 3466 inhabitants. *Pézénas*, an ancient town situated near the left bank of the Hérault, at its junction with the Peine, has a tribunal and chamber of commerce, an exchange, a college, and 7759 inhabitants. The town is well built, with pretty wide streets and good houses; the parish church and the theatre are the most remarkable buildings. The neighbourhood of the town is remarkably beautiful, and so well cultivated as to have gained for it the title of the Garden of Hérault. Pézénas is celebrated for its salubrity; several craters, now extinct, and masses of basalt, are seen near it. It was in this town that Molière wrote his 'Précieuses Ridicules.' The manufactures are linen, muslin, calico, woollen stuffs, hats, soap, chemical products, syrup and sugar of grapes, cotton-yarn and raw silk. There are also brandy and spirit distilleries, establishments for washing wool, and a considerable commerce in corn, olive-oil, fruits, &c. *Roujan*, a small place in a volcanic district, near the right bank of the Peine, has a population of 1627; near it there are extensive coal-mines, and also cold mineral springs. *Servian*, 6 miles N.E. from Béziers, has 2203 inhabitants. There is a castle here, the construction of which dates from the 11th century.

3. In the third arrondissement the chief town *Lodève* is situated in a valley at the foot of the Cévennes, on the left bank of the Ergue, which here receives the Salondres, 32 miles N.W. from Montpellier, in 43° 43' 57" N. lat., 2° 26' 10" E. long., and contains 10,793 inhabitants in the commune. It is the seat of tribunals of first instance and of commerce, and has also a chamber of commerce, a college, and a council of prud'hommes. The town is surrounded by strong walls, but the interior is badly built and ill laid out. The approaches to it are by avenues of fine trees. The air is pure, and the environs delightful; the hills around it are cultivated to their very summits, and plantations of the vine, the olive, and the mulberry everywhere meet the view. The most remarkable building in Lodève is the former cathedral church of St.-Etienne, which contains a beautiful mausoleum in white marble of one of the bishops of Lodève. The town is the centre of a great cloth manufacture, and is celebrated for its piece-dyed goods, which are exported to the Levant. Soldiers' uniforms, other woollen stuffs, soap, leather, &c., are also manufactured. *Clermont-Lodève*, 10 miles S. from Lodève, stands on the slope of a hill above the little river Ydromiel, and contains 6294 inhabitants in the commune. A college, a tribunal of commerce, a council of prud'hommes, and a savings bank are the principal institutions of the town. The most remarkable building is a handsome gothic church with aisles and nave (terminating in a beautiful apsis), a very lofty tower, and, over the principal entrance, a rose window of noble dimensions. The principal manufacture is piece-dyed cloth; but woollen and cotton hosiery, handkerchiefs, cotton-yarn, leather, brandy, and chemical products are also manufactured. *Gignac*, near the left bank of the Hérault, is situated 15 miles S.E. from Lodève, in a country covered with vineyards, olive grounds, and mulberry plantations, and has 2669 inhabitants, who manufacture verdigris, olive-oil, sugar, brandy, and woollen-yarn, and trade in agricultural produce.

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4. In the fourth arrondissement the chief town, *St.-Pons*, stands on the Jaur, a feeder of the Orb, 60 miles W. from Montpellier, and has 6947 inhabitants in the commune. It is a well-built town; most of the houses are constructed of marble from the neighbouring quarries. The church of St.-Pons, which is classed as an historical monument, is one of the most interesting in the department. Within the town the Jaur receives the waters of a very abundant spring, which forms a vast basin of considerable depth; in front of this there are two immense elms, on the right a church built in the time of Charlemagne and well preserved, and on the left a gothic tower. The town has a tribunal of first instance, a college, and an ecclesiastical school; the waters of the Jaur drive the machinery of several corn and fulling mills, saw-works, dye-houses, &c. There are important manufactures of woollen cloth in this town; hosiery, woollen-yarn, and leather are also among its industrial products; and there is a good trade in corn, cattle, and marble. *St.-Christian*, important for the manufacture of piece-dyed woollen goods, brandy, and leather, stands in a rich valley watered by the Bernasobre, 12 miles S.E. from St.-Pons, and has 3627 inhabitants in the commune. *La-Salvetat*, 7 miles N.N.W. from St.-Pons, is situated among high mountains, near the right bank of the Agout, a feeder of the Tarn, and has a population of 4009, who manufacture flannel, woollen-cloth, woollen-yarn, and swanakin, and trade in wool, cattle, and the excellent butter of the neighbourhood, which is considered the best in all Languedoc.

The department forms the see of the bishop of Montpellier, is included in the jurisdiction of the High Court and University Academy of Montpellier, and belongs to the 8th Military Division, of which Montpellier is head-quarters. Besides the university of Montpellier there are in the same town a theological college, an ecclesiastical school, a royal college or high school, and a primary normal school. There are communal colleges in Agde, Bédarieux, Béziers, Clermont, and Pézenas. The Calvinists have churches in Montpellier, Montagnac, Massillargues, and Ganges. To the Legislative Body of the French empire the department returns three members.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers; Richard, Guide Classique du Voyageur en France et en Belgique.*)

HERCULA'NEUM, a very ancient Italian city, situated on the coast of Campania, about 5 miles E. from Naples by the railway to Nocera which passes near it. It is said to have been of Phœnician origin and to have been afterwards occupied by the Pelasgians and Oscans; but its history is obscure, and it seems never to have attained any importance. In the time of Titus, A.D. 79, it was overwhelmed by the memorable eruption of Vesuvius which also ruined Pompeii. It appears to have been buried under showers of ashes, subsequently overflowed by streams of lava, and it lies about 70 feet below the present surface of the ground. It was re-discovered by the sinking of a well in the village of Resina in 1706, when the remains of the theatre were discovered. This led to further investigation, and after several years, in which little was done, the Neapolitan government undertook the work of excavation. But the circumstance that the ground over the buried city is occupied by the large and populous villages of Resina and Portici, has thrown great difficulties in the way of the excavations, which have been carried on wholly by subterranean galleries. The theatre, a chalcidicum, and two temples are the chief buildings explored; the private houses are chiefly small, and of one story, like those of Pompeii. The whole excavation is said to have been about 600 yards long by 300 yards broad; but it being impossible to remove the incumbent soil, in consequence of its thickness, as fast as one part was thoroughly searched it was filled up with rubbish from another. The theatre alone is now accessible; it is a noble edifice built of stone in a very massive style, with 18 rows of seats, and capable of holding 8000 persons. A handsome street 36 feet wide and bordered with porticoes, led from the theatre to the forum, on the north side of which stood a basilica of a fine style of architecture; two small temples (the walls of one of which were decorated with beautiful paintings, now in the Museum of Naples); and a villa, in which were some beautiful statues, and a number of papyrus rolls containing some worthless treatises on the Epicurean philosophy, were discovered. The papyri were found in a state resembling charcoal, dry, and crumbling, the laminae, for the most part, strongly adhering to each other. The chief advantage as yet derived from Herculanum is the magnificent collection, not only of statues, paintings, and vases, but of domestic implements of every use and description, deposited in the Museum of Naples. These are figured and described in the magnificent work, 'L'Antichità d'Ercolano,' Nap., 1757, 10 vols. fol. Some excavations were made in 1853 and 1854, when the ground-floor of the houses situated on the declivity leading to the sea were laid open, but the results are hitherto unimportant. In Romaneli's 'Viaggio ad Ercolano,' and in Blewitt's 'Handbook of South Italy' will be found an account of the general results of the excavations made at Herculanum.

HERCULES, PILLARS OF. [GIBALTAR.]

HEREFORD, the county town of Herefordshire, a city, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Wye, in 52° 4' N. lat., 2° 42' W. long., distant 134 miles W.N.W. from London by road. The population of the borough in 1851 was 12,103. The livings are in the archdeaconry and diocese of Hereford. The borough is governed

by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. Hereford Poor-Law Union contains 47 parishes and townships, with an area of 68,116 acres, and a population in 1861 of 25,768.

In early times this city was important as a garrison town to restrain the inroads of the Welsh. From the 11th to the 17th century it was the scene of various important military and political events. There are still some remains of ancient religious houses. The castle consisted of two wards of different dimensions, having a keep within the smaller: the Wye formed its defence on the south side; on other points it was defended by moats.

Hereford is situated in a broad, fertile, and well-cultivated valley. The principal streets are wide and straight, and well paved, and the town is lighted with gas. The shire-hall was built after a plan of Sir Robert Smirke's: it is of plain but pleasing exterior. The town-hall stands in the High Town. The guildhall is a brick building in a remote situation. The Union workhouse and the county jail stand outside the city. There is a neat new post-office. Several curious old half-timber houses are in the town. The principal churches are those of All Saints, St. Peter, St. Nicholas, and St. John. All Saints church faces Broad-street on the north; the steeple is tall and well-proportioned, but its external architecture is generally uninteresting. St. Peter's church, founded by Walter de Lacy in 1085, is a plain building, with a spire.

Hereford cathedral stands upon the south side of the city, not far from the Wye. Ethelbert, who was murdered at the instigation of Offa, was buried in Hereford church, and gifts were offered at his shrine, where it was asserted that miraculous appearances had been shown. Milfrid, the governor of the province in the time of Egbert, erected about the year 825 in honour of St. Ethelbert a new church of stone. This was replaced by a new edifice erected by Bishop Athelstan about 1030, which was demolished by the Welsh in 1065. The present cathedral was commenced in 1079 by Bishop Robert of Lorraine, and was completed about 1115. In 1786 the western portion of the cathedral fell, and alterations were subsequently made, the spire was removed, and a new western end added by Wyatt: these alterations however detracted both from the beauty and the stability of the building. During the last few years the work of repair and restoration has been very efficiently and thoroughly executed. The principal dimensions of the cathedral are—extreme length 850 feet, breadth 174 feet, height of nave 63 feet, breadth of nave 28 feet, height of tower 160 feet. The cathedral contains many monuments of great antiquity, some of which are highly ornamented. In the chapter-room is a curious map of the world, probably one of the oldest original maps in existence. Triennial music-meetings have for many years been held in the cathedral, in rotation with those of Gloucester and Worcester.

In the city there are places of worship for the principal denominations of Dissenters. The Roman Catholic chapel is of considerable dimensions. There is a Cathedral school of uncertain foundation; connected with it are about 40 scholarships; the number of scholars in 1858 was 60. There are several National, Parochial, and British schools, a Natural History Society, a permanent library, a mechanics institute, an infirmary, and a savings bank. The county assizes, the quarter sessions, and a county court are held in the city. Gloves are manufactured to some extent, and there is an iron-foundry. Five yearly fairs are held. The October fair is one of the most considerable cattle fairs in England. The market-days are Wednesday and Saturday; the great market is on the Wednesday after St. Andrew's day.

The diocese of Hereford is in the province of Canterbury. It extends over the greater part of Herefordshire, with parts of Shropshire, Worcestershire, Radnor, and Montgomeryshire, and comprises 358 benefices. It is divided into the archdeaconries of Hereford and Salop. The chapter consists of the dean, two archdeacons, four residentiary canons, a precentor, a chancellor, 24 non-residentiary prebendaries, and 6 vicars choral. The income of the bishop is fixed at 42000 a year.

HEREFORDSHIRE, an inland county of England, is bounded E. by Worcestershire and Gloucestershire; N. by Shropshire and a portion of Worcestershire; W. by Radnorshire, Brecknockshire, and part of Monmouthshire; and S. by Monmouthshire and Gloucestershire. Several detached portions of the county were by the Act 7 & 8 Vict., cap. 61, declared to be portions respectively of Shropshire, Worcestershire, Monmouthshire, and Radnorshire. By the same Act small portions of land belonging to other counties, but locally situated in Herefordshire, were declared to be part of Herefordshire. The county lies between 51° 49' and 52° 24' N. lat., 2° 20' and 3° 7' W. long. Its greatest length is about 40 miles; its greatest breadth is 34 miles. Its area is 836 square miles, or 534,823 acres. In 1851 the population was 115,489.

Surface, Hydrography, Communications.—The surface of this county is generally hilly, but the valleys occasionally expand into open plains. The Hatterel range of the Black Mountains, which forms its border on the west-south-west, is the highest land within its limits. In the south-west are the Saddlebow and Garway hills; in the south the hills near Walford and Penyard, and the long chain extending from the Lea northward; in the east the Malvern Hills, and the range

stretching northward, and comprising Bromyard Downs; on the north are the hills of Downton and Leintwardine. Near the centre of the county are Dinmore, Westhope, Badnage, and other hills.

The principal streams which water Herefordshire rise in the higher counties of South Wales. They are—the Wye, the Lugg, the Teme, the Arrow, the Frome, the Leddon, the Dover, and the Munnow.

The Wye, which rises in Plinlimmon, on the borders of Cardiganshire and Montgomeryshire, enters Herefordshire on its western side, and running at first in a northerly direction, becomes for a short distance its boundary from Radnorshire: near Clifford the river flows east-south-east with many windings through a broad and fertile valley until it reaches the city of Hereford. Between that city and the town of Ross its general course is south, but its windings are numerous. From Ross the Wye runs in a general south and south-west course, and again forming the boundary of Herefordshire for a few miles, finally leaves it near the Leya. It is imperfectly navigable throughout its course in this county. After northerly or westerly rains the water sometimes rises 8 feet, or even 10 feet, in the course of 24 hours. For picturesque beauty this river is justly celebrated: the bolder and more celebrated scenery does not indeed belong to this county, but the banks of the Wye are here very beautiful.

The Lugg, rising in Radnorshire, enters Herefordshire near the Combe, flows first in an easterly direction and then southerly to Mordiford, where it falls into the Wye. The Teme, a tributary of the Severn, rises in Radnorshire, enters Herefordshire near Brampton Brynu, and near Downton crosses the border into Shropshire. At Ludlow it again enters Herefordshire, which it finally quits near Burford. The other rivers are small. Trout abound in all these streams, but are seldom of great weight.

There is a canal to Ledbury from Gloucester, which it is intended to continue to Hereford. The canal from Leominster to the vicinity of Tenbury in Worcestershire is part of a projected line from Kington in Herefordshire to Stourport in Worcestershire, intended to communicate with the Stourport and Dudley Canal.

The principal turnpike roads run from Hereford to Ross, to Ledbury, to Hay, to Kington, to Abergavenny, to Monmouth, to Leominster, to Ludlow, and to Bromyard. The Shrewsbury and Hereford railway and the Newport and Abergavenny railway afford direct communication between Newport, Monmouthshire, and Shrewsbury. The Hereford and Gloucester railway is in operation a part of the way, but is not yet completed at the Hereford end. There are several tram-roads for the conveyance of minerals, &c.

Geology, Mineralogy, &c.—The whole of Herefordshire appears to consist geologically of old red-sandstone. On the eastern side the mean direction of the strata, as determined by the outline of the trap and sienitic ridges of Abberley and Malvern, is from north to south. But there are many aberrations from that direction, and innumerable local disturbances, curvatures, and faults. On the western boundary the prevailing strike of the deposits is from north-east to south-west. Limestone has been raised to the surface at Aymestry, Ledbury, and other places.

The valley of elevation at Woolhope is a very symmetrical example of the upper Silurian formation. The two superior formations of the grauwacke series are incurvated round a central dome-shaped mass composed of the shelly sandstones of the third formation, from which the strata dip away on all sides at angles varying from 15 to 70 degrees. The harder strata of each formation having resisted destruction, whilst the shales have been worn away, the former constitute the higher encircling ridges, the latter deep trenches of intervalation.

Climate, Soil, and Agriculture.—The climate of Herefordshire varies greatly, according to the elevation and exposure. The air is healthy, and the population long-lived. The soil of this county consists principally of a deep heavy red loam, which varies in its degree of tenacity: in some districts there is a substratum of clay; in others, gravel approaches nearer to the surface. The whole is extremely favourable to the growth of trees, especially the apple and the oak. Wheat, turnips, barley, clover, and peas or vetches, are raised in the valleys and less exposed elevations: wheat is the chief object of attention. Hop-gardens are common in the middle and eastern portions of the county. Orchards are numerous and general. Cider is made in large quantities.

The prevalent breed of cattle is that for which this county is justly celebrated; their colour is red, with white or mottled faces, and frequently white along the back and about the legs. Graziers from the south and the middle of England drive a large number of this popular stock from the Hereford Cattle-mas and October fairs. The usual breed of sheep is a cross between the Leicester and the Ryeland. Agricultural horses of average quality are bred in considerable number. The northern part of the county produces many useful riding and coach horses.

Political Divisions.—Herefordshire is divided into 11 hundreds:—Broxash, Grimsworth, Greytree, Ewyas Lacy, Huntingdon, Radlow, Stretford, Webtree, Wormilow, Wigmore, and Wolphy. These contain 221 parishes and 7 market-towns—BROMYARD, HEREFORD, ROSS, LEDBURY, LEOMINSTER, KINGTON, and WOELEY. Notices of these towns will be found under their respective titles. The following are the more important villages, with the population of the parishes in 1851, and a few other particulars:—

Abbey-Dore. [DORE-ABBEY.] *Bosbury*, 16 miles W. by N. from Hereford, population 1133, is pleasantly situated on the small river Leddon. The Free Grammar school has an income from endowment of 82*l.* a year, and had 85 scholars in 1851. *Cradley*, 17 miles E.S.E. from Hereford, population 1641, contains an Endowed Free school, which has an income from endowment of 20*l.* a year, and had 78 scholars in 1853. *Eardisland*, on the left bank of the river Arrow, 15 miles N.N.W. from Hereford: population, 889. The Free school, founded in 1607, has an income from endowment of 55*l.* a year, and had 75 scholars in 1851. There are also National schools. *Eardisley*, 15 miles W.N.W. from Hereford, population 811, is situated on both sides of a small river that runs into the Wye. There is a National school. Fairs for cattle and dairy produce are held on May 15th and October 18th. *Leintwardine*, 25 miles N.N.W. from Hereford, population 1607, is situated on the left bank of the river Teme, into which the river Clun flows about half a mile west from the village. In the church are beautiful specimens of stained glass. The rivers Teme and Clun are much resorted to for angling. Limestone is quarried in the neighbourhood. *Madley*, 6 miles W. by S. from Hereford, population 927, has a commodious and handsome church, chiefly of the decorated style, with an embattled tower at the west end. There is a chapel for Baptists. *Mordiford*, 4½ miles E.S.E. from Hereford, population 677, is situated on the left bank of the Frome, near its junction with the Wye. The church, dedicated to the Holy Rood, has a tower at the west end, erected in 1814. There are National and Infant schools. Hops are cultivated in the vicinity. Limestone is extensively quarried. Near Mordiford are remains of an ancient camp. *Orleton*, 20 miles N. from Hereford: population, 618. There are here National schools. A great cattle fair is held on April 24th. Hops are extensively cultivated. *Pembridge*, 15 miles N.W. by N. from Hereford, population 1319, on the banks of the river Arrow, has a commodious church with a steeple of peculiar construction detached from the churob. There are chapels for Wesleyan Methodists and Independents, National schools, and an hospital for six poor persons. Hops are cultivated to a considerable extent. *Shobdon*, 20 miles N.W. by N. from Hereford: population, 538. Schools for boys and girls are supported by Mr. and Mrs. Hanbury. Hops are cultivated in the vicinity. Near the church is a mount, with remains of an ancient fortification. *Wigmore*, 22 miles N.N.W. from Hereford, population 494, contains National schools for boys and girls. Fairs for horned cattle, horses, and sheep are held on April 16th, May 6th, and August 5th. Limestone is quarried extensively in the vicinity. On an elevation westward from the village are the remains of Wigmore Castle, including some massive fragments of the keep. A priory was founded here in the reign of Richard I.

The churches of Kilpeck and Moccas are perhaps the oldest in the county: they are small churches of early Norman date, with semicircular apses. Avenbury, Castle Frome, Stanford Bishop, and Mathon are also of Norman date. The churches most distinguished for architectural beauty are at Ledbury, Leominster, Weobley, Dilwyn, Pembridge, Madley, Burghill, Abbey-Dore, and Kilpeck. The principal family mansions are—Eastnor Castle, a modern building of great size, and of considerable beauty, situated near Ledbury; Holme Lacy, Hampton Court, Stoke Edith, Berrington, Shobdon, Croft Castle, Garnons, Foxley, Garnstone, Downton Castle, Kentchurch, Goodrich Court, Harewood, and Whitfield. Kinnersley Castle, situated in the parish of the same name, is one of the oldest inhabited houses that we are acquainted with: it is asserted that it was built before the Conquest. At Brinsop is a curious fortified house, now occupied as a farm-house.

In Herefordshire industry is occupied, with little exception, in agriculture and retail trade. The manufacture of gloves employs a considerable number of women in the central and western parts of the county; some coarse hats are also made.

Ecclesiastical and Legal Divisions.—With the exception of a few parishes which are in the diocese of St. David's, the whole county is comprised in the diocese of Hereford, of which it forms an archdeaconry. By the Poor-Law Commissioners the county is divided into eight Unions—Bromyard, Dore, Hereford, Kington, Ledbury, Leominster, Ross, and Weobley. The Unions include 238 parishes and townships, with an area of 483,670 acres, and a population in 1851 of 110,708. Herefordshire is included in the Oxford circuit: the assizes and quarter-sessions are held at Hereford. County-courts are held at Bromyard, Hereford, Kington, Ledbury, Leominster, and Ross. Three members are returned to Parliament for the county, two for the city of Hereford, and two for the borough of Leominster.

History and Antiquities.—The greater part if not the whole of Herefordshire was comprised in the territory of the Silures, and was conquered by the Roman general Julius Frontinus, about A.D. 73. A line of Roman and British entrenchments may be traced from the Malvern Hills to Whitbourn, Thornbury, Croft, Brandon (near Leintwardine), and Coxwall Knoll (near Brampton Bryan). There are also traces of a camp on the east of Leintwardine, near Downton. The Roman road called Watling-street entered the county near Brandon, passed through Wigmore to Kenchester, and thence by way of Kington and Dore to Abergavenny in Monmouthshire. A second Roman road traversed a small portion of the south of this county near Ross; a third entered it from Worcester, and passing Frome Hill, Grandison,

Luggbridge, and Stretton Sugwas, reached Kenchester. During the Heptarchy Herefordshire belonged to Mercia, and in 680 a synod was held at Hereford.

The Danes for the second time obtained possession of Mercia about 819, and appointed Cenolph king. Cenolph was defeated by Alured, king of the West Saxons, whose successor Egbert united the seven principalities into one monarchy. The position of Herefordshire relative to Wales subjected it to continual inroads from the Welsh. A considerable part of the county was included in the debatable land called the 'Marches,' and was consequently the scene of frequent contests. Harold, after subduing the Welsh in one of his expeditions, made an ordinance that if any Briton was found on the English side of Offa's dyke (an artificial boundary which in part of its great length has been traced through the county of Hereford), his right hand should be cut off by the king's officers. The strife continued and was carried on with more or less vigour during several reigns. The demolition of castles enforced by Henry II., in order to limit the power of his barons, had no very beneficial effect on the security of Herefordshire. These garrisons being destroyed, the Welsh, who had for a long time lived in comparative tranquillity, recommenced their depredations, which were not quelled until an English army had been marched against them. During the troubled times of Edward II., Herefordshire was the scene of many executions; among others Hugh De Spenser, Baldoe, and Reding, the immediate adherents of the king, were executed at Hereford. At a later period the rebellion of Owen Glyndwr threw the Marches into confusion, and renewed the feeling of insecurity which the Welsh had so frequently excited.

During the wars of York and Lancaster a battle was fought in 1461 at Mortimer's Cross, in the parish of Kingland, between the Earl of March and the army under the Earls of Pembroke and Ormond, and Owen Tudor, husband of Catherine of France, was taken prisoner and afterwards beheaded at Hereford. In the contest between the King and the Parliament, the city of Hereford was thrice in the possession of the Royalists, from whom in 1646 it was taken by Sir William Waller and Colonel Birch.

A pile of stones, called 'Arthur's Stone,' situated in the parish of Dorstone, constitutes the only remains of primeval antiquity.

Statistics.—According to the 'Census of Religious Worship and Education,' taken in 1851, it appears that there were then in the county 426 places of worship, of which 213 belonged to the Church of England, 115 to Primitive and Wesleyan Methodists, 20 to Independents, 16 to Baptists, and 32 to other bodies. The total number of sittings provided was 69,575. The number of Sunday schools was 161, with 9150 scholars: of these schools 109 belonged to the Church of England, 14 to Baptists, 12 to Independents, 9 to Wesleyan Methodists, 5 to Primitive Methodists, and 12 to other bodies. Of day schools there were in the county 303, of which 149 were public day schools with 8763 scholars, and 154 were private day schools with 2697 scholars. The number of evening schools for adults was 4, with 75 scholars. Of literary and scientific institutions there were 3, all in the city of Hereford, which had 415 members, with 6076 volumes in the libraries belonging to them. In 1852 the county had 6 savings banks—at Bromyard, Hereford, Kington, Ledbury, Leominster, and Ross: the total amount owing to depositors on November 20th 1852 was 240,483*l.* 8*s.*

HERENCIA. [CASTILLA LA NUEVA.]

HERENTHALS. [ANTWERP.]

HERISSON. [ALLIER.]

HERM. [GUERNSEY.]

HERMANNSTADT (in Hungarian *Nagy-Seeben*, in Wallach *Szibin*), an important town of Transylvania, capital of the 'Land of the Saxons,' is situated in a beautiful and fertile valley watered by the Zibin, a feeder of the Alt (from which it derives its Latin name of Zibinnium, or Cebinnium), in 45° 47' 4" N. lat., 24° 9' 20" E. long., 60 miles W. from Cronstadt, double that distance E. from Temesvar, and about 6 miles from the northern entrance of the Rothernthurm Pass over the southern Carpathians into Wallachia: population, about 20,000. It consists of an upper and lower town, the former built on an eminence, and communicating with the latter by stone steps; the whole is surrounded by a double wall pierced by five gates and girt by a moat. In the upper town is an old fortress or citadel. The streets are in most instances narrow, but clean, and the houses are well and regularly built in a quaint gothic style. The principal, or market-square is spacious, surrounded by good buildings, and adorned with a handsome fountain. There are four Lutheran and three Catholic churches, a Calvinist and a Greek chapel, the military hospital and barracks, a house of correction, and a theatre in the town. The principal buildings are the Lutheran cathedral; the Briakenal palace, which contains a gymnasium, a picture gallery, a public library of 15,000 volumes, a large collection of medals, and a museum of Roman antiquities found in Transylvania; and the town-hall, an old gothic edifice, which contains the archives of the Saxon colony of Transylvania. Hermannstadt is the residence of the Austrian governor of Transylvania, and of a Greek bishop; it is the seat of the supreme tribunal of the province and of a financial board, and the head-quarters of the 12th corps of the Austrian army. The ramparts of Hermannstadt are laid out in pretty promenades, and the environs in which are three suburbs abound with beautiful scenery.

including near views of the Carpathians. The manufactures of the town comprise linen and woollen stuffs, horn-combs, felt-hats, ropes, pottery, paper, leather, and gunpowder. There is a considerable local trade, but the overland commerce with Wallachia, formerly so important, has almost disappeared. Of the inhabitants, the Saxon element is the most numerous. Among them are also Wallachs, Hungarians, Armenians, Greeks, Gipsies, and Jews.

HERNANI. [BASQUE PROVINCES.]

HERNE BAY. [KENT.]

HERNÖSANDS LÄN. [ÄNGERMANNLAND.]

HERNHUT. [LAUBITZ.]

HERRENVEEN. [FRIESLAND.]

HERSFELD. [FULDA.]

HERTFORD, the county town of Hertfordshire, a municipal and parliamentary borough, market-town, and the seat of a Poor-Law Union, is situated chiefly on the right bank of the river Lea, in 51° 48' N. lat., 0° 4' W. long., distant 21 miles N. from London by road, and 26 miles by the Eastern Counties railway. The population of the borough in 1851 was 6605. The livings are in the archdeaconry of St. Albans and diocese of Rochester. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. Hertford Poor-Law Union contains 18 parishes and liberties, with an area of 34,830 acres, and a population in 1851 of 15,188.

The town of Hertford is irregularly laid out, but the streets are well paved and are lighted with gas. All Saints parish church is a large cruciform structure of the 14th century; St. Andrew's church is smaller, and is supposed to be of earlier date than All Saints. There are places of worship for Independents, Baptists, Wesleyan and Primitive Methodists, Roman Catholics, and Quakers. A branch of Christ's Hospital, or the Blue-Coat school, is maintained at Hertford. In 1853 the number of boys was 450, and of girls 70. Connected with the school is an infirmary to accommodate 100 sick children. In Hertford are also the Cowper Testimonial National schools, erected in 1841 in memory of Henry Cowper, Esq.; the Green-Coat school for 40 boys and 30 girls; Hale's Free Grammar school for boys; a School of Industry; an Industrial training college; Infant schools, a literary and scientific institute, a Mutual Instruction Society, and a savings bank. The General Infirmary is supported partly by endowment and in part by subscription. The Corn Exchange, erected in 1849, is covered with a glass roof. The Shire Hall, a spacious building, contains the courts of law, an assembly-room, grand jury-rooms, the town-hall, council-chamber, and other judicial and municipal offices. Some portions remain of an ancient castle. A handsome brick edifice was built on the site of the castle about the time of James I., but some parts of it are of older date. The county jail and house of correction is situated a little way eastward from the town; one ward of it is appropriated as the borough prison.

In Hertford as in other towns of the county a good deal of business is done in malting. There are many corn-mills in the vicinity. The market on Saturday is one of the largest corn-markets in the kingdom. There are four yearly fairs. Quarter sessions and a county court are held in the town.

Hertford is a place of considerable antiquity. In the civil war of the reign of John the castle, which had been built by Edward the Elder about 905, was taken, after a brave defence, by the Dauphin Louis and the revolted barons: it subsequently came to the crown, and was granted in succession to John of Gaunt, and to the queens of Henry IV., V., and VI. Queen Elizabeth occasionally resided and held her court in this castle.

HERTFORDSHIRE, an inland county of England, situated between 51° 36' and 52° 5' N. lat., 0° 13' E. and 0° 45' W. long. It is bounded N. by Cambridgeshire, E. by Essex, S. by Middlesex, W. by Buckinghamshire, and N.W. by Bedfordshire. Its greatest length is 39 miles; its greatest breadth about 25 miles. Its area is estimated at 669 square miles, or 391,141 acres. The population of the county in 1851 was 167,298.

Surface, Hydrography, and Communications.—Hertfordshire has no lofty hills. The highest elevations are the Chalk Downs, which form the continuation of the Chiltern Hills, north-eastward into Essex and Cambridgeshire. Kenworth Hill, just within the border of the county, near Dunstable (in Bedfordshire), is 908 feet high. The surface of the county is generally undulating, and from the abundance of woods presents a variety of pleasing scenery.

The rivers for the most part belong to the basin of the Thames. The principal are the Colne and the Lea; the Hiz and some other streams in the northern part of the county belong to the system of the Ouse. The Lea rises near Houghton Regis, in Bedfordshire; it enters Hertfordshire on the north-west side of the county, and flows 9 miles S.E. to the neighbourhood of Hatfield: hence it flows east-north-east to Ware. At Hertford it receives the Maran or Mimram and the Beane, and between Hertford and Ware the Rib; all on the left bank. From Ware it flows to the border of Hertfordshire and Essex, where it receives the Stort, also on the left bank. At Waltham Cross it quits Hertfordshire. The navigation commences at Hertford.

The Colne rises near Hatfield, in this county, and flows through a projecting part of the county of Middlesex into Hertfordshire again. It has a very circuitous course of 13 miles to the junction of the

Verlam or Muse, on its right bank, near St. Albans; from this point it flows by Watford and Rickmansworth, partly through and partly on the border of the county, till it quits it to form the boundary of Buckinghamshire and Middlesex. Some of the feeders of the Thames, another affluent of the Thames, have their sources in the north-western part of the county, near Tring.

The streams which belong to the system of the Ouse have but a small part of their course in this county. They rise on the northern slope of the Chalk Downs. They are the Oughton, the Hiz proper, and the Pirral.

The New River, which is brought to London from springs in the neighbourhood of Ware, has a feeder from the Lea near that town. A part of its course is in Hertfordshire; it is carried along the valley of the Lea, and nearly parallel to the course of that stream.

The Grand Junction Canal enters the county near Tring, and runs along the valleys of the Quin, the Gade, and the Colne, till it enters Middlesex. There are cuts from the main line in the neighbourhood of Tring, to Aylesbury, and to Wendover; and one near Watford to the town of Watford.

The high north road runs through this county, through Chipping Barnet, Hatfield, Stevenage, and Baldock: the Liverpool road branches off from the North road, and runs through St. Albans to Dunstable; the Cambridge road runs by Waltham Cross, Hoddesdon, Ware, and Puckeridge, where it divides into two branches, one of which passes through Buntingford and Royston.

The London and North-Western railway runs through this county, nearly in the line of the Grand Junction Canal. The Great Northern railway enters the county near Barnet, and passes through it in a generally northern direction, quitting it near Hitchin. From Hitchin a branch is carried to Royston, and thence continued to join the Eastern Counties line near Cambridge. The Eastern Counties railway skirts the south-eastern border of the county from Waltham Abbey to Bishop's Stortford. A short branch runs from the main line near Hoddesdon to Ware.

Geological Character.—This county is comprehended in the chalk basin of London. The south-eastern corner at Cheshunt, and the south-western part, comprehended within a line drawn from North Mimms by Ridgehall, Aldenham, and Bushey, to Harefield, in Middlesex, are occupied by the London clay. From under this the plastic clay crops out, and extends to a line drawn from the Stort, between Sawbridgeworth and Bishop's Stortford, to the north of Ware, Hertford, and Hatfield, to St. Albans, and thence along the valley of the Colne. To the north-west of this line all the county is occupied by the chalk, except a few spots along the border of Bedfordshire, where the subjacent strata crop out.

Climate, Soil, Agriculture.—The climate of Hertfordshire is as mild and genial as that of most of the inland counties. The harvest is early where the soil is light and rich, as is the case in some of the valleys. On the cold wet clays, which are found in some parts of the county, and the most exposed tops of the chalky hills, the crops are later. The whole of the county is upon chalk at a greater or less depth below the soil; and in the north-western part, toward Bedfordshire, the chalk rises to the surface in considerable hills. Where the chalk lies deeper, the soil on the hills is mostly a heavy clay; and the valleys between them have variations of gravel and loam much intermixed. Rich loam occurs on the borders of Essex.

The number of resident gentry in Hertfordshire tends to introduce a high state of cultivation around their immediate residences; but, as the mansions are generally erected in the driest and best situations, the cold wet clays are a good deal neglected; the roads also on the clay soils are not good.

There are many orchards in Hertfordshire, chiefly for apples and cherries, which are sold in London. In the poorer soils are many woods and coppices, but they are fast diminishing in number, and the land is being gradually brought into cultivation as arable or pasture.

There are no breeds of cattle peculiar to Hertfordshire. The Suffolk cart-horses are esteemed for farm work, being active and tractable. The grass-lands are reserved for hay, and there are few rough pastures.

Divisions, Towns, &c.—The county is divided into eight hundreds, namely:—Braughing, east; Broadwater, central; Cashio, central and south-west; Dacorum, west; Edwinstree, north-east; Hertford, south-east; Hitchin, north-west; Odsey, north. But several of the hundreds are most irregularly formed. Cashio, Dacorum, and Broadwater hundreds have outlying portions in various parts of the county.

Hertfordshire has no city: it contains two boroughs and market-towns, namely, HERTFORD and ST. ALBANS; and twelve other market-towns, namely, BALDOCK, BARNET, BERKHAMPTON, BISHOP'S STORTFORD, HATFIELD, HEMEL HEMPTSTEAD, HITCHIN, HODDESDON, ROYSTON, TRING, WARE, and WATFORD. The markets of BUNTINGFORD and RICKMANSWORTH have fallen into disuse; but they are still frequently enumerated as market-towns. The places which have their names printed in small capitals are described under their respective titles.

The following towns had mostly markets, which are now generally disused; the populations are those of 1851:—

Ashwell, 24 miles N.N.W. from Hertford, population 1425, is situated on the slope of the chalk hills. A small corn and cattle market is held on Thursday, and fairs in July and November. There

are here an Endowed school for boys, which is supported by the Merchant Taylors' Company, and a girls school. Roman coins have been found in the vicinity.

Braughin, 9 miles N.N.E. from Hertford, population 1246, on the site of the Roman station *Ad Fines*, is built on both sides of the small river *Quin*, near its junction with the *Rib*. The parish church, an ancient edifice, has a tower surmounted with a spire. The Independents have a place of worship. There are here an Endowed school for boys, and a National school for girls.

Hadham, *Much* or *Great*, 7 miles N.E. from Hertford, population 878, had anciently a palace, the site of which is now occupied by the Hadham Palace Lunatic Asylum. There are here National and Infant schools.

Hoddesdon, in Hertford hundred, 4 miles S.E. from Hertford, population of the hamlet 1854, consists chiefly of two long streets, which are well lighted: some of the inns are of old date, such as the *Bull*, mentioned by *Matthew Prior*, and the *Thatched House*, frequented by *Izaak Walton*, when angling in the *Lea*. *Hoddesdon* is still much resorted to by London anglers. The chapel erected in 1734, and repaired in 1827, is a neat and commodious structure. The Independents and Quakers have places of worship, and there are National, British, and Infant schools.

Redbourn, a small but ancient town on the right bank of the *Verlam*, 16 miles W. by N. from Hertford, population 2085, has three fairs in the year. Some corn-mills are in the vicinity; glove-making and the straw-plat manufacture employ some of the inhabitants. Near *Redbourn* is an ancient encampment called *Aubury*.

Sawbridgeworth, on the right bank of the river *Stort*, is 8 miles E. by N. from Hertford: population, 2571. Besides the parish church there are chapels for Independents and Baptists. There are a National and a Free school. Some corn-mills are in the vicinity. Malting is carried on. Fairs are held on April 23rd and October 20th.

Stevenage, 11 miles N.W. by N. from Hertford, population 2118, was formerly a market-town. The parish church contains a fine painted window at the east end. The Free Grammar school was founded in 1558: its endowment yields 67*l.* a year, with a house and garden free; there were 33 scholars in 1858. There are National schools for boys and girls.

Wheatthampstead, a small ancient town 10 miles W. by N. from Hertford, population 1908. The parish church is an old cruciform building, with a tower springing from the intersection. There are chapels for Independents and Methodists, and National and Infant schools. Paper-making, malting, and brewing are carried on.

The following are some of the more important villages in the county, with their parish populations in 1851, and a few other particulars:—

Barkway, 16 miles N. by E. from Hertford, population 1288, has a handsome church, containing in the windows some fragments of stained glass which formed part of a series representing the history of the creation. *Broxbourn*, 5 miles S.S.E. from Hertford, population 717, situated between the *Lea* and the *New River*, is a station on the Eastern Counties railway. The parish church, a commodious and handsome edifice in the perpendicular style, contains some fine monuments and a curious font. *Cheshunt*, 8 miles S. by E. from Hertford: population, 5579. The name appears in *Domesday Book* as *Cestre-hunt*, and it is probable there was a Roman station here. There are here Free, National, Infant, and Industrial schools, and a Vicarage school. *Cheshunt Park* was formerly the residence of *Cardinal Wolsey*, of *James I.*, and of *Richard Cromwell*. *Cheshunt College* is an institution founded by the Countess of *Huntingdon* for training candidates for the ministry. The students reside in the college buildings, and pursue a course of theological and classical studies during several years. The number of students in 1853 was 23. In this parish is *Waltham Cross*, situated near the *Essex* border. The beautiful cross erected here by *Edward I.* to mark one of the resting-places of the corpse of *Queen Eleanor* on its way to *Westminster* for interment, was restored a few years back by *Mr. W. B. Clarke*.

Haileybury, in the parish of *Great Amwell*, situated about 3 miles S.E. from Hertford, is the site of the *East India College*, which contained 85 inmates in 1851. The college, which was founded in 1806, contains residences for the principal and for several professors, and accommodation for 100 students, who are trained for the civil service of the *East India Company*; about 30 are sent out to *India* every year. The number of students in June 1853 was 91. *Hertingfordbury*, 2 miles W. by S. from Hertford, population 752, on the right side of the small river *Maran*, a feeder of the *Lea*. In the church is a vault belonging to the family of *Earl Cowper*, the design and workmanship of which are much admired. *Earl Cowper's* seat, *Panshanger*, is about a mile north-west from the village; in the park is a celebrated large oak-tree, which is about 17 feet in girth at a height of 5 feet from the ground: in the house are some fine paintings. *Abbot's Langley*, 20 miles W.S.W. from Hertford, population 2384, was the birthplace of *Pope Nicholas Breakspere*, the only Englishman who has ever occupied the *Papal* chair. There is here a National school. There are paper-mills and corn-mills in the vicinity. *King's Langley*, 21 miles W.S.W. from Hertford: population, 1599. The church, which is partly in the Norman style, is situated on elevated ground near the small river *Gade*, and consists of a chancel and nave, with a tower at

the west end. There is here a type-foundry. Brewing is carried on, and the straw-plat manufacture employs some of the inhabitants. *Standon*, 8 miles N.N.E. from Hertford, population 2462, including 106 inmates of *St. Edmund's College*, has an ancient church; National schools for boys and girls; and the Roman Catholic College of *St. Edmund*, the buildings of which are of considerable extent. Paper-making and rope- and twine-making employ some of the inhabitants. *Watton*, 5 miles N. by W. from Hertford, population 976, has a church, National and Infant schools, and a savings bank. An extensive water-mill and a malting establishment are in the village.

Divisions for Ecclesiastical and Legal Purposes.—Hertfordshire is comprehended in the diocese of *Rocheater* and archdeaconry of *St. Albans*. County courts are held in *Barnet*, *Bishop Stortford*, *Hertford*, *Hitchin*, *Waltham*, and *Watford*. The county is divided by the *Poor-Law Commissioners* into 13 Unions:—*St. Albans*, *Barnet*, *Berkhampstead*, *Bishop's Stortford*, *Buntingford*, *Hatfield*, *Hemel Hempstead*, *Hertford*, *Hitchin*, *Royston*, *Ware*, *Watford*, and *Welwyn*. These Unions, which extend somewhat beyond the county, contain 174 parishes and townships, with an area of 453,345 acres, and a population in 1851 of 186,176. Hertfordshire is included in the *Home circuit*. The assizes and quarter-sessions are held at Hertford, except for the hundred of *Cashio*, the quarter-sessions for which are held at *St. Albans*. The county returns three members to the *Imperial Parliament*. Two members are returned for the borough of *Hertford*. *St. Albans* returned two members, but was disfranchised in 1852 for corruption and bribery in the election of representatives to *Parliament*.

History and Antiquities.—At the time of *Cæsar's* invasion Hertfordshire seems to have belonged to the *Catyeuchlani*, or *Catuallani*, of whom we have elsewhere supposed *Cassivellaunus*, the antagonist of *Cæsar* (B.C. 54) to have been the chief. [BRITANNIA.] In the revolt under *Boadicea* (A.D. 61), *Verolamium* was taken and the inhabitants massacred. The martyrdom of *Alban* occurred during the persecution in the reign of *Diocletian*.

Several of the ancient British roads or trackways crossed this county: *Watling-street* crossed it in a north-west direction, not varying much from that of the present road from *London* by *Edgware* and *St. Albans* to *Dunstable*; *Ermine-street* nearly coincided with the present road from *London* by *Enfield*, *Ware*, and *Buntingford* to *Royston*; *Icknield-street* ran along the downs from *Dunstable* towards *Royston*. The *Verolamium* of the Romans has been mentioned as having been probably a British town: it has been conjectured that there were British towns or posts at *Royston*, at *Braughing*, at *Raven-sburg*, and perhaps at other places. The Romans included Hertfordshire in the province of *Flavia Cesariensis*. They fortified the town *Verolamium*, near *St. Albans* [ALBANS, ST.], on which they conferred the rank of a municipium; and made military roads along *Watling* and *Ermine* streets, and in other directions. A Roman post or town, *Ad Fines*, on the *Ermine-street*, was most probably at *Braughing*, where are the remains of a vallum of a regular shape, and where a tessellated pavement, many silver coins, and other Roman antiquities have been found. At *Wilbury Hill*, three miles west of *Baldock*, are remains of an ancient camp on the *Icknield-way*, inclosing about seven acres. Between *Caldecote* and *Hinxworth*, five miles north of *Baldock*, various Roman antiquities have been dug up. Roman antiquities have been found at *Ashwell*; in *Rockley Wood*, near *Royston*; at *Westmill*, near *Braughing*, and at *Bishop's Stortford*, *Cheshunt*, and *Hemel Hempstead*. When the Saxons subjugated Britain, Hertfordshire appears to have been included in the two kingdoms of *Essex* and *Mercia*.

In the invasions of the Northmen which troubled the close of the reign of *Alfred* (A.D. 896), they brought their vessels up the *Lea* to the neighbourhood probably of Hertford or *Ware*; but *Alfred*, who pursued them, diverted the waters of the *Lea* into another channel, and obliged the Northmen to abandon their vessels and march across the island to the *Severn*.

When *William the Conqueror*, after the battle of *Hastings* (1066), advanced into the interior of the kingdom, his march was impeded near *Berkhampstead* by *Frederick*, abbot of *St. Albans*, who obliged the *Conqueror* to come to terms, by swearing, in a grand assembly of the clergy and nobles at *Berkhampstead*, to govern according to the ancient laws of the realm, and especially those of *St. Edward* the Confessor. Hertford Castle was defended for *King John* by *Walter de Godarvil*, a retainer of *Fulke de Brent*, against the revolted barons and the *Dauphin Louis* of France. In the reign of *Edward II.* the barons, who were confederated against *Gaveston* the king's favourite, assembled their troops at *Wheatthampstead*, a few miles from *St. Albans*, 1312. After the general rising of the peasantry under *Wat Tyler* and *Jack Straw* many of the ringleaders were tried and executed at *St. Albans*, the king being there at the time with a guard of 1000 men.

In the war of the *Roses* this county was repeatedly the scene of contest. In 1455 *Richard*, duke of *York*, and the earls of *Salisbury* and *Warwick*, at the head of 3000 men, advanced towards *London* in order to seize and bring to trial the *Duke of Somerset*, who had been impeached of treason by the *House of Commons*, but released by the influence of the queen, *Margaret of Anjou*. They stormed the town of *St. Albans*, which was occupied by the king, who had advanced

from London with a body of 2000 men to impede their progress. The Duke of Somerset and several other nobles and gentlemen of the Royalist side fell in the battle, and the king himself was wounded and taken prisoner. In 1461 a second battle was fought at St. Albans. The queen, who had just vanquished and slain the Duke of York at Wakefield in Yorkshire, was advancing to London when she was met near St. Albans by the Yorkists under the Earl of Warwick, having the king with them. The Lancastrians prevailed, and the king was restored to his own party.

Of the monastic or castellated buildings of the middle ages Hertfordshire possesses but few remains. St. Alban's Abbey is the chief; to which may be added Royston church, formerly conventual, and some remains of the priories at Hitchin and Wara. There are castles at Hertford and Berkhamstead; some slight remains of a castle at Bishop's Stortford, and the earthworks of Anstey or Anstie Castle, between Royston and Bishop's Stortford. Waltham Cross and Hatfield Palace have been already noticed. There are some remains of a palace built by King Henry III. at King's Langley.

On the breaking out of the war between Charles I. and the Parliament, Cromwell, while yet captain of a troop of horse which he had raised, arrested the high-sheriff of Hertfordshire as he was proceeding to St. Albans to publish the king's proclamation declaring all the parliamentary commanders traitors. No public event has since occurred of any moment connected with the county.

Statistics.—According to the Census Returns of 1851 there were then in the county 347 places of worship, with 95,585 sittings. Of these places of worship 162 belonged to the Church of England, 60 to Primitive and Wesleyan Methodists, 47 to Independents, 44 to Baptists, 7 to Quakers, 6 to the Countess of Huntingdon's Connexion, and 21 to other bodies. The number of Sunday schools was 236 with 20,584 scholars. Of these schools 137 belonged to the Church of England, 34 to Independents, 32 to Methodists, 27 to Baptists, and 6 to other bodies. Of day schools there were 554, of which 244 were public day schools with 17,507 scholars, and 310 were private day schools with 5866 scholars. The number of evening schools for adults in 1851 was 12 with 225 scholars. There were in the county 18 scientific and literary institutions, with an aggregate membership of 1410, and libraries containing in all 7916 volumes. In 1852 the county contained 8 savings banks, at Baldock, Bishop Stortford, Buntingford, Cheshunt, Hemel Hempstead, Hertford, Hitchin, and Watford. The total amount owing to depositors on November 20th 1852 was 155,668*l.* 16*s.* 7*d.*

HESKET, and HESKET NEWMARKET. [CUMBERLAND.]

HESSE-CASSEL, a small state in Germany with the title of Electorate, is situated between 50° 6' and 52° 25' N. lat., 8° 25' and 10° 45' E. long. It consists of three distinct portions, of which the largest, extending only to 50° 40' N. lat., 10° 15' E. long., is bounded N.E. by Hanover and the Prussian province of Saxony, E. by Weimar and Bavaria, S. by Bavaria, and W. by Nassau and Hesse-Darmstadt. The detached portions are the county of Schaumburg to the north, surrounded by Hanover and Lippe, and the lordship of Schmalkalden to the east, surrounded by the Saxon principalities and the Prussian circle of Schleusingen. The area of the whole is 4420 square miles.

Divisions.—The electorate is divided into four provinces, which, with their respective area and population, are as follows:—

Provinces.	Area in Square Miles.	Population in 1846.
Upper Hesse, with Schaumburg	2,080	366,663
Lower Hesse	874	122,432
Fulda	884	140,713
Hanau	582	124,782
Total	4,420	754,590

Face of the Country, Soil, and Climate.—The country is in general hilly; but it contains numerous valleys, which in some places expand into more extensive plains. On the south-east and south the Thüringer-wald, the Rhöngebirge, and the Spessart extend their branches into the country from the Saxon duchies and Bavaria, and cover the province of Hanau, and the whole tract between the Werra and the Fulda. Schmalkalden is situated on the Thüringer-wald (Thüringian mountain), on the northern frontier of which is the Inselberg (2932 feet high). In Hesse proper the highest point is the Meissner, to the south-east of Almerode (2325 feet). The Thüringer-wald is thickly wooded, chiefly with red pine and fir. The other principal chains are the Hundsrück, the Wesergebirge, and the Vogelgebirge. The soil of Hesse is not distinguished in general by great fertility, but it can by no means be called sterile. The finest parts are the beautiful valleys of the Fulda, the Schwalm, the Eder, and the Werra. The climate is on the whole temperate, and everywhere healthy; mildest on the banks of the Main, and most severe in the province of Fulda, on the summits of the Rhöngebirge. The principal rivers are the Main, the Weser, the Werra, the Lahn, and the Fulda. The last, though not the largest, is the most important river of Hesse; rising in Bavaria, it traverses the circles of Fulda, Hersfeld, Röttingen, Meisingen, and Cassel, becomes navigable at Fulda, and

joins the Werra at Münden, in the kingdom of Hanover, both together forming the Weser. The Main only just touches the south-west corner of the country, and being joined by the Kinzig near Hanau, flows into the Rhine. The Lahn, traversing the circle of Marburg, joins the Rhine below Coblenz. There are no lakes, but numerous large ponds, of which there are 40 of various sizes in the district of Diemel alone. The railway from Frankfurt-am-Main through Marburg to Cassel is connected at its northern end by the Thüringian railway with Prussia and Saxony, and by the Westphalian lines with Hanover and Belgium. By the trunk-lines up the right bank of the Rhine and the branches that open upon it, the province is connected with Würtemberg, Bavaria, Baden, and Switzerland; and by a branch now in course of construction from Frankfurt through Hanau (thus far it is completed) and Würzburg, the electorate communicates at Bamberg with the great railway of central Germany, connecting Munich with Leipzig, Dresden, and Berlin.

Natural Productions.—Rye, barley, oats, wheat, maize, pulse, and potatoes in great abundance are cultivated. Flax and timber are staple articles: tobacco, hemp, madder, some hops, and rapeseed are also among the products. The vine is cultivated only in some parts of Hanau. The pasturage is in general good. Garden produce of excellent quality is raised about Cassel and Hanau; fruits are cultivated chiefly in Upper Hesse, Hanau, and Hersfeld, whence large quantities of dried fruits are exported. Apples are extensively grown for making cider. The breeding of cattle is pretty general: there are horses enough for the purposes of agriculture; and sheep chiefly in Lower Hesse, Hanau, and Fulda. Domestic poultry and game are very abundant. Hesse abounds in mineral wealth, producing silver, copper, lead, iron, quicksilver, cobalt, salt (from saline springs in great quantities), saltpetre, vitriol, and alum. There are also coal, marble, very fine white alabaster, porcelain-clay, potters'-earth, and pipe-clay, &c. Turf, which is abundant, is used for fuel. There are numerous mineral springs; those of Neundorf are much frequented for sulphur baths.

Manufactures and Trade.—Manufactures, which are carried on chiefly in Cassel, Hanau, and Fulda, have extended considerably since the electorate joined the Zollverein in 1832. The principal are linen, flannel, and carpets; fine linen is made in Cassel and Herzberg;—silks, velvets, carpets, and jewellery at Hanau. Cotton-spinning and weaving has been introduced, and is become pretty general, especially about Fulda, where the cotton trade is supplanting the linen manufacture. Schmalkalden manufactures almost all the steel and iron of the country, it produces timber (and little else) which is used in the smelting-works and iron-furnaces, of which there are seven in the country. Grossalmerode is celebrated for its crucibles and pottery, which are exported to all parts of the world. Other manufactures are paper, musical instruments, chemical products, beet-root sugar, tobacco, wooden-ware, &c. With respect to trade, there is properly no commercial town, and the two fairs at Cassel are of little importance. The chief exports are the industrial products enumerated, timber, wrought iron, salt, &c. The imports are colonial produce, wines, silk, cotton, brandy, &c. The transit trade by the Main, the Weser, the Werra, and the Fulda, but more especially by means of railways, is very important.

Revenue, Government, &c.—By the triennial budget for 1852-54, the expenditure for the three years is estimated at 13,932,790 dollars, and the receipts at 12,475,440 dollars; leaving a deficiency on the period of 1,457,350 dollars. In 1840, the latest year of which a statement is given, the public debt was 1,642,566 dollars, bearing interest at 3½ per cent.

The army consists of six regiments of infantry of the line, two battalions of foot-guards, two battalions of light infantry, and two regiments of cavalry.

The Constitution of January 1831 was one of the most liberal in Germany. The states formed only one chamber; and all laws were debated in the chamber, which had the control over the taxes. The electoral dignity is hereditary, to the exclusion of females. Though there is no longer an emperor of Germany, and consequently no elector, the sovereign retains the title of elector or prince elector (Kur-Fürst). The elector is assisted by a council of ministers.

Education.—The court and great majority of the inhabitants are Calvinists, the Roman Catholics number 102,000, the Jews about 9000. A law for the emancipation of the Jews was passed in 1833. The Calvinists are under superintendents, and the Roman Catholics under the bishop of Fulda. Hesse has a university at Marburg, the oldest Protestant university in Germany, founded in 1527: it has faculties of Calvinist theology, law, medicine, and philosophy, and had 62 professors and teachers in 1850, and 263 students. The library contains 100,000 volumes. Among other establishments for superior education are the six gymnasia or lycœums of Cassel, Marburg, Fulda, Rinteln, Hersfeld, and Hanau, which were attended by a total number of pupils amounting to 923 in 1850. There is a Catholic theological seminary in Fulda. Elementary schools are established throughout the state.

Divisions and Towns.—Lower Hesse is divided into ten circles. The chief town is Cassel, the capital of the electorate, which is noticed in a separate article. [CASSEL.] *Bschwege*, on the Werra, 25 miles

E.S.E. from Cassel, has 6000 inhabitants, who manufacture woollen stuffs, canvass, ribands, needles, iron-ware, and machinery. Among the other towns are *Frislar*, 20 miles S.W. from Cassel, with an Ursuline convent and 3000 inhabitants; *Hofgeismar*, a small walled town 15 miles N.N.W. from Cassel, population 3500; *Melungen*, another walled town on the left bank of the Fulda, 15 miles S. from Cassel, with a castle and about 4000 inhabitants, who manufacture woollen cloth; *Rothemburg*, on the Fulda, 24 miles S.E. from Cassel, with a palace, formerly the residence of the landgrave, 4 churches, and 3000 inhabitants; *Kinteln*, capital of the detached county of Schaumburg, situated on the Weser, 10 miles S.E. from Minden, population 3200; *Homburg*, on the Elze, 22 miles S. from Cassel, with a population of about 4000, employed in woollen and linen manufactures, brewing, distilling, and in the iron-mines near it.

Upper Hesse, which comprises the most western part of the electorate, is divided into four circles. Its chief town is *MARBURG*. The other towns are small; but among them may be named *Frankenberg*, on the Eder, 19 miles N. from Marburg: population, 3300.

The province of Fulda comprises the south-eastern part of Hesse-Cassel, and consists of—1, the former duchy of Fulda, chief town Fulda; 2, the circle of Hersfeld, chief town Hersfeld; 3, the circle of Hünfeld; and 4, of the lordship of Schmalkalden, which lies on the Upper Werra, between Saxe-Gotha and Saxe-Meiningen. This province and the chief towns in it are noticed under *FULDA*.

The province of Hanau comprises the most southern part of the electorate, and lies east of the territory of Frankfurt-am-Main. It is divided into four circles, and has for its chief town *HANAU*, which is noticed in a separate article.

From the time of William IV. (1592), Hesse-Cassel, though it suffered much in the successive wars which desolated Germany, did not sustain any loss of territory, but on the contrary it made several acquisitions. After the Thirty Years' War Hessian mercenaries were hired out to foreign powers; a system which greatly enriched the princes of Hesse. Frederick II., who succeeded to the government in 1760, embraced the Roman Catholic religion, but made no change in the constitution, and had his children educated Protestants. He let out several thousand men to England in the American war, and received for them, from 1776 to 1784, above three millions sterling. He died in 1785, and was succeeded by the landgrave William IX., who in the war of the French revolution not only furnished his contingent as a prince of the empire, but had also a body of troops in the pay of England. In the French revolution his dominions on the left bank of the Rhine were seized by the French. In 1803 he assumed the title of Elector as William I. In 1806 his territories were seized by Napoleon, and incorporated with the new kingdom of Westphalia. After the battle of Leipzig (1813) he returned to his capital, and subsequently became a member of the Germanic Confederation. He did not live on good terms with his subjects, who were disappointed in their expectations of obtaining a new constitution. He died in 1821, and was succeeded by his son William II., who embroiled himself still more seriously with his subjects by his connection with the Countess of Reichenbach. In 1830 serious riots broke out; the countess left Cassel; and on the 9th of January in the following year the elector presented his subjects with the long-promised constitution. Fresh disturbances however arose in consequence of the return of the countess; and the elector was so angry that he also left Cassel, and could not be induced to return. He appointed his son, the electoral prince, regent, who entered on his functions October 1, 1831.

Hesse-Cassel joined the Prussian Customs Union (*Zollverein*) in 1832. With the exception of some discontent consequent upon this step, the electorate enjoyed tranquillity till the year 1850. In that year, when re-action set in against the revolutionary doctrines and movements which had kept Germany in commotion since 1848, the chamber of Hesse-Cassel was not summoned to meet till the unusually late date of August 26, and was then asked to authorise the receipt of taxes till the 30th of September, when a budget would be presented. The assembly voted the receipt of indirect taxes, but refused, in the absence of a budget, to authorise the levy of direct taxes. On the 2nd of September the assembly was dissolved, and the elector subsequently ordered his subjects to pay the taxes as usual. A system of passive resistance soon developed itself against this arbitrary proclamation; a decree of the elector followed in a few days declaring his dominions in a state of siege, suppressing the journals, and prohibiting popular meetings. The elector on the 14th of September transferred the seat of government from Cassel to Bockenheim, a small town in the province of Hanau, not far from Frankfurt-am-Main, and claimed the protection of the Germanic Confederation. The Frankfurt diet then sitting passed a resolution condemning the Hessian chamber, and promising to take steps for the re-establishment of legal order in the electorate. Prussia then interfered in the quarrel, protesting against the jurisdiction of the diet, to which she and several of the German states had refused to send representatives. Austria, on the other hand, supported the resolution of the diet, as binding upon the states represented, at all events. Angry notes followed between the two powers: the armies of both states were put in motion. Prussia took possession of the military road through Hersfeld with a force under General Gröben, with part of which he occupied Cassel and Fulda. Bavarian troops entered the

territory of Hesse at Hanau, supported by a division of the Austrian army under Field-Marshal Legeditz, who advanced upon Fulda, from which the Prussians retired for (it was said) strategic reasons. Everything threatened an angry civil war in Germany, when at a conference held at Olmütz between Prince Swarzenburg and Baron Manteuffel, it was agreed to settle the affairs of Hesse and of Holstein (for thither also the Austrians were on march to support the federal diet against Prussia) by means of two commissioners, one appointed by the Confederation and the other by Prussia. Accordingly the Prussians withdrew from the military road, and the Federal commissioner, Field-Marshal Count de Linange, conducted the elector back to Cassel on the 27th of December.

HESSE-DARMSTADT, a grand-duchy in the west of Germany which is governed by the second main branch of the house of Hesse, was founded in 1567 by George I., youngest son of Philip the Generous, of whose dominion he obtained one-eighth with Darmstadt, and a small addition on the death of his brother Philip without issue. On the death of George his dominions were divided among his three sons. Louis V. succeeded him in the principal line; Philip obtained Butzbach, which reverted on his death to the main line; and Frederick, the youngest, was the founder of the junior line of Hesse-Darmstadt, namely, that of Hesse-Homburg. Excepting the ruinous effects of the Thirty Years' War, the reigns of the succeeding princes were on the whole prosperous, and various acquisitions of territory were made. Louis IX., who found the country burdened with debt, which he paid off, left to his son, Louis X., an improved territory with 300,000 inhabitants at his death in 1790. Louis X., during his long reign of 40 years, acquired very large additions to the extent of his dominions and the number of his subjects by the treaty of Luneville in 1801. In 1806 he joined the Confederation of the Rhine, and obtained from Napoleon still further accessions of territory, with 112,000 inhabitants, and the dignity of Grand-duke, on which he took the title of Louis I. In 1809 his troops acted against Austria, and the peace brought him new accessions of territory. In 1813 he let his troops serve with the French; but after the battle of Leipzig he joined the allies, on their engaging to let him retain his newly-acquired provinces. In 1815 the grand-duke joined the German Confederation. By the decision of the congress at Vienna he indeed made large cessions on the right bank of the Rhine, with 185,000 inhabitants, to suit the convenience of Prussia and other states, but obtained on the left bank a part of the then late French department of Mont-Tonnère, with Bingen, Mainz, and other towns, containing altogether 203,854 inhabitants; so that he gained an addition of above 18,000 subjects.

The grand-duchy of Hesse-Darmstadt consists of two large portions, which are separated from each other by a long strip of land, extending from east to west, belonging to Hesse-Cassel and the city of Frankfurt. The grand-duchy from Wimpfen, a small detached portion surrounded by Würtemberg, to Bingen its most western point, is situated between 49° 12' and 51° 20' N. lat., 7° 50' and 9° 40' E. long. The northern portion is bounded W. by Prussia and Nassau; N.E. and S. by Hesse-Cassel. The southern portion is bounded N. by Nassau, Frankfurt, and Hesse-Cassel; and on the other sides by Bavaria and Baden. The area of the whole is 3231 square miles, and the population, according to the census of 1851, was 854,314.

Divisions.—The grand-duchy is divided into 3 provinces:—

1. *Ober-Hessen, or Upper Hesse*, has an area of 1542 square miles, and a population of 309,617; chief towns, Giessen, the provincial capital [*GIESSEN*], Friedberg (3000 inhabitants), Büdingen (2700 inhabitants), Alsfeld (3700 inhabitants), Lauterbach (3400 inhabitants), Schlitz (3200 inhabitants), Biedenkopf, on the Lahn (3200 inhabitants).

2. *Starkenbury* has an area of 1159 square miles, and a population of 319,050; chief towns, Darmstadt the capital of the grand-duchy [*DARMSTADT*], Pfungstadt (3000 inhabitants), Griesheim (2900 inhabitants), Bensheim (4000 inhabitants), Heppenheim (4100 inhabitants), Gernsheim (2900 inhabitants), Lampertheim (3000 inhabitants), Dieburg (3000 inhabitants), and Offenbach-am-Main (10,000 inhabitants). Near Heppenheim is the castle of Starckenburg, which gives name to the province. *Offenbach*, 4 miles S.E. from Frankfurt, stands on the left bank of the Main, which is here crossed by a bridge of boats. It has a castle the residence of the princes of Isenburg-Birstein, several churches and schools, and important manufactures of hosiery, carpets, cotton and woollen stuffs, carriages, pipes, musical instruments, and jewellery.

3. *Rhein-Hessen, or Rhenish Hesse*, has an area of 529 square miles, and a population of 225,647; chief towns, Oppenheim (2400 inhabitants), Mainz, the greatest fortress of the German confederation [*MAINZ*]; Worms (9500 inhabitants) [*WORMS*], Alzey (4500 inhabitants); and Bingen on the left bank of the Rhine at the mouth of the Nahe, population about 5000.

To the province of Upper Hesse belongs the entirely detached district of Wöhl, or Itter, the most northern part of the grand-duchy, a wild sterile country, surrounded by the territory of Waldeck.

The grand-duchy of Hesse, as a member of the German Confederation, is the ninth in rank, has three votes in the full council and one in the minor council, furnishes a contingent of 6195 men, and contributes 1500 florins annually to the treasury of the Confederation.

Ober-Hessen is traversed by the railway from Frankfurt-am-Main to

Cassel, which passes through Giessen. The Main-Neckar line, from Frankfurt to Heidelberg, traverses the province of Starkenburg, in which it passes through Darmstadt, Bensheim, and Heppenheim. The Main-Neckar line runs nearly parallel to and at a little distance west of the famous Roman road called Bergstrasse, which extends from near Darmstadt to Heidelberg, and traverses the district that lies at the western base of the Odenwald, the most beautiful region in Germany—so beautiful that it is popularly called the 'German Paradise.' The region itself is sometimes called the Bergstrasse. The province of Rhein-Hessen is traversed by the railway from Mayence to Paris, which passes through Worms.

Face of the Country, Soil, Climate.—A large part of the surface of the country is mountainous. The banks of the Rhine, and the Wetterau (valley of the Wetter in Oberhessen), which contain about 400 square miles, are pretty level and very fertile; the remainder of the country is traversed by branches of the Vogelsgebirge, the Odenwald, Taunus, and the Westerwald; but of the two latter only small portions extend into the grand-duchy. The Vogelsgebirge, in Upper Hesse, is a volcanic mass, which with its branches occupies 400 square miles: it consists chiefly of basalt, and of various compact and porous lavas. The Odenwald, in Starkenburg, presents a pleasing and picturesque rather than a wild mountain character. Most of its summits are clothed with forests of oak, beech, and fir, while the broad well-watered valleys and middle declivities are covered with numerous habitations and carefully cultivated. Hesse-Darmstadt is on the whole an agricultural country, and one of the most fertile and best cultivated in Germany. The chief productions are corn of all kinds, maize, and spelt; wheat and rye chiefly in Rhenish Hesse and the Wetterau; flax, hemp, hops, tobacco, pulse, potatoes, wines, both white and red, garden vegetables and fruit, and timber. Rhein-Hessen is nearly destitute of timber, but famous for its vineyards, which yield some of the finest Rhenish wines. The valleys of the Odenwald and Vogelsgebirge are well adapted to the breeding of cattle and sheep. Swine are kept chiefly in Upper Hesse and Starkenburg. The breeding of horses is much neglected. Domestic poultry is abundant. Mining is confined to copper, iron, coal, and salt. The iron mines are chiefly in Oberhessen and the Odenwald. Cobalt, basalt, lime, sandstone, marble, and slate, are found in different parts of the grand-duchy. The chief rivers are the Rhine (2500 feet broad at Mainz), and the Main, and next to these the Lahn, the Schwalm, the Nidda, the Ohm, and the Itter.

Manufactures, Trade, &c.—The chief manufactures are of woollens, cottons, and linen (of which manufacture the principal centre is the little town of Schlitz, situated on a feeder of the Fulda at the eastern base of the Vogelberg in Ober-Hessen), leather, and hardware. Wine is produced chiefly in the province of Rhein-Hessen, which lies entirely on the left bank of the Rhine. The most considerable manufacturing and trading town is Offenbach, which has two annual fairs. Mainz is the principal place for the transit-trade. The exports consist of the natural productions of the country and of some manufactures. Hesse-Darmstadt is a member of the German Customs Union, and derives a considerable annual revenue from the transit trade.

The revenue, according to the budget for the financial period 1851-1853, amounts annually to 8,206,873 florins, and the expenditure to an equal sum, including the interest of the debt. The public debt, properly so called, amounted at the end of 1849 to 4,346,267 florins; but besides this the state is accountable for 2 millions of florins in paper money, and 11,848,607 florins bearing interest and borrowed for the construction of railways.

The military establishment is fixed at 10,514 men, namely, 1446 cavalry, artillery 853, infantry 8041, a company of sappers and miners 126, general staff 48.

Religion, Education.—Of the 854,314 inhabitants, 409,658 are Lutherans, 36,520 Calvinists, 157,405 United or Evangelical, 217,798 Catholics (who are under the bishop of Mainz), 28,734 Jews, and 4199 belonging to small Christian sects. There is a university at Giessen [GIESSEN], an episcopal seminary at Mainz, gymnasia in Darmstadt, Giessen, Mainz, Bensheim, Büdingen, and Worms, and at least one elementary school in every commune.

HESSE-HOMBURG was formerly a part of Hesse-Darmstadt, till it came, in 1596, into the possession of Frederick I., youngest son of George I., who was the founder of the line of Hesse-Homburg. The Congress of Vienna in 1815 restored the Landgrave to the sovereignty of his principality of Hesse-Homburg (of which he had been deprived in 1806), and added to it the lordship of Meisenheim, on the other side of the Rhine. The landgrave was received in 1817 as a member of the German Confederation, and as such has one vote in the full council. The area of Hesse-Homburg, exclusive of the private estates of the landgrave, is only 106 square miles; the population in 1852 was 24,921, more than half of whom are Calvinists: the rest are Lutherans and Catholics with about 150 Jews.

Divisions.—1. The lordship of *Homburg*, which contains 32 square miles with 11,166 inhabitants. The chief town, *Homburg-vor-der-Höhe*, with 4500 inhabitants, is situated 9 miles N. from Frankfurt-am-Main, at the foot of an eminence on which the palace of the landgrave is built, commanding an extensive prospect of extraordinary beauty. Homburg is divided into the old and the new towns, the latter of which is open, and regularly built. Besides the palace the chief

buildings are the Catholic cathedral, an orphan asylum, a synagogue, and the government offices.

2. The lordship of *Meisenheim*, which contains 74 square miles and 13,755 inhabitants. It lies between the Prussian province of the Lower Rhine, the Bavarian Palatinate, and the principalities of Lichtenberg and Birkenfeld. The chief town is Meisenheim, with 1750 inhabitants.

The territory of Hesse-Homburg contains a considerable proportion of arable land. Meisenheim, which is occupied by the offsets of the Hundsrück, has mines of coal, iron, stone-quarries, and considerable forests. The landgrave possesses also the bailiwicks of Winnigen, Hötensleben, and Oebisfelde, in the Prussian province of Saxony, and some other private estates. This petty state has a constitutional government. The landgrave is assisted by a privy council and a chamber of deputies, one of whom is returned for every 1500 inhabitants. The revenue for 1853 was 374,803 Rhenish florins, the expenditure 377,869 florins. About 26,000 florins a year are derived from the gambling establishment in the town of Homburg, which was opened in 1841. The Frankfurt National Assembly passed a law to put an end to this system in 1849, and sent a battalion of infantry to put the law in execution, in which they succeeded, but as soon as the troops were withdrawn gambling commenced afresh. The public debt on the 1st of February 1853 amounted to 1,245,980 florins. The military consists of 333 men, which force forms its contingent to the army of the Germanic Confederation.

HESSEN, an extensive country of Germany, which in ancient times was inhabited by the Catti, or Chatti, part of whom however emigrated before the Christian era to Gaul, where they were called Batavi. The territory inhabited by the Catti seems to have extended from the Westerwald to the Saale, and from the Main to the sources of the Weser, thus coinciding with the modern country of Hesse, which derives its name (Hessen or Haasen) from its ancient inhabitants. The Catti are mentioned under the emperors Augustus and Tiberius. Germanicus burnt their chief seat, Mattium (probably Marburg), A.D. 15. In the sequel they belonged to the great empire of the Franks, losing their name in the 3rd or 4th century. The Christian religion was introduced among them even before Charlemagne's reign by Boniface, the apostle of the Germans, archbishop of Mainz; and Christian churches and convents flourished in the 7th century at Hersfeld, Fulda, Frizlar, Amöneberg, &c. Till about the middle of the 13th century the history of Hesse was blended with that of Thüringen; but Henry Raspe, landgrave of Thüringen, dying without children, in 1247, a war for the succession took place, which was terminated in 1263 by a compact, by which Hesse was separated from Thüringen, and assigned to Henry, son of Sophia, duchess of Brabant, daughter of the late landgrave's brother, who was the common ancestor of all the succeeding landgraves of Hesse. Philip I., surnamed the Generous, who succeeded his father William II. in the sovereignty of the whole country in 1509, and who introduced the Reformation, divided his dominions among his four sons: William IV., the eldest, obtained one-half, with Cassel, the capital; Louis IV. a fourth part, with Marburg; Philip II. an eighth, with Rheinfels; and George I. an eighth, with Darmstadt. But Philip II. dying in 1583, and Louis IV. in 1604, without issue, there remained only the two still flourishing main branches of Hesse-Cassel and Hesse-Darmstadt.

HETTON. [DURHAM.]

HEUSDEN. [BRABANT, NORTH.]

HEVER. [KENT.]

HEWORTH. [DURHAM.]

HEXHAM, Northumberland, a market-town, and the seat of a Poor-Law Union in the parish of Hexham, is situated in 54° 59' N. lat., 2° 5' W. long., distant 20 miles W. from Newcastle, 279 miles N.N.W. from London by road, and 298½ miles by the Great Northern and Newcastle and Carlisle railways. The population of the township of Hexham was 5231 in 1851. The township is under the management of a Local Board of Health. The living is a perpetual curacy in the archdeaconry of Northumberland and diocese of Durham. Hexham Poor-Law Union contains 70 parishes and townships, with an area of 202,638 acres, and a population in 1851 of 30,397.

Roman remains have been discovered at Hexham, and it is believed to have been a Roman station. In the 7th century (A.D. 674) a monastery was founded here by St. Wilfrid, who erected the monastic buildings in a style of magnificence little known at that day. About 678, on the division of the Northumbrian diocese into three parts, a bishop's see was established at Hexham. The diocese was afterwards united to Lindisfarne. The abbey and town of Hexham were sacked by the Danes early in the 9th century; and in 875 it was again attacked, the church burned, and the inhabitants massacred. In 1112 the archbishop of York established here a priory of regular canons of St. Augustine, and bestowed on them the former cathedral, and many other gifts. In the Scottish wars of Edward I. the town was burned, and part of the church was destroyed.

Hexham is pleasantly situated on the right bank of the Tyne River a little below the junction of the North and South Tyne. The principal streets are of good width, and the town is lighted with gas, and partially paved. The market-place is a spacious square, surrounded with good houses; there is a neat and commodious market-house, furnished with piazzas. The bridge over the Tyne at Hexham has

nine principal arches, with three supplementary arches, affording a passage for the waters in time of floods. The old priory church, now used as a parish church, is a cruciform edifice, with a lofty central tower, and is of the transition style of the 12th century. The nave, which was burnt by the Scots in the reign of Edward I., has never been rebuilt; the transepts are separated from the choir by a screen, richly carved in the lower part, and having in the upper part an emblematical painting. The choir is separated from the side aisles by three tiers of arches, supported by massive clustered pillars: the lower and the upper tiers are composed of pointed arches, the arches in the middle tier are circular. At the west end of the church are some remains of the monastic buildings. In Hexham there are places of worship for Independents, Wesleyan and Primitive Methodists, English Presbyterians, United Presbyterians and Roman Catholics. Hexham is the seat of a bishop of the Roman Catholic Church in England. The Free Grammar school, founded in 1599, has an income from endowment of 25*l.* a year, and had 55 scholars in 1853. There are also a Free school, a mechanics institute, a savings bank, and a dispensary. A county court is held in the town. Tuesday is the market-day. Fairs are held on March 25th, August 6th, and November 9th. Gloves and hats are manufactured in the town.

HEYTESBURY. [WILTSHIRE.]

HIBERNIA. [IRELAND.]

HIÈRES. [HYÈRES.]

HIERRO, or FERRO, ISLAND. [CANARIES.]

HIERTING, or HJERTING, a small sea-port town of Jütland in Denmark, is situated on the east shore of the Bay of Hierting, near the point indicated by 55° 31' N. lat., 8° 21' E. long. It has lately risen to consideration on account of its harbour, which affords to Denmark a direct means of import and export independent of Hamburg and Bremen. A railroad is in course of construction to Copenhagen, with breaks at the Little and Great Belts. Steamers occasionally ply with cattle and the agricultural produce of Jütland to Lowestoft in the English county of Suffolk.

The Bay of Hierting is a well-sheltered inlet of the North Sea, about 10 miles long and 3 miles broad. It is protected on the west by a long sandy peninsula and on the south by the island of Fanø, between which and the peninsula, an entrance about a mile and a half in width leads into the bay from the North Sea. The *Wardø-see* runs into the head of Hierting Bay a few miles west of the town of Wardø.

HIGHAM FERRERS. [NORTHAMPTONSHIRE.]

HIGHGATE. [MIDDLESEX.]

HIGHWORTH, Wiltshire, a market-town, and conjointly with Swindon the seat of a Poor-Law Union, in the parish of Highworth, is situated in 51° 38' N. lat., 1° 42' W. long.; distant 26 miles N. by E. from Devizes, and 74 miles W. by N. from London. The population of the tithing in 1851 was 698, of the entire parish, 4026. The living is a vicarage in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Highworth and Swindon Poor-Law Union contains 16 parishes and townships, with an area of 52,030 acres, and a population in 1851 of 17,332.

Highworth stands on a hill on the road between Lechlade and Swindon. It is lighted with gas. The houses are generally built of stone. The church is chiefly of the 14th century. On the south side is a chapel which is hung round with ancient armour. The Wesleyan and Primitive Methodists and Independents have places of worship, and there are National and British schools. Wednesday is the market-day. Two fairs are held in the course of the year.

HILDBURGHAUSEN. [SALE-MIENINGEN.]

HILDESHEIM, a *landdrostei*, or province, of Hanover, consisting of the principality of Hildesheim, which forms the most southern part of Hanover proper; of the principalities of Göttingen and Grubenhagen, which form an isolated portion of Hanover lying between Brunswick, Hesse-Cassel, Prussian Saxony, and Westphalia; and of the county of Hohnstein, another isolated district which lies south-east of the preceding, and extends southward from the Brunswick circle of Blankenburg into the Erfurt division of Prussian Saxony. The total area of the province of Hildesheim is 1717 square miles: the population according to the census of 1852 was 367,883, of whom 296,734 were Lutherans, 7627 Calvinists, 60,302 Catholics, 197 undefined Christians, and 3023 Jews.

1. In the south of the principality of *Hildesheim* the surface is traversed by branches of the Harz. The soil is stony and not generally fertile. In the centre and north the surface is undulating, and the soil rich and fertile. The principal rivers are the *Innerste*, *Leine*, *Ocker*, *Ecker*, and *Fuhse*. The climate is healthy. The agricultural products are corn, garden vegetables, fruit, flax, hops, and timber: the mineral products are iron, coal, and salt. Linen is the principal manufacture. The area of the principality is 721 square miles.

The principal town is *Hildesheim*, the capital, which stands on the *Innerste*, and is a place of considerable extent, but very irregularly built. It is connected by railway with Hanover, from which it is 24 miles distant to the south of south-east: population, 14,000. It is divided into the old and the new towns. There are seven gates; the ancient ramparts have been levelled and converted into public walks. The town gives title to a Roman Catholic bishop, but most of the inhabitants are Lutherans. The cathedral, founded in 818 by Louis

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the Pious, has 10 altars, very fine paintings on glass, magnificent bronze doors covered with bas-reliefs, and numerous antiquities, among which is a pillar of greenish marble, said to have been a Saxon idol, which now supports an image of the Blessed Virgin. There are 3 other Catholic and 8 Lutheran churches, several hospitals, 2 gymnasia, and a well-regulated poor-house in the town. *Goslar*, on the Gose, a feeder of the Ocker, stands at the foot of the *Rammelsberg*, a northern spur of the Harz, famous for its lead and copper mines; the town, which was once a free imperial city and the residence of the emperors of Germany, has 7500 inhabitants, and is interesting for the remains of its ancient cathedral (finished in 1050, and partially demolished in 1820), and of an imperial palace, now a corn magazine; its principal manufactures are beer, spirits, vitriol, hardware, carpets, leather, shot, &c. *Goslar* is the seat of the mining board and of the corn depôt for the Hanoverian portion of the Harz. *Peine*, a small walled town N. E. of Hildesheim, stands on the *Fuhse*, and on the railway from Hanover to Brunswick, and has 8000 inhabitants. Among the other towns are *Bokenem* on the *Netze*, a branch of the *Innerste*; population, 2500: *Alfeld* on the right bank of the *Leine*, which has 2600 inhabitants: and *Elze*, a few miles W. of Hildesheim; population, 2000.

2. The principality of *Göttingen* is bounded N. and E. by Brunswick, and the principality of *Grubenhagen*, S. and W. by Prussian Saxony, Hesse-Cassel, and Westphalia. Its area is about 646 square miles. The north-eastern part of the principality is covered with offsets of the Harz, and the south-western part between the *Leine* and the *Weiser*, by the *Solling Mountains*. These eminences are of moderate height, chiefly of basaltic formation, and frequently assume conical forms. The *Weiser*, which is formed in this principality by the junction of the *Werra* and the *Fulda*, forms part of the western boundary. The *Leine* drains the eastern districts. The soil is for the most part stony, except in the river valleys, where it is very fertile; every part capable of cultivation is tilled with care. The corn crops are more than sufficient for the consumption; potatoes and pulse are grown in abundance; other crops are flax, tobacco, and colza. Cherries, apples, and plums are the chief fruits. Sheep are reared in great numbers on the natural pastures. The minerals of the principality comprise copper, lead, and iron; salt and alum are also found. Linen, woollen cloth, glass, paper, and iron are among the industrial products. Timber is abundantly produced. The navigable river *Weiser*, the high-road from Frankfurt-am-Main through Cassel, Göttingen, and Hanover to the towns on the *Elbe* and the *Baltic*, and the railway from Hanover through Göttingen to Cassel afford great facilities for commerce.

Göttingen, the capital of the principality and the seat of a university, is noticed in a separate article. [GÖTTINGEN.] Among the other towns we notice the following:—*Münden*, 15 miles S.W. from Göttingen, is built in the fork between the *Werra* and the *Fulda*, which here unite and form the *Weiser*. It is surrounded by walls flanked with towers, and has above 4000 inhabitants. *Münden* is the most commercial place in the principality. The river trade is in corn, timber, and millstones, and employs above 500 river barges, plying down the *Weiser*, the *Werra*, and the *Fulda* to Bremen. The imports consist chiefly of colonial produce and French wines and brandies. *Münden* has also a very important linen trade and market. Tobacco and earthenware are manufactured. *Nordheim*, 12 miles N. from Göttingen, on the left bank of the *Ruhme* and a little above its junction with the *Leine*, is also a walled town. It is well-built, and has manufactures of tobacco, linen, flannel, and hosiery: population, 4100. *Uslar*, a small fortified town 15 miles N.W. from Göttingen, is built in a valley watered by the *Ahle*, a feeder of the *Weiser*, at the western base of the *Solling Mountains*, and has iron-works, manufactures of linen and pipes, bleachworks, a copper foundry, a paper-mill, and 2300 inhabitants.

3. *Grubenhagen* is the subject of a separate notice. [GRUBENHAGEN.]

4. The isolated county of *Hohnstein*, or *Hohenstein*, has an area of 72 square miles. It is covered by the Harz Mountains, except towards the south, where it comprises a portion of the *Goldene-Aue*. The *Goldene-Aue*, or *Golden Vale*, watered by the *Helme* and its feeders, separates the region of the Harz from the offsets of the *Thuringerwald*, and is one of the most beautiful spots in Germany. It is chiefly in the Prussian government of Erfurt. The small part of it belonging to Hanover is very fertile in corn, and well cultivated. The mountains are covered with forests or with pasture; cattle are reared; honey and game abound. Iron, copper, cobalt, manganese, coal, marble, limestone, &c. are among the minerals; but iron-mines only are worked. The county is divided into two districts, named from the villages of *Neustadt* and *Ilfeld*, which have under 1000 inhabitants. Near *Neustadt* are the ruins of the castle of *Hohnstein*, from which the county is named.

HILLAH. [BABYLON.]

HILLSBOROUGH. [DOWNSHIRE.]

HIMALAYA MOUNTAINS, or HIMMALAY MOUNTAINS, form the boundary of Hindustan, on the N.E. and N., and of the valley of Assam on the N. They are situated between 27° and 35° N. lat., 73° and 98° E. long. The most western portion, which extends over more than 900 miles (between 73° and 88° E. long.), lies in a general direction from north-west to south-east, forming a slightly curved line, which gradually becomes nearly due east. Between 88°

and 98° E. long. the mountains run west and east, extending about 600 miles. Its breadth, as far as it has been ascertained, varies between 80 and 120 miles. The whole range may occupy a surface of 150,000 square miles.

This extensive mountain range lies between a low and level plain, drained by the Ganges and the Brahmaputra, and the elevated and partly hilly table-land of Tibet, which lies to the north-east and north of the range. The plain of the Ganges and Brahmaputra, at its southern extremity, is little elevated above the sea, and where it is farthest from the shore its elevation does not much exceed 1000 feet. The table-land of Tibet, as far as it is known, rises to an elevation of more than 10,000 feet. The Himalaya Mountains rise far above the level of the table-land of Tibet, and where they are contiguous to it they constitute an uninterrupted range, covered with snow in its whole extent, with the exception of a few mountain passes, which are partly free from snow during the hottest months. In the middle region of the Himalayas the surface varies considerably. The mountains terminate on the plain of the Ganges, in a wall-like range from 4000 to 5000 feet high, which however is frequently broken by gaps through which the rivers escape that carry off the water collected in the interior of the mountain region.

The most north-western extremity of the Himalayas, called the Gooseie Mountains, a high snow-topped range, protrudes into the most northern bend of the river Indus, and skirts its banks as far south as the neighbourhood of Attock. This range is separated from the great mountain range of Cabul, called the Hindoo-Kooh, by the narrow valley of the Indus. This valley is about 60 miles in length.

The river Sutlej, an affluent of the Indus, originates on the table-land of Tibet, and crosses the Himalaya range between 31° and 32° N. lat. in its winding course from east to west. That portion of the mountains which lies between the valleys of the Indus and Sutlej, incloses the valley of Cashmere on the north. On the south, between the upper course of the Chenab and the Sutlej, it incloses the valleys of the Ravee, the Beas, and others, which are probably between 5000 and 7000 feet above the sea.

Twelve mountain passes connect the valley of Cashmere with the adjacent countries, among which the most frequented are the Kandaiball Pass, to the east, near 34° 20' N. lat., to Leh, or Ladak, on the table-land of Tibet; the Sagam Pass, to the south-east, from Islamabad in Cashmere to Kishtewar on the Chenab; and the Barramulla Pass to the south-west, running along the course of the river Jelum to Mozufferabad and Attock. At the western extremity of this range, where the offsets of the Gooseie Mountains approach the Indus south of Attock, extensive layers of rock-salt occur, which are worked to a great extent. The other natural riches of this portion of the Himalayas are best known in the valley of CASHMERE.

The central part of the Himalayas, or that which extends between the valley of the Sutlej and Bootan (from 77° to 88° E. long.), is about 100 miles across, and is composed of enormous mountain masses, which protrude from the principal range. These masses contain between them a few transverse narrow valleys or ravines. Such protruding masses, rising to between 18,000 feet and 20,000 feet above the sea, extend from the valley of the Sutlej to the Jumna and the Bhaghiratee. Farther east lie the mountain masses of Gurwal, which, with their extensive snow-fields and numerous peaks, several of which rise to more than 20,000 feet, fill up the country between the two principal branches of the Ganges, the Bhaghiratee, and the Alakananda. Still farther east is the great mass of the Jawahir, which in its most elevated summit rises to 24,238 feet, and is surrounded by other peaks not much inferior in elevation. To the east of the upper branches of the river Gogra lies an extensive mountain region, of which we hardly know anything else than that it is covered with very high mountains, and partly with snow. It extends to the Dhawalaghiri range, which occupies the space between 28° 30' and 29° N. lat., 83° and 84° E. long., and is traversed by the principal source of the Gung-tuck. Its highest summit, called Ghosa Cotee, attains an elevation of 27,600 feet above the sea, the highest known land on the surface of the globe. Contiguous to the Dhawalaghiri Mountains on the east is the great mass of the Kinchinjungu Mountains, whose highest pinnacle rises to 28,178 feet. These extensive masses terminate north-west of Khatmandu on the banks of the Bori Gandaki. The space between the Bori Gandaki and the Arun, an affluent of the Coosy, is mainly occupied by the Salpoo range, which contains two summits exceeding 24,000 feet in height, and many others nearly as high.

The enormous mountain masses are separated from one another by long but very narrow valleys, which descend towards the south and south-west with rather steep slopes, especially in their higher parts. During the summer these upper valleys are covered with a vigorous vegetation, and are used by the inhabitants of the lower valleys as pasture-ground; but during the greater part of the year they are buried in snow, and uninhabited. Through these valleys lie the few roads by which the plain of the Ganges communicates with the countries on the table-land of Tibet. The most northern of these roads follows the valley of the Sutlej. At Shipkee, where it issues on the table-land, the road is 10,484 feet above the level of the sea. Other mountain passes, or ghauts, are at their highest parts from 16,000 to 18,000 feet above the sea-level. Nearly all the passes are

too steep and high for any beasts of burden, except sheep, which in the Himalaya Mountains are used for the transport of merchandize.

The high mountain masses advance so far from the principal range into the interior of the mountain region, as to occupy more than one-third of it, when they descend with a rapid declivity. The general elevation of the lower portion may be between 4000 and 5000 feet above the sea. On the hill sides, and in the valleys of these mountainous districts, between 29° and 30° N. lat., the cultivation and manufacture of tea is carried on. The Indian government has authorised an outlay of 10,000*l.* a year upon the tea-culture. Inferior kinds are carried through the passes, and compete with the Chinese teas in Tibet. The superior kinds are sold in Hindustan, and some portions have been sent to England. The usual varieties of black and green tea are cultivated, but the colouring of the green kinds, which is practised in China, is not permitted by the Company's manager. Almorah, the capital of Kumaon, on the river Koaila, and only 15 miles in a straight line from the lower edge of the mountain region, is 5485 feet above the sea-level. Only the valleys which are drained by the Bhaghiratee and Alakananda sink considerably below this level. Tiri, on the Bhaghiratee, being 2272 feet above the sea, and Sireenuggur, on the Alakananda, 1800 feet. The surface of this portion of the mountain region is extremely uneven; the more elevated summits are not numerous, and are considerably below the snow-line, as they generally do not rise above 8000 or 9000 feet. The tract between the upper branches of the Jumna and the Sutlej is much more mountainous, and several of the summits attain the snow-line. The difficulty which the general unevenness of this tract presents to an easy communication between the inhabited places, explains the circumstance of there being in it a great number of sovereigns whose dominion frequently extends only over a few villages. The remainder of this lower portion of the Himalaya range contains more cultivable land than is generally found in mountain regions, and is also pretty well inhabited, though the villages are mostly very small.

The mineral wealth of that portion which belongs to the British, or is under their protection, is unknown; but Nepal contains, according to Sir Francis Hamilton, rich mines of copper, iron, lead, and sulphur.

In such a mountainous country the climate must of course vary extremely. The snow-line occurs on the north-eastern declivity at about 16,600 feet; on the south-western declivity it occurs at 12,500 feet above the sea-level. It follows that the vegetation must be different at the same elevation on the two sides.

The portion of the Himalaya between the Sutlej and Bootan is in part immediately subject to the British or under their protection, and partly subject to the independent Raja of Nepal. About one-half of the country between the Sutlej and Kali Gogra is governed by about 80 rajas under British protection, and the other half constitutes the British province of Kumaon. The province of Kumaon is annexed to the sub-presidency of the North-West Provinces. The countries within the Himalaya range, extending from the eastern banks of the Kali Gogra to the boundary of Bootan, are subject to the independent Raja of Nepal, except a very small portion contiguous to Bootan, which is possessed by the Raja of Sikkim, an ally of the British, who resides in the town of Sikkim.

With the eastern portion of the Himalaya range, extending from the western boundary of Bootan to the sources of the Brahmaputra River, we are only acquainted as far as it is contiguous to the road which leads from the plain of the Ganges through Tassisdun, the capital of Bootan, to the table-land of Tibet. When seen from the valley of Assam it does not appear to rise to the snow-line west of 93° E. long.; but between 92° and 98° E. long., extensive ranges are visible, which rise above the snow-line.

The word Himalaya is a Sanscrit word, compounded of 'hima,' cold, or frost, or snow, and 'alaya,' abode. (Wilson's 'Sanskrit Dict.'). The resemblance of the first part of the compound to the Greek 'cheima' (*χειμα*) and the Latin 'hiems,' is obvious; the Greek and Roman geographers were acquainted with this enormous mountain range under the general name of Imaus or Emodus, though their limited geographical knowledge does not allow us to assume that their term Imaus comprehended so much as the word Himalaya. It was known to Pliny that the word 'Imaus' signified, "in the language of the natives, snowy." (vi. 17.)

(Hodgson, Webb, Herbert, Wilcox, and Traill, in *Asiatic Researches*; Webb and Hügel, in *London Geographical Journal*; Fraser, *Journal of a Tour through Part of the Snowy Range of the Himala Mountains*; Mundy, *Journal of a Tour in India*; Johnson, *Journal through the Himala Mountains*; Archer, *Tour in Upper India*; Ritter, *Erkunde II. and III.*; Berghaus, *Karte von Assam und Spezialkarte vom Himalaya in Kumaon, Gurwal, Sirmour, &c.*; *Parliamentary Papers, &c.*)

HIMERA, an ancient Greek city on the north coast of Sicily, at the mouth of the river Himera, was founded (a.c. 648) by the Zancleans of Myle in Sicily. (Strab., vi. 272.) The application of Terillus, tyrant of Himera, expelled by Theron of Agrigentum to the Carthaginians for aid, gave that people a pretext for invading Sicily a.c. 480. Theron defended Himera against Hamilcar at the head of 300,000 Carthaginian troops, until Gelon of Syracuse arrived with aid and with far inferior forces fought the great battle of Himera, in

which the Greeks were entirely victorious. This battle was contemporary with (tradition said it was fought on the same day as) the battle of Salamis. In the Athenian invasion of Sicily the Himeræans took the part of Syracuse. After existing as a flourishing town for 240 years, it was totally destroyed by the Carthaginians A.C. 408, and its ornaments carried off. The inhabitants who survived this calamity established themselves at *Therma*, not far from the site of the ancient town (Cicero, 'In Verr.,' il. 85), and enriched their new abode with such works of art as they had saved from the wreck. Upon the capture of Carthage, Scipio restored to the people of *Therma*, of Gela, and other Sicilian towns, these monuments of art of which they had respectively been plundered in their wars with Carthage. ('In Verr.,' iv. 33.) *Therma* derived its name from its hot springs, which still remain. It was a flourishing place under the empire, and received a colony in the reign of Augustus. The site of *Therma* is occupied by the modern town of Termini, in which are numerous Roman remains. Termini is about 8 miles W. from the mouth of the Fiume Grande, the representative of the ancient Himera. At the mouth of the Fiume Grande there are no ruins, but many ancient relics, such as vases, bronzes, &c., and numerous sepulchres have been discovered—strong presumptive evidence that Himera stood at the mouth of the river, and not as some say on the left bank of the Fiume di Termini, opposite Termini, where no remains have been found. Himera was the birthplace of the poet Stesichorus.



Coin of Himera.

British Museum. Actual size. Silver. Weight, 268½ grains.

HINCKLEY, Leicestershire, a market-town and the seat of a Poor-Law Union, in the parish of Hinckley, is situated on the Chester and Liverpool high road, in 52° 33' N. lat., 1° 21' W. long., distant 13 miles S.W. from Leicester, and 99 miles N.W. by N. from London. The population of the town of Hinckley in 1851 was 6111. The living is a vicarage in the archdeaconry of Leicester and diocese of Peterborough. Hinckley Poor-Law Union contains 14 parishes and townships, with an area of 27,415 acres, and a population in 1851 of 16,560.

The parish church of Hinckley, supposed to have been built in the reign of Edward III., is a commodious structure, with a beautiful old oak roof. Trinity church is a new building. The Baptists, Independents, Wesleyan Methodists, Quakers, Roman Catholics, and Unitarians have places of worship in the town. There are in Hinckley a Free school, a Green-Coat school, a school supported by the Roman Catholics, and an Infant school; baths and washhouses; and a savings bank. The town is lighted with gas. A county court is held. The market-day is Monday: fairs are held five times in the year. Cotton and woollen hosiery is the staple manufacture of the town.

HINDIA. [CANDEISH.]

HINDLEY. [LANGASHIRE.]

HINDON. [WILTSHIRE.]

HINDOO-COOSH. [AFGHANISTAN.]

HINDUSTAN, that is, in the Persian language, the country of the Hindus, or Hindoos, is the name which has been adopted by geographers to designate that part of India, or the East Indies, which was formerly called the Peninsula within the Ganges, and which extends from Cape Comorin to the Himalaya Mountains. As the long declivity of this extensive mountain chain slopes towards the plains of Hindustan, the Himalaya Mountains are properly included in Hindustan. The seas which surround Hindustan on the south-east, south, and west, and the mountains which inclose it on the north-west and north-east, mark distinctly its boundary on these sides. On the east, where the valleys traversed by the Brahmaputra and the Soornah open into the plains of Bengal, the boundary-line is uncertain; but we may fix it at 92° 30' E. long. Within these boundaries Hindustan extends from Cape Comorin, 8° 4' N. lat., to Attock on the Indus, 34° N. lat., and from Cape Monze, west of the delta of the Indus, 67° 30' to 92° 30' E. long. Its length from north to south is about 1800 miles, and its greatest breadth between Cape Monze and Silhet, along the parallel of 25° N. lat., is about 1500 miles. The area is about 1,900,000 square miles, or more than ten times the area of Great Britain and Ireland.

The coast-line of Hindustan amounts, according to a rough calculation, to about 3280 miles, of which 1830 miles are washed by the Indian Ocean, and 1290 miles by the Bay of Bengal; about 160 miles, or somewhat more, extend along the Gulf of Manar and the Palk Strait. Beginning with the innermost corner of the Bay of Bengal, at Chittagong, the coast for about 320 miles is traversed by the numerous mouths of the Ganges, all of which are navigable either for

small or large vessels. Contiguous to the Hoogly branch of the Ganges is the open Bay of Balasore, with a coast of 120 miles, terminating at Cape Palmyra. From this point the coast stretches in a south-west direction to the mouth of the Kistna for about 420 miles, and is without harbours, except that of Coringa, near the mouth of the Godavary. From the mouth of the Kistna to Cape Calymere, an extent of about 430 miles, no harbour occurs, even for vessels of moderate size. Between Cape Calymere and Cape Comorin, about 160 miles, there is only the small harbour of Tuticorin. The coast, which stretches north-north-west, and afterwards nearly north, between Cape Comorin and the innermost corner of the Gulf of Cambay, a distance of about 1150 miles, contains a great number of small and several very good and safe harbours. The coast-line of the peninsula of Gujerat, which is about 380 miles in extent, has several harbours for vessels of moderate size. The coast-line of the island of Cutch extends about 150 miles. The coast intersected by the several mouths of the Indus extends as far as Cape Monze, about 150 miles, but it cannot be approached by vessels of more than 50 tons burden, except at the harbour of Curache, which admits vessels of moderate size.

Following what may be called the natural divisions of Hindustan, we shall distribute our description of it under the following heads:—1, Southern region, comprehending the southern extremity as far north as the Gap of Coimbatore; 2, the Deccan, which extends to the river Nerbudda; 3, Mountain region of North Hindustan, comprehending the terraces north of the Nerbudda, together with the peninsulas of Gujerat and Cutch; 4, the Plain of the Ganges; and 5, the Plain of the Indus. To these may be added, as a sixth natural division, the Himalaya Mountains. [HIMALAYA MOUNTAINS.]

I. *The Southern Region*.—The narrow sea which separates Hindustan from the island of Ceylon is traversed by a chain of islands and sand-banks called Adam's Bridge. [ADAM'S BRIDGE.] The island of Rameserum is low, sandy, and not cultivated, but celebrated for its great pagoda, the extent and splendour of which have called forth the admiration of many travellers; it is still visited by pilgrims from all parts of Hindustan. At the western extremity of the island is a small place called Paumben, where travellers cross the Paumben Passage to the continent. It is about a mile wide, and has 6 feet of water at high tide. The coast from Point Calymere to Cape Comorin is low and sandy, but at a short distance from the sea some sand-hills occur, between and behind which are numerous salt swamps and lagoons. Behind them the country rises very slowly to the foot of the mountains on the west, a distance of from 40 to 60 miles. This tract is well supplied with water, numerous small rivers descending from the mountains, and supplying plentiful means of irrigation. It is accordingly well cultivated and presents a succession of rice-fields and palm-groves. Among its rivers the chief is the Vaygaroo, which passes near the town of Madura, and falls into the sea not far from the Paumben Passage. [CARNATIC.]

At the foot of the mountains the plain may be about 300 feet above the sea. Of the mountain regions which border on it on the west little is known, except that between 9° 10' and 10° 20' N. lat. they occupy a considerable surface, and some of their ridges rise to a height of 7000 or 8000 feet. This isolated mountain region therefore may be considered as the highest land in Hindustan, south of the Himalaya range. The Aligherry Mountains, south-west of Madura, another offset of the same stock, rise to 4200 feet. South of 9° N. lat. the mountain mass runs southward in one single range, which is lower, but continues at a considerable elevation to a distance of about 20 miles from Cape Comorin, where it suddenly lowers about 2000 feet. The remainder is a low ridge of granite overgrown with thick forests. Two passes are at present known to exist across these mountains. The northern, called the Ariangawal Ghaut, occurs near 9° N. lat., and leads from Tinnevely on the east to Quilon on the west, through Cotallum. The southern, the Amboli Ghaut, lies about 20 miles from Cape Comorin. The country which lies to the west of the mountains exhibits a much more diversified surface than that to the east of them. Numerous offsets consisting only of low hills advance towards the coast and leave a level tract along the sea some miles broad. This tract is traversed by a chain of lakes, which extend from Trivandrum to Cochin. The low country which extends east of the lakes some miles inland, is in many places swampy, and used as pasture-ground in the dry season, or covered with jungle and forest-trees; but the higher tracts produce rice and other grain in abundance. These tracts are mostly uninhabited. The villages are built farther inland on the low ranges of the hills, where they are surrounded by extensive plantations of palms, plantains, and mangoes. Still farther inland the mountains rise with a steep ascent, and are covered with forests, especially of teak. A very heavy surf always runs along this coast, and renders landing difficult.

The southern part of this tract belongs to the Raja of Travancore, and is about seven-eighths of the whole; the northern part belongs to the Raja of Cochin. *Trivandrum*, the capital of Travancore, a few miles distant from the sea, is a large and well-peopled place, with a castle. *Anjengo* is a small harbour. *Quilon* has a small harbour, but a considerable population. [COCHIN.]

The Gap of Coimbatore or Ponany, which extends between 10° 40' and 11° N. lat., is a long valley, which unites the wide plains of the

lower Cavery with the level coast of Malabar. It takes its name from the town of Coimbatore, which lies near its eastern extremity, but outside of it, or from the river Ponany, which drains it in all its length. The town of *Ponany* stands near the mouth of the river. It has a good harbour, and a population of about 10,000. It carries on a considerable commerce with the towns along the Malabar coast, Arabia, and Bengal. [COIMBATORE.]

II. *The Deccan*.—This term was originally applied to the whole peninsula south of the river Nerbudda, including also the country south of the Gap of Coimbatore. [DECCAN.] We here apply it, in a geographical view, to the peninsula north of the Gap of Coimbatore, and we fix its northern boundary at the valley of the Nerbudda, and carry it thence eastward to the neighbourhood of Balasore, on the Gulf of Bengal. This boundary-line runs across the whole peninsula between 21° and 23° N. lat.

The interior and by far the greater part of this extensive region is an elevated table-land, which is inclosed on all sides by low plains extending to the sea-shore. The edges of the table-land are raised above the surface of the table-land itself, and appear in the form of mountains or high hills, and the descent from them to the low plains on the sea-shore is steep, and full of impediments to communication. The table-land extends from about 12° to 21° N. lat. Between 12° and 16° its average breadth probably does not exceed 150 miles, but north of 16° it widens gradually to 400 miles. By the natives it is called *Bala-Ghaut*, or the country above the Ghauts; and the low plains of the coast are named *Payan-Ghaut*, or the country below the Ghauts. The name *Ghaut* properly signifies a narrow pass through mountains, but is also applied to the mountain-ranges in which these passes occur. The word is a form of the Sanscrit, 'gati,' a way or path. The elevation of this table-land varies. The country south of 15° N. lat., which is called the table-land of Mysore, is the highest part, and it is higher towards the east than towards the west. Bangalore is 3026 feet above the sea. North of 15° N. lat., the table-land descends, and the greatest depression seems to occur between 15° and 17° N. lat., in the region drained by the Kistna and its tributaries, where the elevation is only about 1200 feet. Farther north it again rises higher, and the western and higher districts, as far as 77° E. long., vary between 2000 and 2500 feet. But east of 77° its slope, which is mostly to the south-east or south, is more rapid, and the elevation becomes less than 1000 feet above the sea. The surface of this table-land is a level plain, on which hills rise here and there in a conical form, from 300 to 900 feet above their base. Towards the mountains which constitute the western edge of the table-land the surface is much more uneven. Numerous short spurs branch off from the mountains and advance about 30 or 35 miles into the plain. The isolated hills, as well as these spurs, are of very steep ascent, and on them are built the numerous strong fortresses called *droogs*, or hill-forts, now mostly going rapidly to decay.

Here, as in other countries between the tropics, the year is divided into two parts, a rainy and a dry season. The rainy season occurs during the south-west monsoon, commencing in May, when only small showers fall. In June or July they become more regular and continuous, and they last till October. But the quantity of rain is not great, being estimated to amount only to 20 or 26 inches annually; whilst on the western coast it is 116 inches, and on the eastern 45 inches. The mean annual temperature of the higher districts of the table-land seems to be nearly 10 degrees less than at Madras; it is stated to be at Darwar 75° Fahr. and at Madras 84° Fahr.

The table-land is destitute of trees so far as the plain extends. On the low spurs of the Western Ghauts and in the valleys between them the country is wooded, and this is also the case with the most southern corner along the river Cavery. On the whole surface of the table-land a black soil prevails, which is favourable to the growth of cotton. The hills which rise on the table-land are bare and sterile, as are most of the small valleys between them, but some of the valleys are very fertile. The northern districts of the table-land are less fertile than the southern, and vast tracts without cultivation frequently occur there. During the rainy season and the cool months which immediately follow, this country is covered with a fine sward of grass, and much of it is cultivated or planted; but towards the spring the plains lose their verdure, and their surface becomes a brown level, intersected by numerous deep rents. Clouds of dust are raised by the dry winds, and the heat is excessive. The rivers flow slowly in their deep beds, and all the smaller streams dry up. The cultivation of rice is only carried on where there are artificial means of irrigation; tanks for this purpose are numerous in some places. The number of other grains, plants, and fruits is very great.

By far the greatest portion of this table-land is still under the sway either of Hindoo or of Mohammedan princes.

1. The most southern part is the kingdom of Mysore, governed by a Hindoo prince. The capital is *Mysore*, south of Seringapatam. Mysore is situated in 12° 19' N. lat., 76° 42' E. long. It occupies a large space of ground, and is inclosed by a wall. The streets are laid out with some regard to regularity, and the houses are intermingled with temples and trees. The fort is separated from the town by an esplanade, and besides the raja's palace contains the residences of the principal merchants and bankers. *Seringapatam*, formerly the capital of the principality of Mysore, stands on a small but beautiful and

fertile island in the river Cavery, about 10 miles N. from Mysore. The fortress is at the western extremity of the island. The streets of the town are narrow, crooked, and dirty; but there are several palaces, and a great number of pagodas and mosques. On the 4th of May, 1799, the fortress of Seringapatam was carried by assault by the British army, and Tippoo Saib himself was slain while fighting with desperate valour. The population is probably under 10,000. Besides these there are two other large towns which carry on a considerable commerce, BANGALORE and BEDNORE.

2. The territories of the Nizam, or Raja, of Hyderabad, or Hyderabad, a Mohammedan prince, occupy the centre of the northern portion of the table-land. The capital is *Hydrabad*, a large town, with a population of about 120,000. It is noted for its extensive traffic in diamonds. In its neighbourhood is Golconda, a fortress on a high hill, from which the whole country once received the name of the kingdom of Golconda. Other remarkable places are—*Beder*, a commercial town, situated on one of the great thoroughfares of the table-land; AURUNGRABAD, DOWLETABAD, and ELORA.

3. The possessions of the Raja of Berar, or Raja of Nagpoor, extend to the east of Golconda. Nagpoor was formerly included in the province of Berar, but is now in the adjoining province of Gundwana, of which the city of *Nagpoor* is the capital. *Ellichpoor* is the capital of Berar. The palace and seat of government of the Raja of Berar is at Nagpoor, and hence he is as frequently styled the Raja of Nagpoor as the Raja of Berar. The state of Berar, or Nagpoor, is one of those over which the British hold full political sway, with right of interference in case of mismanagement of the public revenue; and they have a political agent resident at Nagpoor. That portion of Berar which lies to the west of the river Wurdah is included in the territory of the Nizam of Hyderabad; and the title of Raja of Nagpoor is consequently now perhaps a more appropriate title than Raja of Berar, a large portion of the territory of Berar having been transferred to the Nizam after the termination of the Mahratta war. The capital, *Nagpoor*, stands in 21° 9' N. lat., 79° 10' E. long., on the table-land, about 1100 feet above the sea. It is about seven miles in circumference, but is of a very irregular form, the houses being placed in a straggling manner. The palace of the raja is a large brick building. The population is about 120,000. The prince is a Hindoo of a Mahratta family. *Bustar*, a town situated in 19° 13' N. lat., 81° 56' E. long., is the capital of the district of Bustar in Gundwana. The district of Bustar is occupied by a branch of the range of mountains that runs through the Circars parallel to the Bay of Bengal. Nearly the whole of the country consists of hills covered with jungle and of unhealthy morasses; the remainder, constituting not more than one-fiftieth part of the entire area, is very imperfectly cultivated by the scanty population, who live almost in a state of nature, and subsist on the produce of the chase. The principal rivers in Bustar are the *Indravati* and the *Mahanuddy*. The forests yield fine teak timber. The inhabitants are among the most ignorant and superstitious in India. The zemindar, or chief, of Bustar pays tribute to the Raja of Nagpoor.

4. The territory of Sattara extends along the Western Ghauts, but reaches far into the table-land. The Raja of Sattara was deposed, and died at the latter end of 1849. The territory is at present included in the Bombay Presidency. *Sattara*, the capital, stands in 17° 40' N. lat., 74° 3' E. long., 75 miles S. from Poona in a straight line. It is a small town on a rocky and precipitous mountain, with a strong fortress and a handsome palace. In this territory is the ancient town of *BEJAPORE*.

5. The territory of the Raja of Colapore extends likewise along the Western Ghauts, south of the territories of the Raja of Sattara. The prince is a Hindoo. The capital is *COLAPORE*.

6. The English possessions are partly annexed to the government of Madras and partly to that of Bombay. Only the Ceded Districts, or Balaghauts, belong to Madras. [BALAGHAUTS.] They contain the fortresses of Gootydrugg and Bellary. Two districts are annexed to the presidency of Bombay, namely, Darwar and the Deccan; the first lying south of the territories of the rajahs of Colapore and Sattara, and the second lying north of it. In Darwar is the town of *DARWAR*, and in the Deccan are the towns of *AHMEDNUGGER* and *POONA*. *Poona*, in 18° 30' N. lat., 73° 52' E. long., is situated at the confluence of the rivers *Moola* and *Moota*. It is about 80 miles S.E. from Bombay, direct distance. Poona is a handsome city, and contains a population of 100,000. The British have a cantonment a little to the west of Poona, which is laid out in wide streets and well arranged. Near Poona are the curious cave-temples of *Carlee*, and the town of *Nassuck*, which has 27,000 inhabitants.

Of the higher lands which encircle the table-land the most northern portion is the elevated table-land of *Omercuntuc*, which lies between 22° and 23° N. lat., 80° 30' and 82° 30' E. long. It rises considerably above the surrounding tracts, but its elevation is not known. On its eastern declivity rises the river *Sone*, and the *Nerbudda* traverses it in its length from east to west until it leaves it near *Mundla*. The table-land of *Omercuntuc* is the central link by which the higher lands of the Deccan are united to those which extend to the north of the *Nerbudda*. Below *Mundla* the high lands contiguous to the table-land extend westward on both sides of the narrow valley of the *Nerbudda* in extensive masses, which near 79° E. long. take the form

of three distinct ranges—the Vindhya Mountains, the Sautpoora Mountains, and the northern declivity of the table-land of the Deccan, which has no general name, but may be called the Northern Ghauts. Between these three ranges lie the two parallel valleys of the Nerbudda and Tapti.

The Northern Ghauts begin about 22° N. lat., between 78° and 79° E. long., with the high lands on whose eastern declivity the upper branches of the Wurdah, an affluent of the Godavery, and on whose western declivity those of the Tapti, rise. These mountain masses have probably an elevation of 4000 feet above the sea, and send off a very distinct and elevated range westward between the two upper branches of the Tapti. This range rises to the height of 4000 feet near the fortress of Gawulgur. The remainder of the Northern Ghauts lies in a general westerly direction along the southern side of the valley of the Tapti, and joins the Western Ghauts west of 74° E. long. The range rises with a very steep ascent from the valley of the Tapti, where it seems to be between 2000 and 3000 feet high; but its descent on the south is short and easy, the table-land of the Deccan being only about 500 feet lower than the range.

The Western Ghauts, which constitute the boundary of the table-land of the Deccan towards the Indian Ocean, begin about 10 miles from the southern bank of the Tapti and about 60 miles from the sea-shore. Somewhat north of the parallel of Bombay the range approaches within about 30 miles. The Western Ghauts continue to run from north to south generally at a distance of from 20 to 30 miles from the shore, but sometimes coming close to it, and forming a high coast. The range terminates a little south of the parallel of Calicut, about 11° N. lat., where it constitutes the northern border of the Gap of Coimbatore. This range varies considerably in elevation. North of Bombay it is stated not to exceed 3000 feet in height, and to be only about 1000 feet above the table-land on the east. South of Bombay it rises higher, and about 18° N. lat. has an elevation of about 5000 feet. Opposite Goa (15° 30' N. lat.) the mountains are traversed by a pass which is only 2477 feet high, and hardly more elevated than the contiguous plains of Darwar. Opposite Bednore (south of 14° N. lat.) the mountains rise to 4000 feet, and they seem to continue with this elevation to 13° 42' N. lat., south of which they rise to between 5000 and 6000 feet in the alpine region of Coorg, and at their termination they probably are not much lower. The width of the Western Ghauts is inconsiderable, and, if the spurs be excluded, perhaps nowhere except towards the southern extremity exceeds 12 miles.

The rapidity with which the Western Ghauts descend to the sea renders it very difficult to ascend the table-land of the Deccan on the west side. The mountain passes, or ghauts, are not numerous, and most of them are not passable for beasts of burden. One of the most frequented is the Hosso Angady Ghaut, which keeps up the commercial communication between Bednore and Mangalore.

The Western Ghauts, which are the abrupt and elevated edges by which the table-land of the Deccan descends towards the Indian Ocean, are entirely covered with thick forests of tall trees, except in a few places where the rocky masses are too steep to permit any accumulation of earth. In all other parts the mountains are covered with a thick layer of earth, capable of maintaining a vigorous vegetation. Many of the trees are very valuable. On the upper parts are forests of bamboo. Lower down the sandal-wood tree is abundant, and supplies an important article of exportation to China, Japan, &c. The middle of the range is occupied by forests of teak. During the rainy season the teak timber is floated down to the harbours on the coast, especially to Mangalore, and is thence conveyed to the other ports of Hindustan. It is said that on these mountains alone in Hindustan sandal-wood grows, and that it occurs only between 12° and 14° N. lat.

The whole of the narrow coast which intervenes between the Western Ghauts and the Indian Sea is sometimes comprehended under the name of Malabar. But the northern part of it, as far south as 15° N. lat., is called the Concan; the middle part, between 15° and 12° 3' N. lat., Canara; and only the southern part, as far as Cape Comorin, is properly named Malabar. The surface of this narrow tract is never entirely level except along the sea-shore, and to a distance at the utmost of five miles from it. This level tract is covered with sand, and overgrown with cocoa-palms. Near the termination of the low hills, which are offsets of the Ghauts, the soil is better, and is planted with rice. The sandy coast is indented with numerous small inlets, which during the rainy season are the receptacles of torrents. The small valleys which lie farther inland between the low ranges of hills are converted into swamps by the abundant rains, but when the water has run off they are cultivated, and give very rich crops of rice. On the sides of the hills which separate these valleys from one another are numerous villages, inclosed by extensive plantations of fruit-trees. The tops of the hills are level, but dry and naked.

The mean annual temperature at Bombay is about 80°. No kind of grain is cultivated except rice, for the growth of which no artificial irrigation is required, as the soil is saturated by the abundant rains. This country contains a great variety of fruit-trees, especially different kinds of palms; the cocoa-palms especially cover an immense tract of land along the sea-coast. The sugar-cane is also extensively cultivated. Cattle and buffaloes are the only domestic animals, and both are dis-

tinguished by their large size. Wild elephants are numerous; and also tigers, leopards, hyenas, and jackals.

This maritime tract, as far south as 10° 45' N. lat., is British territory, except the portion between 15° and 16° N. lat., comprising the Portuguese territory of Goa and that of the Raja of Sawunt Warree, and the towns of Mahé and Damaun, of which the first belongs to the French and the second to the Portuguese. The English possessions north of 16° N. lat. are annexed to the presidency of Bombay, and those south of 15° N. lat. to that of Madras. *Damaun*, the Portuguese settlement (20° 22' N. lat.), has lost much of its commerce since the rise of Bombay. It lies nearly halfway between Surat and Bombay, and has a safe harbour for vessels of small size, there being 17 feet of water over the bar. Farther south is *BOMBAY*. In 17° 55' N. lat. is the town of *Bancote*, or Fort Victoria, with 14,000 inhabitants. It has a harbour for small vessels, and carries on a considerable trade with Poona and Sattara. *Goa*, the Portuguese settlement, is situated in 15° 30' N. lat., on an island about 24 miles in circumference, formed by the river Mandova. The ancient city, which is now deserted by all its inhabitants except a few miserable ecclesiastics, was once a splendid and populous place. The new town, to which the name of Panjim has been given, stands five miles nearer the sea than the ancient city. It is well built, and has from 18,000 to 20,000 inhabitants. *Mangalore* is a thriving town. [CANARA.] *Cananore* (11° 52' N. lat.) is built at the end of a small lake, which is one of the best harbours on this coast. It has some commerce with Arabia and the harbours of Hindustan, and contains about 10,000 inhabitants. *Tellicherry* (11° 44' N. lat.), which was long the chief settlement of the English on the coast of Malabar, but has since been neglected, has still a considerable commerce in the produce of the country—coir, sandal-wood, cardamoms, pepper, cassia, and cocoa-nuts: the population is about 5000. *Mahé* (11° 42' N. lat.), the only French settlement on this coast, has a harbour for small vessels and 6000 inhabitants. It is rather well built, and principally exports pepper. Farther south is the town of *CALICUT*.

The mountain ranges which support the table-land of the Deccan on the south were scarcely known till within the last thirty years. They cover by far the greatest part of the space contained between 11° and 12° N. lat., 76° and 79° E. long. The western portion is occupied by the Nilgherry Mountains, which are well known to Europeans resident in India as affording them the climate and productions of Europe at a distance of only 11 degrees from the equator. These mountains are connected with the southern extremity of the Western Ghauts; they extend between 76° 28' and 77° 20' E. long., and between 11° 10' and 11° 35' N. lat., so that their length from west to east is more than 80 miles, and their width about 30 miles. All this space is occupied by one mass of high land, unbroken by ravines or deep valleys, but consisting of a succession of gentle ascents, with tracts of level ground between them. The lowest parts of these level tracts are estimated to have an elevation of from 5000 to 6000 feet. Through the centre of this region there runs a lofty ridge, containing various summits, the highest of which, nearly in the middle of the whole mountain mass, the Dodabetta Peak, is 8429 feet above the level of the sea. The surface of this region is a fertile soil overgrown with a green sward of grass and several kinds of alpine herbs where it is not cultivated. The excellent climate on these heights has led to the establishment of several sanitary stations, in which Europeans may re-establish their health when impaired by a long residence in the hot countries. One of these European settlements is at Utakamund, 7000 feet above the sea, at the foot of the Dodabetta Peak. The mean annual temperature at Utakamund is 56°, and consequently 28 degrees less than at Madras. The thermometer sometimes rises to 69°, and has been observed to descend as low as 20°, but very rarely. The changes in the temperature are slow, and the difference in 24 hours hardly exceeds 2 degrees. Moderate rains occur all the year round, but more during the south-west than during the north-east monsoon. Frost occurs between September and April, but it is moderate; the thickest ice does not exceed an inch and a half in thickness. Agriculture is limited to wheat, barley, millet, peas, and European vegetables. The fruit-trees of England succeed everywhere, and are frequently seen covered with blossoms and fruits in all stages at the same time. Oranges grow only in the lower districts. No animals are kept, except cattle and buffaloes; sheep, goats, deer, and hogs are found in a wild state. Game abounds everywhere. To the south this hilly table-land descends with a steep slope to the Gap of Coimbatore, from which it is divided by the river Bhovany. The deep valley through which the small river Moyar runs along its northern side separates it from the table-land of Mysore. The slopes on all sides are wooded, and it is only here that the animals of the tropical regions, as tigers, leopards, and elephants, are found. North-east of the Nilgherry Mountains is another mountain mass, which occupies nearly the whole space between the Cavery and the Bhovany, an affluent of the Cavery, as far west as 77° E. long. Very little is known of these mountains, beyond the fact that they occupy more than twice the space of the Nilgherry Mountains, and that some of their loftiest summits rise to a height of more than 5000 feet.

The river *Cavery*, which for about one-fourth of its course drains the table-land of the Deccan, for nearly the same space winds between high mountains, and for the remainder runs through a level plain.

After passing by Seringapatam, it enters the mountain masses, and has an extremely winding course between high rocks. At Caverypooram the river issues from between the mountains, and enters a valley. Where it receives the Bhovany it has already entered the plain, and is a large river in the rainy season. For about one-half of its course in the plains, it runs in one channel, but below the town of Trichinopoly it divides, and incloses the island of Seringham, famous for its two pagodas, and as a place of pilgrimage. Below this island the river again unites for a short distance, and then divides again. The northern arm, called the Coleroon, runs east-north-east, and falls into the Bay of Bengal between Deviacotta and Chillamburum; but its waters have been so exhausted by irrigating the adjacent fields, that it carries only a small quantity to the sea. The water of the southern arm is employed in feeding a great number of canals which traverse the sandy alluvial plain extending on the coast between Cape Calymere and Deviacotta. The waters of these canals being conducted over the adjacent fields, convert them into one of the most fertile tracts in Hindustan, their crops of rice being only inferior to those of the district of Burdwan in Bengal. The delta of the Cavery and the level country along its lower course in the plain lie in the parallel of the Gap of Coimbatore, which may be considered as a prolongation of the plain to the Indian Ocean. The whole course of the Cavery is about 450 miles.

The countries extending along these mountain ranges and the lower course of the Cavery constitute a portion of the Carnatic, the principal division of the presidency of Madras. The following are among the most remarkable places:—**COIMBATORE.** *Salem*, a well-built thriving place, with some manufactures and a good deal of commerce, but unhealthy. *Chillamburum* has an extensive and beautiful pagoda, one of the most ancient in India. Other towns of importance are noticed under **CARNATIC.**

The Eastern Ghauts, which separate the table-land of the Deccan from the low and level country extending along the Bay of Bengal, between 12° and 18° N. lat., occupy in width a much larger space than the Western Ghauts. South of 13° 10' N. lat., where their longitudinal direction is south-south-west and north-north-east, their average breadth is not less than 50 miles. Between 13° 30' and 16° N. lat., where they are called the Nella Malla Mountains, and lying in a generally northerly and southerly direction, occupy the whole space between 78° and 79° E. long., they are probably nearly 80 miles across; between 16° and 18° N. lat. they run south-west and north-east, and here their breadth is less. The surface of the whole region is stony, dry, and broken. In general it is almost without vegetation, and offers few spots fit for agricultural purposes.

Three rivers originating on the table-land pass through this mountain region in transverse valleys so narrow that they are, properly speaking, mere clefts. The most southern is the *Pannair*, which runs about 250 miles, and falls into the sea near Cuddalore. The *Palair*, passing by Arcot, flows about 220 miles, and falls into the sea in 12° 28' N. lat. The most northern of these rivers is the *Pennair*, whose course extends to 280 miles, and which falls into the sea not far from Nellore, in 14° 35' N. lat. *Nellore* is situated on the south bank of the Pennair; it is a populous place, and has a considerable amount of trade. Though its course is long, the Pennair brings down a comparatively small volume of water, and is of little use for irrigating the low lands; whilst the Pannair and Palair fertilise the whole of the countries which they traverse.

The mountain passes through this region are as difficult as those over the Western Ghauts. They are very little visited, and are nearly unknown, except the great military road which leads from Madras to the table-land. It runs over the plain to Arcot, on the Palair, and thence to Vellore, whence it begins to ascend the mountains, and runs to Santghur (1120 feet above the sea). Here it divides into two branches: the northern terminates at Colar, on the table-land; the southern at Bangalore, on the table-land. The Nella Malla Mountains are rich in metals. Iron is very abundant; copper and lead are worked in several places; and diamonds are found. The country which separates the Eastern Ghauts from the Bay of Bengal comprehends the central and northern Carnatic, with the Guntoor Circar. [**CARNATIC; CIRCARS, NORTHERN; COROMANDEL COAST; MADRAS; ARCOT; CUDDLALORE; PONDICHERRY.**]

The river *Kistna* originates on the eastern declivity of the Western Ghauts. All the waters collected on the eastern side of that range, between 13° and 19° N. lat., unite successively in its channel. The source of the river is near 18° N. lat., between Poona and Sattara. It runs for more than 100 miles south-south-east, receiving numerous small streams from the west. Afterwards it flows south-east, and its waters are increased by the two rivers Gatpurba and Malpurba. On the table-land it receives from the north the Beema, which has a winding course through the table-land of probably more than 300 miles. Where the Kistna approaches the Nella Malla Mountains, it is joined from the south by the Toongabudra, whose upper branches, the Toonga and the Budra, originate near 13° N. lat. Its whole course is about 650 miles. On the table-land, as well as in the low plain, the surface of the water is from 20 to 30 feet below the adjacent land, and consequently it cannot be used to irrigate the fields. The Kistna brings down a comparatively small volume of water, and is not navigable in any part. The mountain region between the Kistna

and Godavery, which separates the table-land of the Deccan from the low tract along the coast, and which may be considered as a continuation of the Nella Malla Mountains, occupies nearly 60 miles from west to east. The character of this region is but little known. The low country between the lower course of the rivers Kistna and Godavery comprehends the districts of Condapilly and Ellore [**CIRCARS, NORTHERN**], and resembles the delta of the Nile, though it is somewhat smaller. A considerable portion of it is annually inundated by the Lake of Colair, which is a fresh-water lake, situated in a deep depression, nearly in the centre of the low tract. This lake is about 24 miles long, and half as wide in the broadest part, and is connected with the Godavery and Kistna by channels which in the dry season contain no water, but from July to September convey a portion of the water of these rivers to the lake, which is then filled, when it becomes from 40 to 50 miles long, and inundates the adjacent country. During the dry season the water is conveyed by means of canals to a considerable distance from the lake. The lake covers 200 square miles, and contains 15 islands, which, as well as the neighbouring country, are fertilised by the deposit of mud brought down by the rivers. The superfluous water is carried off by the river Oopatair, in which the tides ascend to the lake, but are prevented from entering it by embankments. The Oopatair is navigable for small vessels, and is of great use for the export of produce. This tract contains the large commercial town of *Masulipatam*, 16° 10' N. lat., 81° 14' E. long. It is situated on almost the only part of that line of coast where the surf does not beat, and which affords good anchorage for vessels of 300 tons burden.

The *Godavery*, the largest river of the Deccan, rises in the most north-western corner of the table-land, north of 20° N. lat., about 60 miles from the Indian Ocean. It flows east-south-east and east for about 400 miles, receiving in its course the Manjera River from the south, and the Poorna and Wurdah from the north. After the junction of the Wurdah the Godavery is a mile wide, but at the end of the dry season it has only 15 inches of water. It then passes through the mountain region, and having entered the low country it becomes 4 miles wide, and has a great volume of water, but soon divides into two branches, which include a small delta. Approaching the sea it divides into many more branches, in which the tide ascends to some distance, and which admit vessels of considerable burden. On the most northern of these arms is the harbour of *Coringa*, the only smooth water on the coast between Cape Comorin and the Hoogly during the south-west monsoon. Coringa is a place of considerable traffic. The course of the river Godavery exceeds 700 miles.

The north-eastern portion of the Deccan, extending along the Bay of Bengal, between the mouth of the Godavery and the Bay of Balasore, and from that coast westward into the interior, contains several mountain regions which are little known. The inhabitants of this tract of mountainous country are called Gonda, and the country is called from them Gondwarra or Gundwana. The British government and the Raja of Berar are the rulers of this country in nearly equal parts, but the authority of both is only nominal.

The *Mahanuddy*, whose upper branches drain the plain of Ruttenpoor, between 20° and 22° N. lat., receives its principal supply of water from the unknown mountain region of Gondwarra. It flows east to Sumbhulpoor, where it is a mile across; it then turns south, but from the junction with the Kobragur at Sohnpoor to the sea its course is east. At Cuttack, where it is two miles across, it enters a level plain, which is fertilised by its waters. Below Cuttack it divides into three branches, one of which, called the Cajori, runs south, and passes near the temple of Juggernaut. The main body of the river, called Chittertola, continues east to the sea; and the northern arm, named Beroopa, runs north-east till it joins the Braminy, and then runs east to the sea, near Cape Palmyras. The whole course of the Mahanuddy is estimated at 500 miles. It is navigable for small vessels as far as Sumbhulpoor, and for river-boats to the mouth of its tributary the Hoostu, a distance of 380 miles.

The delta of the Mahanuddy extends along the sea from the Lake of Chilka (19° 40' N. lat.) to the town of Balasore (21° 30' N. lat.). The Lake of Chilka, which forms the boundary between the Circars and the province of Cuttack, receives its waters partly by one or two channels which branch off from the Cajori, or southern arm of the Mahanuddy. The lake is about 35 miles long, and 8 miles wide on an average. It is divided from the Bay of Bengal by a low and sandy tract, which is less than half a mile across. Its mean depth is only from 4 to 5 feet. A great quantity of salt is prepared from the water of the lake by evaporation. The delta of the Mahanuddy is occupied along the shore by a swampy tract, overgrown by jungle and low bushes, among which a few trees rise to a great height. This tract, which extends from 5 to 20 miles inland, is more the habitation of tigers, leopards, wild buffaloes, and crocodiles, than of men. Great quantities of salt, of the finest quality, are made here. Contiguous to the woody tract, but farther inland, lies the fertile portion of the delta, which in some places extends about 30 or 40 miles. It produces, when irrigated, abundant crops of rice, sugar, and tobacco; in the less fertile tract millet is raised. The chief town is **CUTTACK**. It forms, with the adjacent mountainous country, the province of Orissa, which is annexed to the presidency of Bengal. At the town of Pooree, 42 miles S. from Cuttack, and near the shore of the Bay of

Bengal, is the celebrated temple of *Juggernaut*. It stands in the centre of a quadrangle inclosed by a high stone wall, 650 feet in length on each side. The tower which contains the idols is 200 feet high. The festival takes place once a year, and the concourse of pilgrims is still exceedingly large. The idols are placed on a high platform mounted on wheels, and are dragged a certain distance and back again amid the acclamations of the devotees. Self-immolation beneath the wheels of the car is no longer permitted, but many of the pilgrims perish from disease and want of food. The latest account of this temple is given in the 'Orissa' of Lieut. F. B. Laurie.

The middle course of the Mahanuddy lies through a valley, which is generally wide and covered with alluvium producing rice, wheat, and sugar in abundance, and of the first quality. North-west of the delta of the Mahanuddy is an extensive mountain region, whose southern declivity forms part of the Deccan, while the northern belongs to the mountain region of Northern Hindustan. North of the valley of the Mahanuddy this mountain tract is generally from 3000 feet to 4000 feet above the sea; some ridges by which it is traversed, and which run east and west, rise about 2000 feet higher. Rice is cultivated in the lower districts. Forests cover the ridges and valleys, containing several kinds of trees useful as timber or for cabinet-work. A considerable portion of the population is employed in preparing these trees for the market, and in floating them down to Cuttack.

The table-land of the Deccan is separated from the mountain region of Northern Hindustan by the valleys of the parallel rivers Tapy and Nerbudda. The *Tapy* rises in the mountain tract which joins the table-land of Omercuntuc on the south-west. It consists of two branches, the *Tapy* and the *Porna*, the *Tapy* running south-west and the *Porna* west, till they unite, after a course of about 150 miles, near 21° 4' N. lat., 76° E. long. After the junction of the upper branches the *Tapy* flows in a wide valley between the Sautpoora Mountains on the north, and the Northern Ghauts on the south, for about 280 miles, until it enters the Indian Ocean by a wide estuary below the town of SURAT. In the upper valley of the *Tapy* is the town of *Burhampoor*, situated on a fertile plain; it is of considerable size, and carries on an active commerce with the countries both to the north and south of it. The *Nerbudda* rises on the table-land of Omercuntuc, about 22° 40' N. lat., 81° 40' E. long. It flows west over the mountain-plain, and having received a large tributary from the south is precipitated from its steep western declivity not far from the town of Mundla. Thence it runs in a narrow valley and between masses of rocks with a rapid course past *Jubbulpoor*, below which town it forms a cataract at *Bedaghur*. Farther west the valley widens, the mountains to the south rise with a gentle acclivity, and the river has a less rapid course. At *Hosungabad* it is 900 yards wide, and from 5 feet to 6 feet deep; it is here navigable for small vessels, and continues to be navigable as far west as 10 miles below *Chiculda*, where the river, which at *Mundlesir* is 1200 yards wide, is narrowed to 200 yards, and basalt-rocks rising from 10 to 12 feet above its usual surface lie across its bed. The water of the river rushes with great violence through three openings. Lower down the river is still more narrowed by rocks, and becomes unfit for navigation for a great distance; but about 10 miles above *Tulluckwarra* it enters the low lands of Gujerat, and is navigable from this place to its mouth for river boats, a distance of about 90 miles, and for vessels of moderate size half that distance. Below the town of *Baroach* it forms a wide estuary. The whole course of the river is about 600 miles.

The valley of the *Nerbudda* extends mostly along the southern bank of the river, since the *Vindhya* Mountains which inclose it on the north often advance to the river, or very near it. The upper part of the valley from *Mundla* to *Hosungabad* is comparatively narrow, and mostly filled up by low offsets from the mountains which lie farther south. South of *Hosungabad*, at the sources of the *Tapy*, the mountains take the form of a continuous chain, called the *Sautpoora* Mountains. This chain at its commencement runs nearly south-west, but by degrees turns westward and continues nearly parallel to the *Vindhya* Mountains, until it approaches that range, at about 76° E. long., but afterwards it resumes its western direction. These mountains are not very high, their mean elevation towards the east not exceeding 3000 feet, and farther westward they are somewhat lower. But both their declivities are steep, and the mountains are nearly inaccessible. The most considerable places in the valley of the *Nerbudda* are—*Jubbulpoor*, 1458 feet above the sea, whence a road leads over the *Vindhya* Mountains through *Belhari* to *Panna* in *Bundelcund*; *Hosungabad*, a large town with good buildings, and an important place for the communication between the plain of the *Ganges* and the western countries of the Deccan; *Mundlesir*, which, though not large, is an important place, because the most frequented pass leads from it northward over the *Vindhya* Mountains to *Oujein*; *Mheysir*, a little farther west, a large place, with good buildings and a well-stocked bazaar; and *Burwanee*, which is a considerable town, and contains many good buildings and a large palace.

The upper portion of the valleys of the *Tapy* and *Nerbudda* is subject to the British, and is named the *Ceded Districts* on the *Nerbudda*. The western districts on both rivers belong also to the British, with the exception of a tract in the middle, which is subject to the *Guicowar*. The country between *Allahabad* and the presidency

of *Bombay* is partly subject to *Scindia*, *Holkar*, and other *Mahratta* chiefs.

III. *The Mountain Region of Northern Hindustan* has nearly the form of a triangle, whose base is formed by the *Vindhya* Mountains, skirting the vale of the river *Nerbudda* on the north, and whose apex is at *Rewarree*, at no great distance from *Delhi*, on the *Jumna*, to the south-west. It contains a table-land of considerable extent, that of *Malwa*, which occupies its southern portion, and is everywhere inclosed by mountain ranges, and also a mountain region, called *Upermal*, which extends on the north of the table-land. To these two extensive portions are to be added the peninsula of *Gujerat* and the island of *Cutch*, which ought to be considered as detached members of this mountain region.

The *Vindhya* Mountains begin on the west near 74° E. long., 22° 10' N. lat., about 10 miles or 15 miles from the northern bank of the *Nerbudda*, and extend eastward along the vale of the *Nerbudda*. The western portion, as far east as *Chiculda* on the *Nerbudda*, has not the appearance of a continuous range, being frequently broken into isolated groups and presenting many steep summits. East of *Chiculda* (near 75° E. long.), the range approaches the river *Nerbudda* and continues along it like a steep wall, with a broad-backed surface and without summits. On an average it is about 1700 feet above the vale of the *Nerbudda*, and hardly more than 2200 feet above the level of the sea. As the table-land extending north of it, where it is contiguous to the range, has an elevation of 2000 feet above the sea-level, the mountainous character of the range disappears on that side. Towards the northern bank of the *Nerbudda* the declivity is exceedingly steep, and indented by ravines, which give to many of the projecting parts the appearance of bastions, on many of which fortresses, or ghura, were built, but they are rapidly going to decay. Only that portion of the range which extends east to the road which connects the town of *Bhopal* with that of *Hosungabad* is called the *Vindhya* Mountains by the natives. But the range continues east of the road, is connected with the table-land of *Omercuntuc* (between 80° and 81° E. long.), and occupies farther east the greatest part of the tract between the *Ganges* and the river *Sone*, approaching the *Ganges* within a short distance between the towns of *Mirzapoor* and *Chunarghur*; it terminates on the banks of the *Sone* between *Rotaaghur* and *Sasserat*, near 84° E. long. This eastern portion of the *Vindhya* Mountains is called by the natives the *Kimoor* Mountains. The roads leading over the *Vindhya* Mountains are few. The most frequented of them, which is the *Jaum* Ghaut, in 22° 23' N. lat., and 75° 49' E. long., rises to 2328 feet above the sea-level; it connects the towns of *Mheysir* and *Mundlesir* on the *Nerbudda* with *Mow* on the table-land, and thence leads to *Indore* and *Oujein*. Another road farther east connects the towns of *Bhopal* on the table-land with *Hosungabad*.

From the eastern side of the *Sone*, opposite *Rotaaghur*, a mountain range extends south and south-east towards the table-land north of the *Mahanuddy*, whilst another range called the *Goomah* Ghauts, extends east-south-east towards the *Rajmahal* Hills. The mountain tract included within these two ranges is not entirely covered with ridges, but includes numerous plains of considerable extent and elevation, some of which are fertile and well-cultivated, especially along the foot of the ridges. The highest parts of the ridges are estimated to attain an elevation of 4000 feet, and some parts of the plain are as high as 2000 feet. They seem to descend in terraces to the plain of the *Ganges*. The mountains are generally covered with high trees, useful both as timber and for cabinet-work. The *Rajmahal* Hills form a detached mass on the west bank of the *Ganges*, near the town of *Rajmahal*, 25° 2' N. lat., 87° 53' E. long. They are sometimes called the *Puharree* Hills, in consequence of their being inhabited by a native race of mountaineers called the *Puharrees*. The town of *Rajmahal*, though formerly a large city, and at one time the capital of the province of *Bengal*, now consists of little more than a long street of mud huts, some dilapidated mosques, and the ruins of a vast palace, built by *Sultan Sujah*, brother of *Aurangzebe*, and completed in 1630.

The table-land of *Malwa* has the *Vindhya* Mountains for its southern boundary. On the north it is inclosed by a chain of mountains which *Ritter* names the *Harraouttee* Mountains. The table-land of *Malwa* extends from *Dohud* on the west (near 74° 20' E. long.), to *Bhopal* on the east (77° 20' E. long.), about 170 miles, and its average width from south to north may be about 80 miles; its area consequently may be estimated at 13,600 square miles. *Malwa* is a plain, gently inclined towards the north, with an elevation varying between 1300 feet and 2000 feet. *Indore*, near the *Vindhya* Mountains, is 2000 feet above the level of the sea; *Oujein*, 1640 feet; and *Rampoor*, near the *Harraouttee* Mountains, 1276 feet. No range of any extent appears on the plain; a few hills only occur, which do not rise more than from 100 feet to 200 feet above their base. The soil is a black loam, producing rich crops of rice, Indian corn, peas, beans, &c. Large quantities of sugar-cane, tobacco, cotton, linseed, and sesamum are also raised and exported. Opium is the most considerable of its productions; a very large quantity is annually raised, of which the greater part is exported.

On this table-land are several towns of importance. *BHOPAL* has been already noticed. *Indore*, situated near the *Vindhya* Mountains,

is the residence of the Mahratta prince Holkar. *Dhar*, once a very large place, has still a population of 30,000. Nearly in the centre of Malwa is *Oujain*, a very ancient town. It was formerly the residence of Maharaja Scindia, is well built, full of temples, and other buildings, and contains 150,000 inhabitants. *Bhampoor*, on the river Chumbul, nearly opposite Rampoor, is a place of great commerce, being situated at the pass of Mokundra, which leads over the Harraouttee Mountains to Upermal; it contains 5000 houses. South of it is the town of *Gurrote*, with 1200 houses, and in its neighbourhood are the temples of Dhumnar ($24^{\circ} 12' N. \text{ lat.}, 75^{\circ} 34' E. \text{ long.}$), which are excavated in the rocks. In the north-western corner of the table-land is *Pertabghur*, a considerable place, situated on the great road which leads from the table-land to the plain of Gujerat and to Cutch.

Between $68^{\circ} 30'$ and 73° E. long. lies the district of *Gujerat*. On its eastern side the plain of Gujerat, with an average breadth of about 45 miles, extends southward to the banks of the Tupty at Surat, and northward to the river Subarmatti, which enters the most northern corner of the Gulf of Cambay. It is one of the richest and most populous districts of Hindustan, having a good soil, and receiving the heavy rains brought on by the south-western monsoon. It is also well watered, though some of its rivers, especially the largest, the Mhye, have furrowed out deep beds, sometimes more than 100 feet below the surface of the plain. Rice is nearly the only grain which is cultivated; but the numerous villages are surrounded by extensive plantations of cocoa, mango, and other fruit-trees. The number of large towns is considerable. [AHMEDABAD; BAROACH; BARODA; CAMBAY.] The GULF OF CAMBAY is described separately. At the most northern corner of the Gulf of Cambay, and on the western banks of the river Subarmatti, lies a very flat tract, covered with an alluvial soil, which continues in a north-western direction until it meets that part of Cutch which is called the Runn. [CUTCH.] This tract is so low, that when the Runn is covered with water, it is likewise inundated, and the peninsula of Gujerat is changed into an island. It is only used as pasture-ground, and may be considered as a continuation of the Runn.

The peninsula of Gujerat is separated by the Gulf of Cutch from the island of Cutch, and by the Gulf of Cambay from the plain of Gujerat. The greatest part of it is covered with mountains and hills, but a fertile plain extends along its northern shores from 15 to 20 miles inland, and the flat swampy tract along its eastern border continues along the Gulf of Cambay as far south as Bhownuggar. The mountains in the interior are imperfectly known. They seem to extend in a general direction from east to west in two continuous ranges, of which the northern is called the Mandwa Mountains, and the southern the Junaghur Mountains. The whole of the peninsula is well watered, and the rivers, with the exception of those which fall into the Gulf of Cutch, preserve their water all the year round: the Bhunder, which enters the sea at Nuvvee Bunder on the western coast, is even navigable for small river-boats during the greatest part of the year as far as Kotyana. In the lower country which separates the two mountain ranges several extensive tracts occur which are cultivated, but the best cultivated district is the northern plain, where the common grains of Hindustan are raised in abundance, together with cotton. Here also is the principal commercial town *Nouanuggur*, which carries on a considerable commerce with Arabia and the Persian Gulf. It is a large place, and has good manufactures of cotton, and many dye-houses. The most mountainous districts are inhabited by native tribes who live by the produce of their herds. The climate of Gujerat is rather mild, and not unhealthy even for Europeans. The highest point to which the thermometer has been observed to rise is 102° ; in January it sinks as low as 55° .

Gujerat is partly subject to the Guicowar, partly to the British, and partly to native chiefs. An account of the Guicowar is given under BARODA, which is his capital. At the most southern point of Gujerat the Portuguese are in possession of the small island of *Dis*, where there is a good harbour and a fort erected for its protection. It was formerly a considerable place, but has now little or no commerce.

The principality of CUTCH is described separately.

On the north side of the table-land of Malwa, and separated from it only by the Harraouttee Mountains, lies a mountain region called by the natives Upermal, or mountainous country. Its western boundary is well defined, and protected by the Aravulli range, which runs in a north-north-east direction between 24° and 28° N. lat., 73° and 76° E. long. [ARAVULLI.] The country between this range, the Harraouttee Mountains, and the Kimoor division of the Vindhya Mountains, is traversed by several ridges running nearly parallel to the Aravulli Mountains. They decrease in elevation and width as they advance eastward, and the valleys which divide them are also comparatively more narrow. This country occupies nearly double the area of the table-land of Malwa.

The Chitore Mountains are nearest to the Aravulli, with whose southern extremity they are united by a kind of mountain-knot, in which the Harraouttee range also terminates on the west. They extend from about 24° N. lat., 75° E. long., in a north-east direction, to about 26° N. lat., 77° E. long., within about 30 miles from the banks of the Jumna. Though of inconsiderable elevation, being only about 600 feet above their base, and 2000 feet above the sea-level,

their steep declivities and extremely broken surface oppose great impediments to an easy communication between the two valleys which they separate.

The country between the Chitore Mountains and the Aravulli, which, on an average is 60 miles across, but towards the north considerably wider, may be considered as a plain with an undulating surface, which becomes hilly towards the north. Its southern portion forms an inclined plain, descending gently to the east. Wheat, barley, and javary are produced in abundance; opium is also raised. The rains fall from June to September with west winds; but they are preceded by north-easterly winds, which last for four months, and are extremely hot. During these months vegetation almost entirely disappears. North of 26° N. lat., the plain has the appearance of a sandy desert, from which isolated and strangely-formed rocks rise, generally to an elevation of 300 feet, and occasionally to 700 feet. On the highest of these isolated rocks is the town of Alwur, 1200 feet above the plain. This country forms a portion of Rajpootana.

The country south-east of the Chitore Mountains, and between them and the Vindhya range, is known in its western districts by the name of Harraouttee, and in the eastern by that of Bundelcound. It is a succession of narrow valleys, separated by broad-backed mountain ranges. On the table-land of Panna, between the Cane and Tonsa rivers, is the town of *Panna*, a well-built place, perhaps 1800 feet above the sea, the neighbourhood of which contains the richest diamond-mines in Hindustan. North of Panna, on the banks of the river Cane, is the town of *Banda*, which is well built, and carries on a considerable commerce, especially in cotton. This town is situated where the mountain region borders on the plain of the Ganges. The fortress of Gwalior, situated in $26^{\circ} 17' N. \text{ lat.}, 78^{\circ} 4' E. \text{ long.}$, is built on a rock, having a tolerably level surface of considerable extent, and a steep descent on all sides. At the foot of the rock is the town of *Gwalior*, which contains 30,000 inhabitants. In the plain which extends between Kota and Pally is *Patun*, a thriving commercial town, in which nearly the whole commerce between Malwa and the other parts of Northern Hindustan is concentrated.

All the rivers which traverse the table-land of Malwa and the mountain region of Upermal fall into the Jumna or the Ganges, their course being north-east. The largest is the *Chumbul*, which originates on the northern declivity of the Vindhya Mountains, in three branches, between which the towns of Dhar, Sagore, and Indore are built: it receives a great portion of the drainage of the table-land before it leaves it. It then enters the Harraouttee range near Rampoor, and runs in a narrow cleft as far north as Kota. In the plain below Kota it is joined by other rivers, especially the Newy and Parbuttee, which bring to it the waters of the eastern districts of Malwa, and likewise traverse the Harraouttee Mountains in narrow valleys. The Chumbul begins to be navigable only a short distance above its junction with the Jumna, which takes place between the towns of Etawah and Calpee, after a course of about 400 miles. The other rivers of Upermal are the Sinde, Betwa, and Cane, which fall into the Jumna, and the Tonsa, which empties itself into the Ganges. The most eastern of the rivers of the mountain region of Northern Hindustan, the *Sone*, rises on the eastern declivity of the table-land of Omercuntic, south of 23° N. lat., and near 82° E. long. It skirts that table-land on the east, flowing north-north-west to 24° N. lat., where it suddenly turns east-north-east, in which general direction it continues until it joins the Ganges above Patna. Its course is in a narrow valley as far as Rataaghur, below which fortress it enters the plain of the Ganges and becomes navigable.

The mountain region of Northern Hindustan is for the most part in the possession of native princes. The British have however annexed the countries south of the Sone to the presidency of Bengal, and the tract between the Sone and the Ganges to the North-Western Provinces. Between the two British possessions the territories of the Raja of Rewa are inclosed, which comprehend a tract of mountainous country on the upper Sone and on the Tonsa. The remainder is divided between the Mahratta princes, Scindia, Holkar, the Guicowar, and the Rajpoots.

Rajpootana is an extensive territory, so called because the greater part of it belongs to the Rajpoot princes. It is, to a considerable extent, coincident with the ancient province of *Ajmeer*. *Rajast'han*, or 'the abode, or country of princes,' is another name for the same territory. Rajpootana is situated between $22^{\circ} 45'$ and 31° N. lat., $68^{\circ} 25'$ and $77^{\circ} 45'$ E. long. It is bounded N. and W. by the Hill States, Lahore, Moultan, Bahwulpoor, and Sinde; S. by Gujerat and Malwa; and E. by Agra and Delhi. Rajpootana comprehends the states of Alwur, Banswarra, Bikaner, Doongerpore, Jessulmeer, Marwar (or Joudpoor), Jypoor (or Jynagur), Jhalawar, Mewar (or Oodipoor), Tonk, Cutch, Sirahi, Kerowlee, Kishengurh, Pertabgurh, Kota, and Boondee. The city of Ajmeer, with a small territory surrounding it, belongs to the British.

The great chain of the Aravulli Mountains stretches, in a north-eastern direction, through the greater part of Rajpootana, from the hilly country which connects it with the Vindhya Mountains almost to the confines of Delhi. Nearly the whole of the country west of the Aravulli is a sandy waste, extending to the Gharra branch of the Indus, and rising towards the south in a succession of steppes. In this barren territory are comprised the principalities of Marwar,

Sirohi, Jessulmeer, and Bikaner. A few oases occur, the largest of which are those in which the towns of Joudpoor, Jessulmeer, and Bikaner have been built.

Marwar has a better soil, and is in a better state of cultivation than the other principalities on the west of the Aravulli Mountains. The capital of Marwar is *Joudpoor*, a large city with a castle in which the Raja resides. *Nagore* is surrounded by barren sand-hills. Rajpootana east of the Aravulli range, though its soil is sandy, is fertile and generally well cultivated. The periodical rains are abundant, and there are numerous wells for the purpose of irrigating the land in the dry season; some of these wells are 200 feet deep.

Jypoor, the capital of the principality of Jypoor, in 26° 54' N. lat., 75° 38' E. long., stands in a valley open to the south, and is surrounded by a stone wall. It is well and regularly built, with four principal streets, which meet in a large square. The small territories of Boondee and Tonk may be considered as included under the same head. The town of *Kota* is seated on the Chumbul, in 25° 12' N. lat., and 75° 47' E. long.

Mewar, though mountainous, is tolerably fertile, and produces all kinds of grain, sugar, indigo, cotton, and opium. Good pastures are rare, and the cattle are smaller than in the neighbouring districts. *Oodipoor*, the capital of Mewar, in 24° 34' N. lat. and 73° 45' E. long., is seated in a mountainous district, and is a place of great strength; it can only be approached by three narrow defiles. Chitore, the former capital, having been taken by the Mohammedans, Oodipoor became the residence of the Raja, or Ranah, as he is called. The town of *Chitore* is situated in a rocky plain, in 24° 53' N. lat., and 74° 45' E. long., on the banks of the Bunnass, over which are the ruins of a long, lofty, and handsome stone bridge of eight pointed arches, and one semicircular arch in the centre. Chitore is a tolerably large town, with many pagodas.

Ajmeer, in 26° 28' N. lat., and 74° 42' E. long., is a moderate-sized town on the slope of a high hill. The houses are well-built, and are mostly whitewashed. On the top of the hill is a remarkable fortress called *Taraghur*, which is a place of great strength, and is in most parts inaccessible. Just above the town of Ajmeer is a large lake, which was formed by the emperors of Delhi by damming up the outlet of an extensive valley, into which several rills were conducted. The lake is 4 miles in circumference in dry weather and 6 miles during the rains. It affords the means of irrigation to a large district on its banks, supplies abundance of excellent water to the inhabitants of Ajmeer, and is full of fish. In 1818 the city of Ajmeer, with the surrounding district, was ceded to the British by Dowlet Rao Sindia, in exchange for a part of the territory of Malwa.

The other principal towns of Rajpootana are the following:—*Bikaner*, in 27° 58' N. lat., and 73° 20' E. long., a large town surrounded by a wall and ditch. *Boondee*, the capital of the principality of Boondee, is a small town on the side of a hill, on the summit of which is the Raja's palace, a large stone edifice strongly fortified. *Jessulmeer*, in 26° 48' N. lat., 71° 6' E. long., is situated in an oasis of the great sandy desert, and contains a population of 20,000. *Tonk*, on the Bunnass, in 26° 12' N. lat., and 75° 47' E. long. *Kishengurh*, in 26° 38' N. lat., and 74° 57' E. long., is situated on a chain of granite hills, surrounded by walls of solid masonry, with its castle on the mountain top. The states of Rajpootana extend over an area of 123,019 square miles, with a population of 8,095,632, and an annual revenue of 1,743,995*l*. Three of the states have a population of upwards of a million each, namely:—Jypoor 1,891,124, Joudpoor 1,783,600, and Mewar 1,161,400. The others vary from 70,000 to 500,000. A military force is maintained in the states. The extent of the force varies with the circumstances of each state.

The inhabitants of Rajpootana consist principally of Rajpoots, who are Hindoos, and of Mohammedans. The remainder of the inhabitants consist of Bheels, Jains, Jauts, and Mairs. Till they came under the protection of the British the Rajpoots were little better than robbers, and were engaged in incessant warfare with each other; consequently the towns and many of the larger villages of Rajpootana are fortified, and generally placed in situations where they might be protected by a fortress on a rocky height. The Rajpoot states were never properly subjected by the Mohammedan emperors; for though they were compelled to pay a tribute and furnish a certain number of mercenary soldiers they continued in a state of half independence, and their frequent revolts occasioned their principal cities to be several times destroyed. After the death of Aurungzebe in 1707, Rajpootana continued nominally subject to the emperor of Delhi till 1748, when its chiefs became independent. Since then the desolating attacks of the *Mahrattas* have compelled the Rajpoots to place themselves under the protection of Great Britain. The *rajahs* of Rajpootana are independent sovereigns, but an English officer commands the forces; and a garrison has been established at Ajmeer sufficient for its protection against its enemies, and also to keep the Rajpoot chiefs themselves in subjection.

IV. *The Plain of the Ganges.*—The *Ganges*, or *Ganga*, rises with two principal branches in the highest elevation of the Himalaya Mountains, near 31° N. lat., and between 78° 30' and 80° E. long. The most western branch is called the *Bhaghirettee*. The other branch is called the *Alakananda*. The river formed by the junction of the *Bhaghirettee* and the *Alakananda* is called the *Ganges*. Its course within the region of the Himalaya Mountains is not long, but very

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winding, until it entirely leaves it below Hurdwar, and enters the plain of the Ganges. The surface of the river at this point is hardly more than 1000 feet above the sea-level. In its course through the plain it inclines to the south-south-east, and forms a junction with the *Jumna* at Allahabad. In this part of its course of more than 400 miles it receives no considerable affluent except the *Ram Ganga*, which with its principal tributary the *Kosila* joins the *Ganges* above *Canoge*. The *Jumna*, which joins the *Ganges* at Allahabad, rises west of the *Ganges*, within the more elevated masses of the Himalaya range, in two branches, of which the eastern soon takes the name of the *Jumna*. They unite near *Kalsi*, within the lower range of the Himalayas, and soon afterwards leave the mountain region. Though its waters during its course are increased by those of the mountain region of Northern India, the *Chumbul*, *Sinde*, *Betwah*, and *Cane*, yet at the point of their confluence the *Ganges* is much larger, being a mile across, while the *Jumna* is only 1400 yards. From Allahabad to below *Boglipoor*, near the foot of the *Rajmahal Hills*, the *Ganges* runs east with a winding course, and receives a great number of large streams, among which may be mentioned the *Goomtee*, the *Gogra*, the *Ghandaki Ganga*, or *Gunduck*, the *Bagmutty*, and the *Coosy*. At *Sicligully*, about 30 miles below *Boglipoor* and 10 miles above *Rajmahal*, the *Ganges*, turns southward. Here the great delta of the river may be considered to begin. At present the first bifurcation of the *Ganges* takes place at *Sooty*, about 20 miles below *Rajmahal*. The western arm is called the *Bhaghirettee*, and flows south. The eastern arm preserves the name of *Ganges*, and flows south-east. It divides again about 40 miles lower down, near *Jellinghy*, from which the western branch is called the *Jellinghy River*. The *Jellinghy River* flows mostly south, and joins the *Bhaghirettee* near *Nuddea*. Another arm branches off from the *Ganges* a few miles from *Jellinghy*. This arm, called the *Matabunga*, runs likewise south with many large bends, and joins the *Bhaghirettee* nearly at an equal distance between *Nuddea* and *Hoogly*. After the junction of these three arms of the *Ganges* the western branch of the *Ganges* is called the *Hoogly*, under which name it passes *Calcutta*, and reaches the *Bay of Bengal* near the island of *Sagor*. The principal branch of the *Ganges*, continuing its course to the south-east, sends off another arm near *Custee*, which is called the *Chundna*. The fifth great bifurcation takes place at no great distance lower down, near *Maddapoor*, and is called the *Gurroy*. These two great branches, the *Chundna* and *Gurroy*, unite again near *Colna*, and thence proceed southward to the *Bay of Bengal* under the name of *Ballisore River*, or *Horingotta*, which, like the *Hoogly*, forms a wide estuary at its mouth. Whilst the *Ganges* loses a great deal of its waters by sending off so many large branches, besides several smaller ones, it receives new supplies from the Himalaya Mountains and the *Brahmaputra*. The *Mahanada* and the *Teesta*, which both run from 250 to 300 miles, rise on the southern declivity of the higher Himalayas in *Nepaul* and *Bootan*, and run southward. They communicate by several branches with one another during the rainy season, but they join the *Ganges* at different points. At *Nabobgunge* the *Ganges* receives the first supply of water from the *Brahmaputra* by the branch called the *Jenye*, which leaves its principal stream opposite the town of *Sheerpoor*, is very deep, and brings down a great volume of water. Where the *Ganges* is increased by the waters of the *Jenye* it divides again, and its eastern branch, called the *Booree Ganga*, passes *Dacca* at no great distance, and enters the wide bed of the *Brahmaputra* below *Nuraingunge*. The *Booree Ganga* receives three other navigable branches of the *Brahmaputra*. The *Brahmaputra* is so much drained of its waters by these different offsets that during the dry season it is not navigable between *Sheerpoor* and the mouth of the *Booree Ganga*. The principal branch of the *Ganges* flows nearly parallel to the *Booree Ganga* and the *Brahmaputra*, but falls into the sea by a separate embouchure between the continent and the island of *Deccan Shabazpoor*. The *Ganges* runs nearly 1500 miles. All the affluents of the *Ganges* rising within the mountain region of the Himalayas are navigable for smaller or larger river-boats to the very foot of the range for about six months in the year. The *Ganges* itself and its arms within the delta, and also the *Jumna*, are navigable all the year round for vessels of larger or smaller size. The *Hoogly* can only be navigated as far up as *Calcutta* by vessels not drawing more than 15 feet water, and all larger vessels are obliged to remain at the island of *Sagor*, where the climate is very unhealthy. The tide at full and change causes a terrible bore in the *Hoogly*, and its ascent as far as *Culna*, and even *Nuddea*, is very perceptible; but though the bore in the *Megna*, or *Brahmaputra*, is said to be still greater, the tide does not ascend farther than the town of *Dacca*, on the *Booree Ganga*. In the *Horingotta* branch it is felt as far as *Custee*.

The great plain which is drained by the *Ganges* and its affluents may be divided into three parts, the plain of *Bengal*, the plain of *Bahar*, and the plain of the *Doab*, *Oude*, and *Rohilcund*.

The plain of *Bengal* extends from the mouths of the *Ganges* to the Himalaya Mountains, about 280 miles, and its width may perhaps exceed 180 miles. Its western boundary runs from *Balasure* on the *Bay of Bengal*, through *Midnapoor*, *Bishunpoor*, and *Nagore* to *Rajmahal*, and thence along the river *Coosy* to the mountains. On the east its border skirts the *Tiperah Hills*, includes the province of *Silhet* in the form of a gulf, and follows here and farther north the southern and western declivity of the *Garrow Hills*, until in the

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meridian of Goyalpore it traverses the Brahmapútra, and attains in that direction the Himalaya Mountains. On this side the plain is connected with the maritime low tract of Chittagong and the valleys of Silhet and Assam, which differ considerably in their natural character from the plain of Bengal.

The plain of Bengal comprehends four natural divisions; the Sunderbunds, the country subject to inundation, the country which is not inundated, and the Tarai.

The Sunderbunds occupy the most southern part of the plain between the mouths of the Ganges and Brahmapútra, and as far north as the salt water of the sea is carried by the tides. The district extends farthest along the Horingotta branch, where it advances to the neighbourhood of Colna, a distance of 70 miles: the mean width may be about 50 miles. The tract is entirely uncultivated. The soil is extremely swampy all the year round, and overgrown with tall trees, which produce excellent timber. The thickets are inhabited by tigers, rhinoceroses, and other wild animals; while the numerous branches into which the different arms of the Ganges divide within this tract harbour crocodiles. The inhabitants are few, owing to the great unhealthiness of the country. Their occupations are the cutting down of timber trees, and the preparation of salt from the seawater, which enters the rivers and canals with the tides. It is only towards the two extremities, along the Hoogly and the principal branch of the Ganges, that some cultivated tracts occur within the Sunderbunds.

The country subject to inundation comprehends not only what is called the Delta, or the country between the branches of the Ganges, but also the country between the Ganges and the Brahmapútra, as far north as 25°. The inundation is greatest in the eastern districts, especially where the waters of the Brahmapútra are connected with the Ganges, in which part an immense tract of country is covered for several months with water many feet deep, so that at the end of June the towns and villages, which are built on artificial mounds and protected by embankments, appear like islands. The river has then risen 15 feet above its level in the dry season, but it still continues to rise for several weeks, about 5 inches every day. At Custee it rises between 31 and 32 feet; at Dacca, only 14 feet; at Luckipoor, not more than 6 feet; in the Sunderbunds it is not perceptible. In October, when the water rapidly decreases, the country is sown with rice, and the produce of this tract is sufficient to furnish the whole plain of Bengal with this principal article of food. The western districts of the country subject to inundation are only slightly covered with water; and though they likewise produce rice, they are principally covered with plantations of mulberry-trees; while in the northern parts indigo, sugar, cotton, and tobacco are raised in abundance. The plantations, with which the villages are surrounded, consist of mango-trees, cocoa-trees, and other kinds of palms. The whole of this plain is covered with alluvial earth to a depth of 130 or 140 feet, and no wells have been made in it.

The country not subject to inundation lies partly west of the Hoogly, and partly north of 25° N. lat. The district west of the Hoogly is of great fertility, especially Burdwan, which produces grain, sugar, cotton, silk, and indigo, in great abundance and of excellent quality: it is the best cultivated, most populous, and most productive district in India. The country north of 25° N. lat. is fertile and well cultivated in its southern districts; farther north large tracts of waste land occur, which are covered with rank grass and reeds. These sterile tracts increase in number and extent as they approach the Tarai.

The Tarai (the swamp) divides the plain of the Ganges from the lower region of the Himalaya Mountains, and extends from the banks of the Brahmapútra along the foot of the mountains to the place where the Ganges issues from them at Hurdwar. But it varies in width and also in character, narrowing insensibly as it proceeds farther to the north-west. In Bengal it is from 20 to 25 miles across, but towards its north-western extremity only a few miles wide. It is a deep swamp of great fertility, which is covered with a vigorous vegetation and large forest-trees, and is the haunt of numerous wild animals. The inhabitants are few and miserable; they chiefly maintain themselves by cutting down the forest-trees, which are sent to Calcutta and other towns in Bengal. Farther north, in Bahar, Oude, and Rohilcund, the underwood and the climbing plants disappear, and the ground between the trees is covered with long coarse grass, which being destroyed by putting fire to it, herds of cattle pasture on the new grass which immediately springs up.

The Plain of Bahar, which extends west of the river Coosy and the Rajmahal Hills as far as the meridian of Allahabad, is divided by the Ganges into two regions. The southern, or Bahar Proper, is narrowed at both extremities by the Rajmahal Hills and the projecting offsets of the Kimoor Mountains. Its surface along the banks of the river is undulating, but farther south it rises into hills. By the industry of its inhabitants this country has attained such a degree of cultivation that it resembles a garden. Its principal products are opium, indigo, rice, and cotton. [BAHAR.] The country north of the Ganges is called Tirhut or Trihuta. Its surface is undulating, and the districts which border on the Ganges do not differ much from Bahar Proper in soil and cultivation. But about 30 or 40 miles from the river large tracts are covered with forest-trees, especially saul-trees, which

increase in extent as the country approaches the Tarai. The great abundance of water in the rainy season forms extensive lakes, which render this part of the Gangetic plain very unhealthy, and prevent the extension of cultivation.

West of the meridian of Allahabad, the Gangetic plain comprehends the Doab, or country between the rivers Ganges and Jumna, together with Oude and Rohilcund. The surface slopes with rapidity, descending from north-west to south-east, from 1200 feet to 800 or 400 feet, and consequently the running water is soon drained off, and the soil is dry. As the heat of the summer, though excessive, lasts only a short time, and the cold in winter is considerable, the vegetation differs greatly from that of the lower plain. The winter crops resemble those of Europe, consisting chiefly of wheat, barley, oats, and millet, together with peas, beans, and vetches; also tobacco, flax, and hemp. The summer crops, which grow during the rainy season, are rice, javary, cotton, indigo, &c. The palm-tree disappears; but the European fruit-trees grow together with bananas, custard-apples, and fruits which have been transplanted from China.

The country which lies to the west of the Jumna, and extends as far as the banks of the Sutlej and Gharra, constitutes the connecting link between the plains of the Ganges and the Indus. It is a level tract. Where this plain borders on the Himalayas, it is in some measure watered and fertilised by the numerous small rivers which originate along the declivity of the lower range; and numerous villages, with some cultivated tracts, occur here. But the small volume of water brought down by these rivers is soon absorbed by the sandy soil, and some of them cease to flow at a distance of about 30 to 40 miles. The remainder unite in one somewhat larger stream, the Gagur, which continues to flow for about 100 miles, and then also is lost in the sand. With the decrease of the waters of these rivers the country gradually assumes the dismal aspect of the Indian desert. At the few inhabited places fresh water can only be found at a depth of from 50 to 100 feet.

In the Gangetic plain the rains set in towards the end of April or in May: they are however not abundant in Calcutta before the beginning of June. In the countries farther east, as Chittagong and Silhet, the abundant rains begin a month earlier. At Calcutta the mean annual quantity of rain is 71 to 72 inches, but at Dacca it probably does not fall short of 100 inches. The heat is excessive all the year round, but especially so before the setting in of the rains. The mean annual temperature of Calcutta is 79° of Fahrenheit; that of the hottest month (May) 86°; and that of the coldest (January) 67°. The climate changes greatly as soon as the hills of Rajmahal are passed in ascending the Ganges. In Bahar the difference between the hottest and coldest season is much greater. The quantity of rain at Benares does not exceed 40½ inches annually, and the rains set in there a month later. The difference between Bahar and the Doab, in respect of climate, is not so great as between Bengal and Bahar, though the difference of elevation is greater, a great portion of the Doab being more than 600 or 700 feet above Bahar. The western districts of the Doab are visited during the hot season by scorching westerly winds from the Indian desert. The rains are abundant in the districts between the Himalayas and the Ganges, but much less so in those farther west, and very moderate to the west of the Jumna. Farther to the west, in the desert country between the Jumna and Sutlej very little rain falls.

The Gangetic plain is the most fertile, the best cultivated, and most thickly inhabited portion of Hindustan. It contains more than one-half of all its population, and the number of large towns is considerable. Some of these towns are noticed elsewhere. [AGRA; ALLAHABAD; BACKERGUNGE; BAHAR; BAREILLY; BENARES; BOGLIPOOR; BURDWAN; CALCUTTA; CAWNPOOR; DACCA; DELHI; DINAGEPORE; FURRUCKABAD; FYZABAD; PURNAH; RAJMAHAL.] *Colna*, at the confluence of the Chundna and Gurroy, branches of the Ganges, is a rapidly increasing place. *Patna*, the modern capital of Bahar province, is situated on the right bank of the Ganges, in 25° 36' N. lat., 85° 15' E. long. The city within the walls is about a mile and a half long, from east to west, and about three-quarters of a mile broad, from north to south. This part of the city is very closely built, but the suburbs are of far greater extent, and the buildings altogether extend for 9 miles along the Ganges, with a breadth of about 2 miles; but the buildings outside the walls are irregularly placed, and there are considerable spaces between them. The greater number of the houses are of mud, the rest are built of bricks. Nearly all the roofs are tiled. The population is about 300,000, of whom two-thirds are Hindoos, and the remainder Mohammedans; the number of Europeans is very small. The city is the seat of a considerable banking trade. A considerable trade is also carried on in opium, rice, saltpetre, cotton cloths, and silk goods. *Monghir*, a fortress with a population of 20,000, is noted for its manufactures of iron. The great commercial town of *Mirzapoor*, on the right bank of the Ganges, between Allahabad and Benares, is the chief market for silk and cotton, and is estimated to contain a population of from 200,000 to 300,000. *Gaya*, the capital of Bahar district, situated on the Fulgo, a small feeder of the Ganges, has 86,000 inhabitants and a famous temple of Vishnu, which is visited by a great number of pilgrims. The towns of Tirhut have not yet risen to importance, but are rapidly increasing with the extension of cultivation in this fertile district. *Calpee* is still

a considerable place, and carries on an extensive trade in cotton. *Etawah* has also preserved a considerable population, but is not otherwise important. *Lucknow*, the capital of the kingdom of Oude, stands on the right bank of the river Goomtee, in $26^{\circ} 51'$ N. lat., $80^{\circ} 50'$ E. long. Lucknow became the residence of the court in 1775. It is now one of the wealthiest cities of Hindustan, with a population estimated at 300,000. *Muttra* is still a large town, and a sacred city, to which great numbers of pilgrims annually resort. *Hurdwar*, which is situated where the Ganges issues from the Himalaya Mountains, is a place of pilgrimage, and has a considerable commerce. *Serampoor*, on the right bank of the Hoogly, about 12 miles above Calcutta, in $22^{\circ} 45'$ N. lat., $88^{\circ} 26'$ E. long., extends nearly a mile along the river, but is of small width. The town is built in the European manner. It belonged to the Danes, who sold it to the British government some years ago. Serampoor has acquired some celebrity as the principal place where the Protestant mission was established about the close of last century. The mission has since been removed to Calcutta. The population is about 13,000. The Danes obtained possession of Serampoor in 1676. *Shahjehanpore* is situated in $27^{\circ} 54'$ N. lat., $79^{\circ} 50'$ E. long., on the Gurruck, a quiet winding stream. The town is large, and contains about 50,000 inhabitants. The houses are in good condition, and the bazaars show activity and opulence; but the mosques are mostly ruinous. There is a castle at Shahjehanpore. The town was founded by Shah Jehan. The French settlement of CHANDEENAGORE is separately noticed.

The states spread over the Gangetic plain are immediately subject to the government of the British, with the exception of the kingdom of Oude, which occupies that portion of the plain which extends, between 80° and 82° E. long., from the banks of the Ganges to the Himalaya Mountains. [OUDE.] The British possessions are annexed to the presidency of Bengal and to the North-Western Provinces, and now extend to the Beas, including the Jullindar Doab, and overlooking the Hill States, as far as the Cashmere territory.

V. *The Plain of the Indus.*—The *Indus*, called in its southern course also the *Sinde*, rises on the table-land of Tibet, about $31^{\circ} 20'$ N. lat., and near 80° E. long. After a course of perhaps not less than 250 miles on a table-land from 12,000 to 15,000 feet above the sea, it is joined below Leh by a large river called the Shayuk. Little is known of the Indus after its junction with the Shayuk till it issues from the Himalaya range a few miles east of Attock. Above Attock its course lies due west, and it is joined by the river of Cabul, the only considerable affluent which it receives from the west after it has left the mountains. After leaving the high mountains above Attock, it continues its course in a south-south-west direction for about 70 miles more between lower ranges, till at $33^{\circ} 7'$ N. lat. it enters the great plain, keeping the western side of the plain. The Hala Mountains, which run along the eastern border of the table-land of Beloochistan, rise at a short distance from it, in parts within a few miles.

As soon as the Indus has left the mountains it divides into four arms, which run with great bends, and sometimes unite but separate again, so that the whole volume of its waters is seldom united in one bed. South of 29° N. lat., near the small town of Mittun Cote, it is joined on the east by the Chenaub, or united rivers of the Panjab, or Punjaub, and changes its course to south-west. It is here 2000 yards wide. It continues its south-west course to Bakkur, and then turning to the south and south-south-east, it reaches Hyderabad, above which town a branch separates from the main stream, and flows south-east to the Runn, out of which it flows by the wide estuary which separates the island of Cutch from the plains of Sind. This estuary is called the Korie, and has 12 feet of water as far as Busta, but farther inland it is not so deep. The western and principal branch of the Indus divides again south of 25° N. lat. near Jarruck, and the smaller or eastern branch loses also a great part of its waters before it reaches the sea by the mouth called Sir. It is navigable however as far as Gunda for vessels of 38 tons burden, and it is much navigated, though the merchandise must be transferred into small river boats at Gunda. Below Tatta, and about 60 miles from the sea, the principal branch of the Indus separates again into two branches, of which the smaller, called Buggaur, runs west, and the larger, the Sata, continues in a south-south-west direction to the sea. The Sata is, after the bifurcation, still 1000 yards across. It divides into seven arms before it reaches the sea. The widest of its mouths, the Gora, is only accessible to small vessels on account of its shoals and rapid current. The navigation of the Indus along the Delta is very dangerous. At a distance of one mile and a half from the sea the main branch is only 12 to 15 feet deep. Farther from the shore are numerous sand-banks. The spring-tides rise 9 feet in the mouths of the Indus. In the river the tide ascends only 75 miles, and is not perceptible at Tatta.

The Indus receives only one great affluent in its extensive plain, but this affluent unites all the rivers which drain the Panjab, or the Five Rivers, the Pentapotamia of the Greeks. These five rivers, enumerated from east to west, are the Sutlej, or Satadru (the Zaradrus of Ptolemaeus), the Beeah, or Beas (the Hyphasis of Arrian), the Ravee (the Hydrates of Arrian), the Chenaub (the Acesines), and the Jhilum, or Behut (the Hydaspes). The *Sutlej* has the longest course. It originates on the table-land of Tibet. Its course on the table-land, where it flows in some measure parallel to the Indus, is more than 150 miles. So far it flows north-west. Changing its course to the south-west, it soon

enters the Himalaya range, through which it runs in a narrow valley, with numerous bends, more than 100 miles. It enters the plain near Ropur, whence it flows due west past Ludiana as far as Hurree, where it is joined by the Beas, $31^{\circ} 10'$ N. lat., $75^{\circ} 5'$ E. long. The *Beas* originates in the Himalaya Mountains, traverses the mountain region with two great bends to the south and north, and enters the plain above Nadaun after a course of less than 100 miles. Hence it flows west-south-west, gradually approaching the Sutlej until it joins it. The united river then takes the name of Garra, or Gharra, and continuing to flow south-west unites with the Chenaub below Bhawalpoor. The *Ravee* rises in one of the parallel chains of the Himalayas called the Santch Mountains. Its upper course is not long. Above Kotos, or Kothua, it enters the plain of the Panjab, where it flows south-west parallel to the Beas and Garra, until it joins the Chenaub at Fazilshah. The *Chenaub* rises in the Paralass range of the Himalayas near the sources of the Beas, and runs for about 100 miles in the mountain region to the north-west; it afterwards turns gradually to the west, passes the town of Kishtawar, and inclining by degrees more to the south leaves the Himalaya Mountains above Jommu, after a course of perhaps not much less than 200 miles. In the plain of the Panjab its course is west-south-west till it has joined the Ravee, when it declines to the south-south-west. The Chenaub is a very large river. At Alknur, where it leaves the Himalayas, it is 200 yards wide. At Ramnuggur, when at the lowest, it is 300 yards wide and 9 feet deep. The *Jhilum*, or *Behut*, rises in the Tibet range of the Himalayas, flows first north-west in a longitudinal valley of the mountain region, traverses the lake of Wooler, and issues from the valley by the narrow valley of the Baramula pass. It then passes near Mozufferabad, up to which place its course is to the west, and turns by a bold bend to the south, in which direction it reaches the plain. Its course within the range of the Himalayas exceeds 200 miles. The remainder of its course, somewhat more than 100 miles, is mostly south till it joins the Chenaub at Trimo below Jung. After the five rivers have united, they still flow between 40 and 50 miles until they fall into the Indus at Mittun Cote. The natives call the united river Chenaub, but in the other countries of India it is known by the name of Punjund. All the rivers of the Panjab are in general navigable up to the place where they issue from the mountains, and the Indus itself is navigable to Attock, but above that place there is a whirlpool which cannot be passed by boats.

The northern portion of the plain of the Indus, the Panjab, Punjaub, or country of the Five Rivers, extends from the lower ranges of the Himalaya Mountains to the confluence of the Chenaub with the Indus, between 34° and 29° N. lat., and has the form of an isosceles triangle, whose shortest line, or base, which is about 450 miles in length, lies along the Himalayas, and the equal sides, each about 600 miles, unite at the confluence of the Indus and Chenaub. Its surface may be on an average about 1000 feet above the sea. This immense tract of country contains very fertile and very sterile tracts. The country along the foot of the Himalayas, and to a distance of about 100 miles from it, is well supplied with water, and has the advantage of abundant rains, and a plentiful irrigation. A canal has recently been constructed, and much improvement has taken place in the district within the last two or three years. The Jullindar Doab, or country between the Sutlej and the Beas, is very populous, and so likewise is the Barri Doab, between the Beas and Ravee as far as Amritsir. Rice is the principal object of agriculture all over the Panjab, but wheat is also raised in sufficient quantity for the consumption. The sugar cane is cultivated with great care. Wine and different kinds of fruits are produced in many places. Cattle are very numerous, though commonly of small size.

In Lahore the maximum of heat in July is 102° , and the minimum in January 24° . In Moultan it seems to rise still higher; at other places even to 110° .

The principality of *Lahore*, formerly subject to the Raja of Lahore, extended from 30° to 34° N. lat., and from 71° to 78° E. long. It was divided from Sind, on the south, by the territory of the Raja of Moultan, extended northwards to Cashmere, and included, eastwards, the Jullindar Doab and Kohistan, or the Hill States. *Lahore*, the capital, is situated in $31^{\circ} 36'$ N. lat., $74^{\circ} 3'$ E. long., on the south bank of the Ravee. It is a large city, surrounded by a wall, but the streets are narrow, and the houses generally mean. There are several remarkable buildings, among which are some handsome tombs. There are numerous mosques, the domes and minarets of which give the city at a distance an imposing appearance, which is not confirmed by nearer inspection. The population is stated to amount to 80,000. In the principality of Lahore is situated the large town of AMRITSIR, or Umritsir. *Dera-Ghase-Khan*, is an important border town, situated near the right bank of the Indus, in about $29^{\circ} 58'$ N. lat., $70^{\circ} 40'$ E. long., which has a population of about 25,000, and extensive manufactures of silk, cotton-cloth, and cutlery, with considerable commerce.

Moultan, a large city, in $30^{\circ} 12'$ N. lat., $71^{\circ} 30'$ E. long., is situated at a short distance from the left bank of the Chenaub. It is a large town, with a population of about 60,000, and was defended by a citadel, strong walls, and other fortifications. It was taken by the British on January 22nd, 1849. Along the left bank of the Garra is Daoudpootra, or Bahawalpoor, which is subject to an independent chief, or khan, who resides at the town of *Bahawalpoor*, on the Garra,

The whole of the Panjab, including Lahore, Multan, and the Jullindar Doab, and also Sindh and certain of the Hill States north of Delhi, is subject to the British government.

The country south of the Panjab is occupied by the great sandy desert of Hindustan, which extends southward to the Aravulli range and the salt-morasses of the Runn. Its western border approaches the banks of the Indus, from which it is separated only by a fertile tract of land, from 10 to 15 miles in width. But as the Indus, in this part of its course, is almost always divided into several channels, of which some penetrate farther into the country east of it, the cultivated tracts extend in some places to 20 miles and more from its principal channel.

The Desert of Sindh, or the Thurr, which on the north-east is connected with the sterile country which separates the plain of the Ganges from that of the Indus, is covered with ridges of sand-hills. In some places these hills are overgrown with coarse grass or low bushes for about two months in the year; during the remainder of the year their surface is bare, and exposed to great changes from the winds. Between these ridges occur some lower tracts, which have a hard, loamy, or stony soil, and on these the vegetation lasts much longer. They are generally of very small extent, and are used as pasture-ground for camels and sheep, and for a small race of cattle, the only domestic animals which are kept here. The small oases are not numerous in the neighbourhood of the Indus, but increase in number and extent as we approach the Aravulli Mountains.

VI. *Sindh*, or *Scinde*, extends on both sides of the Indus from the sea to near the place where the river is joined by the Chenab. It lies between 23° 30' and 29° N. lat., and 67° and 71° E. long. It extends in length from south to north more than 360 miles, and its average width may be 200 miles. On the south and south-west it borders on the Indian Ocean, and its eastern districts are separated from the province of Cutch by the Runn. To the east of it, and chiefly within its boundary, is the Indian Desert or Thurr, where it borders on the Rajpoot States of Marwar and Jessulmeer. On the north-east are the territories of the Khan of Bhawalpoor, and north those of the Panjab. The north-western corner of Sindh reaches the Boogtee Hills, which belong to Afghanistan, but the other parts of the western borders are Beloochistan or the territories of Khelat, from which Sindh is mostly separated by the Hala Mountains.

The sea-coast of Sindh extends about 150 miles. Sindh is indebted for its fertility to the inundations of the Indus. As far as these inundations extend, the country yields abundant crops. These inundations are caused by the melting of the snow in the upper course of the Indus and its tributaries. As in the higher parts the difference of the snow-line in summer and winter amounts to 3000 feet, an immense volume of snow is annually dissolved, and the water thus produced greatly raises the level of the river. In many places the waters spread over the adjacent levels, and fertilise the soil. Artificial means are employed to increase these advantages, especially canals and dams. The canals are only full during the height of the inundation, and are dry in the winter months. The dams are made across the bed of the river, and are called 'bunds.' The river begins to rise in April. Early in May the swell of the waters begins to point out the necessity of deepening and cleaning out the various canals. Towards the middle of June there is sufficient water for sowing the crops, which ripen and are cut down in October. At the end of September the waters are confined to the bed of the river.

The Delta, or that part of Sindh which is below the town of Tatta, has an alluvial soil, consisting of successive layers of earth, clay, and sand. As the great branches of the river are here very numerous, and throw off many arms, the inundation of this tract is general; and in those places which have not this advantage, artificial drains, about 4 feet wide and 3 feet deep, conduct the waters through the fields. Close upon the sea there is abundance of green forage, which furnishes pasture for large herds of buffaloes. At the back of it extends a belt 10 miles in width, where the country is so thickly covered with furze and bushes that it is incapable of being brought under tillage. Agriculture is only carried on in districts more distant from the shores. If we except a few small towns and villages, the inhabitants reside in temporary villages, which they remove according as they are compelled by the increase of the inundation or other circumstances.

The extensive tract of country which lies west of the Indus, and extends from the sea-shore to the town of Sehwan (26° 22' N. lat.) has a different character. It is only along the banks of the river that there is a low alluvial tract, a few miles wide, which can be cultivated, as it has the advantage of being irrigated by short cuts from the river. Beyond its limits the country rises higher, and the soil is gravelly and intermixed with pebbles, and soon passes into low hills composed of sandstone. The Hala Mountains separate this tract from Beloochistan. On the same side of the Indus, north of the town of Sehwan, is one of the most fertile districts of Sindh, which extends some miles north of Shikarpoor. The country is level, and the means of irrigating the land are abundant; for besides the main channel of the Indus, which is used for irrigating the adjacent lands, the interior of this region for the greater part of its extent is traversed by the Western Narra, which partakes of the inundations of the principal river, and at some places is connected with it by transverse canals.

The country on the east of the Indus, from the northern boundary-

line to the parallel of Hyderabad and Omercoote, presents a different aspect. The banks of the river to the distance of two or three miles inland are covered with tamarisk and acacia shrubs, and mostly uninhabited, but frequently cut by canals, which carry the water of the river to the back country. On the edge of this back country the villages are built, and generally raised somewhat above the ordinary level, to avoid the inundations. Some of the canals which carry the water of the river to the back country are of great extent. The banks of all the canals are fringed with a broad agricultural band, on which numerous large villages are built, many of which contain 500 houses. Besides fertilising the land, these canals afford the means of transporting by boats the produce of the soil.

The country south of a line drawn from Hyderabad to Omercoote, and included by the Sata and Poorun branches of the Indus, generally resembles the region just noticed.

The climate of Sindh differs greatly from that of other parts of Hindustan. Though the south-west monsoons blow so hard along the shores as to prevent vessels approaching them from March to October, they do not bring any periodical rains. Rain is far from being frequent all over Sindh, nor does it occur as in other parts of Hindustan at certain seasons, though storms may be expected at the end of June or the middle of July. In Upper Sindh, that is, north of Hyderabad, the natives of the country divide the year into three seasons, the spring, the hot season, and the cold season. The spring is of very short duration. The cold of the winter continues to the end of February. The temperate weather between the extremes of the cold and hot seasons is very short. The hot season may be said to commence in the middle of March, and it continues generally without intermission till the middle of September. The heat in Upper Sindh is greater than in those parts of Hindustan which lie in the vicinity of the equator, and the sun is singularly fatal in its effects, not only to Europeans but to natives. At Sukkur the heat at 9 o'clock in the evening is three or four degrees more intense than it is at noon, a peculiarity which seems to be owing to the southerly winds which invariably continue to blow from the heated deserts till midnight. During the cold season, from October till the end of February, the climate of Upper Sindh is pleasant and salubrious. Frost and ice occasionally occur. The setting in of the cold and violent north winds of November stops all vegetation except a few stunted tamarisk and babool bushes.

Sindh is rich in agricultural products; rice, wheat, maize, and the other grains and pulse common to India are grown. Indigo is largely grown in the north-eastern districts. Opium is cultivated near Shikarpoor, and in some other districts. The sugar-cane is pretty generally grown. Cotton is generally cultivated; the best is that raised in the northern districts. Tobacco is grown in the vicinity of Khyrpoor. Hemp, cucumbers, water-melons, and musk-melons are extensively cultivated. The gardens produce carrots, turnips, radishes, onions, and several kinds of pumpkins. Among the fruits are the date, mango, pomegranate, apple, grape, lime, citron, fig, and various others. About Shikarpoor and Bukkur dates are so plentiful as to constitute the principal food of the lower classes. The tamarisk is the most abundant production of the uncultivated parts, and is useful for many purposes to the inhabitants.

Dromedaries and asses constitute the principal means of conveyance by land. The horses of Sindh are small but hardy, and capable of enduring great fatigue. Immense herds of buffaloes graze on the banks of the Indus and its arms, and at other places common cattle. Ghee and hides constitute important articles of export. Sheep and goats are met with almost everywhere in Upper Sindh, and wool is exported from that tract which lies west of the Indus and north of Shikarpoor. Tigers, wolves, jackals, wild hogs, porcupines, deer, and hares live in the woods. Among the amphibious animals are the alligator, otter, and badger.

Sindh is a thinly-peopled country. The whole population, as given in the 'Trigonometrical Survey of India,' 1851, is only 1,274,744. The greatest part is a desert on which only some nomadic tribes wander about with their herds, and the bulk of the population is settled on the banks of the Indus and on the canals which are fed by it. The population is divided into three distinct classes, the Sindies, the Belooch, and the Hindoo.

Sindh is divided by the natives into two parts: Lar, which comprehends the southern portion as far north as Sehwan; and Sirra, which extends over the northern districts. Lar contains the three sea-ports of the country, Shah-Bunder, Vikkur, and Kurachee. *Shah-Bunder*, built on the Mull mouth of the Indus, is a small place, accessible for sea-boats of 25 tons burden. *Vikkur*, situated on the Hujamree mouth, 25 miles from the sea, is larger, the river being navigable to that place for more than 35 miles for sea-boats of 40 tons burden. *Kurachee*, about 30 miles from the most western mouth of the Indus, the Pittes, is built at the head of a creek, distant from the sea 4 miles. A harbour at its entrance protected by a high headland affords safe anchorage at all seasons to vessels of 300 tons, whence large boats can pass close up to the town, which is built on a slightly rising ground and surrounded by a mud wall. The bazaars are extensive, but the streets are narrow and filthy. The inhabitants amount to 14,000, and carry on an extensive trade by sea with India, Arabia, and Persia, and by land with Shikarpoor.

Hyderabad, the capital and seat of the government, is built not far from the east bank of the Indus, between this river and the Fulaltee branch, on a rocky eminence. It has no remarkable buildings, and the population, amounting to nearly 30,000, live in mud huts. Nearly half way between Hyderabad and the Hujamree mouth of the Indus is *Tatta*, the ancient capital, which formerly was washed by the river, but is now five or six miles distant from it. It presents only a heap of mud ruins, and contains hardly 8000 inhabitants. Some good cotton fabrics are still made here. At nearly equal distances between Hyderabad and Tatta, on the right bank of the Indus, is the town of *Jurruck*, which is built on a hill 150 feet high, has a good bazaar, and 4000 inhabitants. *Meerpoor* is built on a canal which runs eastward from the Pinyaree branch into the interior, and fertilises a very large tract of country. This town has mud walls inclosing a circuit of three miles, and contains 10,000 inhabitants. There are more than 300 shops in the bazaar. *Omercote* lies on the banks of the eastern Narra, and is built near the edge of the Thurr. It exports the produce of the desert, and contains 2000 inhabitants, chiefly Rajpoots.

Sirra, or Upper Sinde, contains several large towns, especially on the west of the Indus. *Shikarpoor*, the chief commercial town of Sinde, is situated in 27° 58' N. lat., 68° 30' E. long., on the plain which extends from the Indus to the Hala Mountains, 26 miles from the right bank of the river. The walls, of sun-dried brick, but in a state of decay, inclose a space of nearly 4000 yards. The houses are also of unburnt bricks, and the streets are narrow, confined, and dirty. The great bazaar extends 800 yards, running through the heart of the town. The suburbs are very extensive, and a large proportion of the population, especially the Mohammedans and labouring classes, reside in them. The population is about 30,000, of whom about two-thirds are Hindoos and the remainder Mohammedans, including Afghans and Patans. There are from 30 to 40 bankers in Shikarpoor, who have extensive connections both in western and eastern Asia. The best commercial road between Hindustan, Afghanistan, and Persia passes through Shikarpoor, leading by the Bolan Pass. *Sahwan*, a large and formerly an important commercial place, is built on a rocky eminence not far from the place where the Arrul, or Western Narra, joins the Indus. It contains between 10,000 and 12,000 inhabitants, and carries on an active trade with the fertile country to the north. On the banks of a canal connected with the Western Narra is the town of *Khyrgaon*, which has 7 mosques and between 2000 and 3000 inhabitants, and is a thriving place. Farther north, on another canal of the Western Narra, is *Larkhana*, situated in the centre of a tract very productive in rice, which is exported in large quantities: it has 12,000 inhabitants.

On the eastern bank of the Indus stands the town of *Roree*, which is built on a rocky eminence, and contains about 8000 inhabitants. The streets are narrow; the houses, many of which have three or four stories, are built of sun-burnt bricks. Opposite this place, on an island in the river, is the fortress *Bukkur*, and on the other side the small town of *Sukkur*. *Khyrpoor*, built on the canal of Meerwah, has 18,000 inhabitants; the bazaar is spacious. *Subulcote* lies on the road leading from Roree to Bhawalpoor; it has some trade in the produce of the country, especially ghee, hides, and opium.

The manufactures of Sinde are not numerous; but they may be regarded as extensive when the scantiness of the population is considered. Cotton-cloth of a coarse description is manufactured in the principal towns and villages chiefly for home consumption, and a little is exported to Afghanistan and Persia. Among the silk manufactures those of Tatta have acquired repute in India, especially a rich fabric of silk, cotton, and gold, variegated in pattern and of close texture.

People of Hindustan.—The aboriginal tribes, besides the Hindoos, are at present only found in the mountainous parts of the country, where they live chiefly on the produce of the chase and their cattle, though they also cultivate some kinds of grain in the more level parts of the districts occupied by them. Many of them consist of a comparatively small number of families. The most widely dispersed of these tribes are the *Gonds*. They occupy the whole of the mountains extending from the Circars in a north-western direction over the higher branches of the Mahanuddy River to the table-land of Omercote, which is in their possession, and west of it to the sources of the Tapy and Wurdah. The Gonds are in a very low state of civilisation compared with the Hindoos; they live in a state of independence of the governments whose territories they inhabit, and rarely permit foreigners to traverse their country. The western neighbours of the Gonds are the *Bheels*, who occupy the Northern Ghauts and the Vindhya Mountains, together with the mountain region connecting the Vindhya Mountains with the Aravulli. Southward they extend to Poona, and they are also in possession of the northern portion of the Western Ghauts as far south as the parallel of Damsun. They are not more advanced in civilisation than the Gonds, though they are more intermixed with Hindoos, and less independent of their masters. The neighbours of the Bheels, the *Coulies*, are dispersed over a comparatively small tract of country. The Coulies occupy the Western Ghauts south of the Bheels, and as far as Bombay, and even farther. They enjoy no independence, are a laborious people, and at Bombay and other places serve as labourers, and especially as porters. Hence porters in Hindustan are commonly called Coulies by Europeans. The *Ramusis* are dispersed over the Western Ghauts, south of the Coulies.

The *Cathies*, or *Kathies*, are a singular race of people inhabiting a part of Gujerat. They are supposed to be the descendants of the ancient Cathie who in the time of Alexander's invasion occupied a portion of the Panjab. There are no castes amongst them. Besides priests they have bards, who possess authority almost equal to the Druids. These become security for the payment of debts, the conduct of individuals who have misbehaved, and the appearance of parties in actions both civil and criminal. They also conduct travellers and caravans through districts infested by robbers, or in a state of war. If a troop of predatory horse appear the bard commands them to retire, and, brandishing his dagger, takes a solemn oath that if they plunder the persons under his protection he will stab himself to the heart, and bring his blood upon their heads. Such is the veneration in which he as a person of celestial origin is held, and such the horror at being the cause of his death, that the threat in almost every instance deters them, and the party is allowed to pass on unmolested. The religion of these people consists of little else than adoration of the sun. They invoke this object of their worship before commencing any great undertaking, and if a plundering expedition be successful a portion of the money stolen is consecrated to the service of religion. The only functions of the priests are to celebrate marriages and funeral solemnities. They have but one sacred building, a temple dedicated to the sun, near Thuam, and containing an image of that luminary. The size of the Cathies appears to be above the average, often exceeding six feet. The women are tall and frequently handsome, and generally speaking modest and faithful. This people have no restrictions of any sort regarding food or drink. (Calcutta 'Christian Observer,' January, 1847.)

The foreigners settled in Hindustan are partly Asiatics and partly Europeans. The Asiatics have come by sea and by land. To the former class belong the Arabs, who are very numerous on the coast of Malabar. Some Parsees, or Guebres, are dispersed in the cities on the coast between Bombay and Surat. The Asiatics who entered India by land are chiefly settled in the plains of the Ganges and the Indus. They came to these countries with the conquerors who at several epochs have established their empires here. They are mostly Afghans, and commonly called Patans. Their number is said to amount to 10,000,000.

The Europeans in Hindustan are chiefly descendants of the Portuguese, who being rather conquerors than merchants established themselves permanently in the places where they settled; but they are only numerous along the western coast, where their whole population is said to be 2,000,000, an estimate which however seems exaggerated. Next to the Portuguese the British are the most numerous, but their number is stated not to exceed 60,000.

Political Divisions, Areas, and Population.—The whole of Hindustan is comprised in three great political divisions, the Presidency of Bengal, the Presidency of Madras, and the Presidency of Bombay. The Bengal Presidency includes the Sub-Presidency of Agra, or the North-Western Provinces. These divisions include not only the territories under the direct rule of the British government, but also to a greater or less extent all the native and foreign states from the Himalayas to Cape Comorin, and from the Indus to the Birmanese territory. Some of the states are subsidiary, some are tributary, some are protected, and some are nominally independent, but all are more or less under British superintendence and control. The British government have treaties of subsidiary alliance with the Nizam (or ruler) of Hyderabad, the King of Oude, the Raja of Nagpoor, and the Raja of Gwalior. The Bundelcund States and Nerbudda Territories are tributary and protected. Indore and Bhopal are protected, but not tributary. The States of Rajpootana are tributary and protected. Rohilcund is protected, but not tributary. The Hill States and Sikkim are tributary and protected. Bhawalpoor is protected, but not tributary. Gholab Sing is protected, but not tributary. Cossya and Garrow Hills and Munespoor are protected. Tiperah is independent. The Cuttack Mehals are tributary. With Cochin, Travancore, and Mysore there are treaties of subsidiary alliance; but Mysore is at present under British management. Jeypoor and the Hill Zemindaries are protected. With the Guicowar and the Raja of Cutch there are treaties of subsidiary alliance. Colapoor, Sawunt Warree, and Sattara are at present under British management. Nepaul is neither tributary nor protected, but is restricted in certain respects by a treaty of alliance. The French and Portuguese possessions are independent. Each of the great divisions comprises, for purposes of revenue, Regulation Provinces and Non-Regulation Provinces; and under the actual operations of the government many of the old names of the Hindoo and Mohammedan governments are gradually going out of use. The native governments, for purposes of protection, superintendence, &c., are also included in each of the divisions.

The Presidency of Bengal includes 7 Regulation Provinces (Jessore, Bhaugulpoor, Cuttack, Moorshedabad, Daoca, Patna, and Chittagong), and 8 Non-Regulation Provinces (Sugor and Nerbudda, Cis-Sutlej, North-East Frontier, Goalpara, Arracan, Tenasserim, South-West Frontier, and Panjab, including the Jullindar Doab and Kooloo territory).

The North-Western Provinces, which are under a lieutenant-governor and are sometimes called the Sub-Presidency of Agra, include 6 Regulation Provinces (Delhi, Meerut, Rohilcund, Agra, Allahabad, and

Benares), and 7 Non-Regulation Districts (Kumaon, Gurwal, and other Hill States).

The Presidency of Madras includes 18 Regulation Districts (Rajamundry, Masulipatam, Guntoor, Nellore, Chingleput, Madras, South Arcot, North Arcot, Bellary, Cuddapah, Salem, Coimbatore, Trichinopoly, Tanjore, Madura, Tinnivelly, Malabar, and Canara), and 3 Non-Regulation Districts (Gangam, Vizagapatam, and Kurnool).

The Presidency of Bombay includes 13 Regulation Provinces (Surat, Baroach, Ahmedabad, Kaira, Candesh, Tannah, Poona, Ahmednuggur, Sholapore, Belgaum, Dharwar, Rutnagherry, and Bombay Island), and three Non-Regulation Provinces (Colaba, Sinde, and Sattara).

The following are the areas and the population, as far as they are known, or as nearly as they can be ascertained, of the British Possessions, and of the Native and Foreign States, included under each of the three great divisions:—

	Sq. Miles.	Population.
BRITISH POSSESSIONS.		
Presidency of Bengal	325,652	47,958,320
North Western Provinces	85,571	23,800,549
Presidency of Madras	144,889	16,339,426
Presidency of Bombay	120,065	10,485,017
	676,177	98,583,312
NATIVE STATES.		
<i>Bengal.</i>		
Hyderabad	95,337	10,666,080
Oude	23,738	2,970,000
Nepaul	54,500	1,940,000
Nagpoor	76,432	4,650,000
Bundelcund and Nerbudda districts	56,311	6,871,112
Indore	15,080	1,415,200
Bhopal	8,312	815,360
States of Rajpootana	119,859	8,745,098
Rohilkund	720	320,400
Hill States	12,852	891,007
Sikh Protected States	32,177	2,250,809
Sikkim	2,504	92,548
Bahwulpoor	20,003	600,000
Gholab Sing's Territories	25,123	750,000
Cossya and Garrow Hills	7,711	231,605
Mancepoor	7,584	75,840
Tiperah	7,632	7,632
Cuttaek Mehalis	16,929	761,805
	583,404	43,054,596
<i>Madras.</i>		
Cochin	1,988	288,176
Mysore	30,886	3,000,000
Travaneore	4,722	1,011,824
Jeypoore and Hill Zemindaries	13,041	391,230
	50,637	4,691,230
<i>Bombay.</i>		
Gulcowar's Territories	24,249	1,794,426
States tributary to the Gulcowar	5,250	388,500
Cambay and Ballasinore	758	56,092
Surat	850	62,900
Ahmednuggur	1,700	125,800
Colapoor	3,445	800,000
Sawant Warree	800	120,000
Myhee Caunta	3,400	251,000
Rewa Caunta	5,329	394,346
Cutch	6,764	500,536
Sattara Jaghirdars	3,775	419,926
	56,320	4,613,225
FOREIGN POSSESSIONS.		
Pondicherry, Carical, &c. French	188	171,217
Goa, Damaun, and Diu, Portuguese	800	600,000
	988	671,217
SUMMARY.		
British Possessions	676,177	98,583,312
Native States	690,361	52,359,051
Foreign Possessions	988	671,217
Total	1,367,526	151,613,580

The above areas are in many instances only approximations; but by a careful estimation it has been found that the total area of British India, including Sinde, the Panjab, the Jullindar Doab, and Tenasserim, is 800,758 square miles, and that of the Native States is 508,442 square miles, making a grand total of 1,309,200 square miles. This superficial extent is included in a bounding-line 11,260 miles in length. This estimation has been made by the officers employed in the great trigonometrical survey of Hindustan, and probably does not include some of the native states which are given in the preceding list, while others of them are transferred to British India. Since the estimate was made, the province of Pegu in Birma has been annexed to the East India Company's territories. This was done in November 1852. The trigonometrical survey of Hindustan was commenced soon after the capture of Seringapatam, and of it, in 1848, the total area completed was 477,044 square miles, at a cost of about 312,389*l*.

Several important public works have been lately completed, or are

now in process of execution in British India. The Ganges Canal (898 miles in length), referred to in the article *BENGAL* (vol. i., col. 1008) is now completed, under the able superintendence of Major Cantley. It was formally opened at Roorkee on April 8th, 1854. At Calcutta about 44 miles of railway have been completed. The electric telegraph has been laid down over about 3000 miles, reaching as far north as the city of Agra, and instantaneous communication of intelligence has thus been secured between Calcutta, Agra, Bombay, and other important cities. According to a statement presented by the East India Company in 1851, the total amount of expenditure on public works in India during 10 years previous to 1849, was 3,460,930*l*.

History, Government, &c.—Commerce between India and the western nations of Asia appears to have been carried on from the earliest historical times. The Arabs brought the produce of India from the modern Sinde and the Malabar coast to Hadramaut, in the south-western part of Arabia, or to Gerra on the Persian Gulf, from which places it was carried by means of caravans to Petra, where it was purchased by the Phœnician merchants. Indian articles were also brought from the Persian Gulf up the Euphrates as far as Thapsacus, and thence carried across the Syrian desert into Phœnicia; whence Europe was supplied.

The knowledge which the Greeks possessed concerning India, previous to the time of Alexander the Great, was derived from the Persians; and such was the origin of the information contained in the third book of Herodotus (98-105). The expedition of Alexander first gave the Greeks a correct idea of the western parts of India. He did not advance farther east than the Hyphasis (the Gharra of the Panjab), but he followed the course of the Indus to the ocean, and afterwards sent Nearchus to explore the coast of the Indian Ocean as far as the Persian Gulf. After the death of Alexander, Seleucus, in his war with the Præsi, advanced as far as the Ganges. The Greek kingdom of Bactria, founded by Theodotus, a lieutenant of the Syrian monarchs, and which lasted from B.C. 255 to B.C. 126, comprised a considerable part of northern India. After the foundation of Alexandria in Egypt, the Indian trade was almost exclusively carried on by its merchants. The Romans never extended their conquests as far as India.

Hardly anything is known of the history of Hindustan from the time of Alexander to the Mohammedan conquest.

The Tatars (called Scythians by the Greeks), overthrew the kingdom of Bactria in B.C. 126, and remained in possession of the greater part of the north-western provinces of Hindustan till they were driven beyond the Indus in B.C. 56 by Vicramaditya I. The earliest invasion of Hindustan by the Mohammedans was probably made in the latter part of the 10th century. A succession of invasions and conquests followed, and in 1093 Delhi was taken, and made the seat of the Mohammedan government in India. In 1290 the dominion passed into the hands of the Afghans, but the Afghan dynasty was put an end to in 1526 by Baber, a descendant of Timur, who took Delhi, and established the Tatar dynasty, or as it is commonly called, the Mogul empire. That empire no longer exists, and its power has passed to the British.

The Portuguese were the first nation of Europe that obtained any dominion in Hindustan. Vasco de Gama landed with three ships at Calicut on the Malabar coast, on the 20th of May, 1498. The Portuguese rapidly acquired extensive power in the country. By the possession of Malacca, which fell into their hands 24 years after the voyage of Gama, they commanded the trade of the Indian Archipelago; and by their numerous settlements along the Malabar coast, especially at Goa and Diu, they monopolised the commerce with Europe. In the beginning of the 17th century, the English, Dutch, and French began to make settlements along the coast; and the Portuguese lost their dominions almost as rapidly as they had acquired them. They still possess Goa, Damaun, and Diu.

The Dutch never acquired much political power in Hindustan; though at one time they carried on the greater part of the Indian trade. The French on the contrary obtained extensive possessions in the Deccan. Their principal settlement was at Pondicherry, of which they acquired possession in the latter part of the 17th century, and which soon became one of the most splendid European establishments in the country. But their power in the Deccan was principally owing to the prudent and vigorous government of Duplex in 1749. Under his administration the Northern Circars were occupied by the French, and the English power was almost destroyed. Duplex was succeeded by Count de Lally, who was sent from France with a large fleet in 1756; but this expedition entirely failed; and Pondicherry was taken by the English in 1761. At present the French possessions consist only of Pondicherry, which was restored, Carical, Yanason, Mahé, and Chandernagore.

The commencement and early progress of British authority in Hindustan have already been described. [*BENGAL; BOMBAY.*]

The East India Company was first formed in London in 1599, when its capital, amounting to 30,000*l*, was divided into 101 shares. In 1600 the association obtained a charter from the crown, under which they were to possess certain privileges, and were formed into a corporation for 15 years with the title of "The Governor and Company of Merchants of London trading to the East Indies." The first

commercial adventures of the Company were small, but a profit of from 100 to 200 per cent. was realised upon the capital employed, and in 1609 the charter of the Company was renewed for an indefinite period, subject to dissolution on the part of the government, upon giving three years notice to that effect. The first factory of the Company was at Bantam, in Java, established in 1602. In 1611 the Company obtained permission from the Mogul to establish factories at Surat, Ahmedabad, Cambaya, and Goga. In 1639 permission was obtained to erect a fortress at Madras, in 1652 the first footing was obtained in Bengal, and in 1668 the Island of Bombay was ceded to the Company by Charles II., into whose hands it had come as part of his marriage-portion with the Princess Catharine of Portugal.

The functions of government were first exercised by the Company in 1624, when authority was given to it by the king to punish its servants abroad either by civil or by martial law, and this authority extended even to the power of taking life. The capital of the Company was successively augmented, till in 1794 it amounted to 6,000,000*l.* By an Act, 6 Anne, c. 17, the Company received the exclusive privilege, as regarded English subjects, of trading to all places east of the Cape of Good Hope, as far as the Straits of Magalhaens; and this privilege was confirmed by successive acts of Parliament till 1814, when the Company's charter was renewed for 20 years. Retaining only its monopoly in the importation of tea into this country, the Company resigned its exclusive privilege of trading to the East Indies, and allowed the unrestricted intercourse of British merchants with the whole of its Indian possessions. Under these circumstances the Company found it impossible to enter into competition with private traders, whose business was conducted with greater vigilance and economy than was possible on the part of a great company; its exports of merchandise to India fell off during the 10 years from 600,000*l.* in 1814-15 to 275,000*l.* in 1823-24, and to 73,000*l.* in the following year, after which all such exportation of merchandise to India on the part of the Company may be said to have ceased. The shipments to China were still continued, and large quantities of stores were also sent to India for the supply of the army and other public establishments.

The impossibility of the Company's entering into competition with private merchants had a powerful influence with Parliament when it was called upon to legislate upon the affairs of India, and in the charter of 1833 not only was the monopoly of the China trade and tea-trade abolished, but the Company was restricted from carrying on any commercial operations whatever upon its own account, and was confined entirely to the territorial and political management of the vast empire which it has brought beneath its sway.

The succession of wars, conquests, and treaties by which the territorial possessions and political power of the East India Company have been acquired, are matters of history. It may suffice to state, that in addition to the Non-Regulation Provinces attached to the presidency of Bombay, the Eastern Straits Settlements, as they are called, were also placed under the control of that government, namely, Penang, Province Wellesley, Singapore, and Malacca; but, by an order of the Court of Directors, Prince of Wales Island, Singapore, and Malacca, from Sept. 1st, 1851, were formed into a separate government, independent of Bombay.

The charter of 1833 (3 and 4 Wm. IV., c. 85) expired in April, 1854, and by the terms of the Act 16 and 17 Vict., cap 95, some alterations were made in the constitution of the Board of Directors, and its relation to the general government of the empire, by which the affairs of the East India Company are brought more directly under the control of the Government and of the British Parliament.

The home government of the East India Company consists of the Court of Proprietors, the Court of Directors, and the Board of Control. The Court of Proprietors elect out of the general body of proprietors twelve members of the Board of Directors (six others being appointed by the crown), declare the amount of dividend, and make bye-laws. The Board of Directors appoint the governor-general of India and the governors of each presidency; but as these appointments are all subject to the approval of the crown, they may be said to rest virtually with the government. The directors have the uncontrolled power of recalling any of these governors; and in 1844 they exercised this power by recalling Lord Ellenborough, the governor-general. All subordinate appointments are made by the directors, but, as a matter of courtesy, a certain portion of this patronage is placed at the disposal of the President of the Board of Control. The Board of Control was established in August, 1784, by the act of Parliament known as Mr. Pitt's India Bill. This board has the general superintendence of the territorial and political concerns of the Company, and the president has been correctly described as "a secretary of state for the affairs of India, governing by means of the Court of Directors as its instrument in all matters of a political nature."

The army of the British government in India, including her Majesty's troops and the Company's European and native troops of all arms, consists of 289,529 men, namely:—Queen's troops, Europeans, 29,480; Company's troops, Europeans, 19,923; natives, 240,121. The contingent troops of the native states commanded by British officers, and available under treaties to the British government, amount to about 32,000 men.

The total net revenues of India, for the year ending April 30th, 1853,

are estimated by Sir C. Wood, President of the Board of Control, at 26,915,431*l.*; the total charges for the same year at 26,275,966*l.* The total amount of the public debts, bearing interest, April 30th, 1852, was 48,014,244*l.*, on which the annual amount of interest was 2,279,531*l.*

Languages and Religion.—The languages spoken in India may be divided into two great classes, the one consisting of those languages which are derived from the Sanscrit, and which are spoken in the northern and central provinces—these include the Hindee, Bengalee, Punjabee, Mahratta, Guzerattee, Cutohee, Boondela, Brig Bhakhur, Ooriya, and Asamee: the other comprising those languages which are not so closely dependent upon the Sanscrit, and which are spoken in the southern parts of the peninsula—these are the Telooquo, Tamul, Canaree, Malayala, and Cingalee. The common language of Mohammedans throughout India is Oordoo or Hindostanee. This is a compound of Hindee, the primitive language of the Hindoos, with Arabic and Persian, the languages spoken by their Mohammedan conquerors. The Legislative Acts of the Governor-General in Council are translated for the benefit of the community into Persian, Bengalee, and Oordoo or Hindostanee. The Hindoos from the earliest times have been divided into four castes, or races—the Brahmans, Kshatriyas, Vaisyas, and Sudras. The Brahmans occupy the first rank in Hindoo society, and their proper duties are to teach the Vedas or sacred books, to perform sacrifices to the gods, and to meditate upon divine and holy objects. The Kshatriya, or military class, is said by the Brahmans to be extinct, but the Rajpoots claim to belong to this class. The Vaisyas are agriculturists, herdsmen, and hunters. The Sudras are the handicraftsmen and artisans, and form the lowest and most degraded class of Hindoo society. The sects into which the Hindoos are divided at the present day are numerous; but they are all of modern origin, and most of them differ very much from the ancient religion of the people of Hindustan.

Education and Christianity.—The amount laid out by government for the purposes of education is above 100,000*l.* a year. Some particulars under this head will be found in the article BENGAL.

In 1852 there were in India 128 clergymen of the Church of England, including three bishops; there were also 6 army chaplains, who were clergymen of the Church of Scotland; and in January 1853, there were, as far as could be ascertained, 42 Roman Catholic priests officiating throughout India. There are 12 Missionary Societies at present carrying on operations in India: their names, given according to the order in which their operations were commenced in India, are as follows:—Society for the Propagation of the Gospel, 1727; the Baptist Missionary Society, 1793; London Missionary Society, 1805; American Board of Commissioners, 1812; Wesleyan Missionary Society, 1814; Church Missionary Society, 1815; General Baptist Mission, 1822; Free Church of Scotland, 1830; Established Church of Scotland, 1830; Basel Missionary Society, 1830; American Presbyterian Mission, 1834; American Baptist Mission, 1840. According to a statement laid before a Committee of the House of Commons in July 1853, it appears that the state of the Protestant Missions in India presents the following figures:—The number of stations is 258; of preachers 983, of whom 383 are missionaries, and 600 are native catechists: there are 250 native churches, with 15,129 members, and a native Christian population of 94,145; the number of vernacular schools is 1120, attended by 38,102 boys; of English schools for boys there are 92, with 13,189 scholars; of boarding-schools 86, with 2167 boys; of day schools for girls 262, with 8772 scholars; and boarding-schools for girls 97, with 2576 boarders. The number of English chapels in connexion with the Missions was 62.

HINGHAM. [NORFOLK.]

HINOJOSA. [CORDOVA, Spanish.]

HINTON WALDRIDGE. [BERKSHIRE.]

HINZUAN. [ANZUAN.]

HIÖRRING. [AALBORG.]

HIPPERHOLME. [YORKSHIRE.]

HIPPO. [BONA.]

HIPPOLITE DU FORT, ST. [GARD.]

HISPANIA. [SPAIN.]

HISPANIOLA, HISPANO'LA, ESPAÑO'LA (that is, Little Spain), known also under the names of SAN DOMINGO and HAITI, is one of the Great Antilles or larger islands of the West Indies. It extends from the Mona Passage, which separates it from Puerto Rico, to the Windward Passage, which lies between it and Jamaica and Cuba, between 68° 30' and 74° 30' W. long., 17° 40' and 20° N. lat. Its length is about 360 miles. Its area is about 29,500 square miles, or nearly the extent of Ireland; and four times as large as Jamaica. The population is said to be about 940,000, of whom 490,000 are blacks, 420,000 mulattoes or creoles, and 28,000 whites. The island is now divided between two states; the western portion forming the empire of Haiti, the eastern the republic of San Domingo.

Hispaniola was discovered by Columbus in his first voyage (January 1493), at which time it received this name. The Spaniards formed settlements first at Isabella and then at San Domingo. For nearly half a century these settlements received much attention, and rose to great prosperity, until different parts of the American continent were discovered and conquered. From that time Hispaniola was neglected, and as the natives had been nearly extirpated, the island soon became depopulated, and the northern and western districts were nearly a desert. The buccaners now settled on the island of Tortuga, opposite

Cape Français, and also on the coast. Perceiving that they would be driven away by the Spaniards, they voluntarily submitted to France, and Louis XIV. sent them a governor. In 1697 the Spaniards were obliged to give up the western districts, or about one-third of the island, to France. The French, who considered their portion of Hispaniola as the most valuable of all their foreign settlements, began to cultivate it with great care. In 1791 the agricultural produce of the French portion only was valued at more than 8,000,000*l.* sterling. In 1794 the negro slaves were declared free by the National Convention, a declaration which was followed by a general insurrection of the negroes and mulattoes, who massacred a large number of the white inhabitants, and compelled the remainder to emigrate. One of their chiefs, Toussaint l'Ouverture, established in 1801 a kind of republic, but was obliged to submit to a French army sent out by Bonaparte in 1802. After he had been treacherously taken prisoner and sent to France, the negroes rallied under Dessalines, and expelled the French in 1803. Dessalines restored to the island the name of Haiti, a name by which it was called by the natives when discovered by Columbus. In 1804 Dessalines followed the example of Bonaparte and called himself emperor; in 1806 he was murdered. After his death the French portion of Hispaniola was divided into two states: the northern coast was formed into a negro republic under Christophe, who in 1811 also took the title of emperor; the plains about the Bay of Gonaves became a mulatto republic under Petion. Continual war was carried on between these two republics. After the death of Petion (1813) he was succeeded as president of the republic by Boyer. Christophe having killed himself on the breaking out of an insurrection in 1820, Boyer united the whole under his authority. In the meantime the Spanish part of Hispaniola had been ceded to France in 1795, but was re-occupied by the Spaniards in 1808. The following year however it declared its independence of the Spanish government, and remained in an unsettled state until 1822, when it was subjected to the authority of Boyer, who thus united the whole island under his government. France recognised the independence of Haiti in 1825, the Haitian government undertaking to pay the sum of 150,000,000 francs (subsequently reduced to 90,000,000 francs) as an indemnity for the losses of the French colonists during the revolution. Boyer retained the presidency till 1844, when he was deposed. The following years were spent in a struggle for the supreme power, which was terminated by the election, in March 1847, of General Faustin Soulouque as president. Although nominally republican, the government of Haiti was really despotic, absolute power having been usurped by the president; and even the name of a republic was at length put an end to by Soulouque declaring himself, August 1849, Emperor of Haiti. He was crowned as Faustin I. in April 1850.

Meanwhile, however, the eastern or Spanish part of the island had been formed into a separate state. Taking advantage of the weakness of the Haitian government, the inhabitants of Spanish Hispaniola, in February 1844, declared themselves independent under the title of the Dominican Republic. Their leader, General Santana, was elected the first president; and he was succeeded in 1849 by the present head of the republic, Baez. The independence of the Dominican republic was acknowledged by Great Britain in 1850, and subsequently by other powers. The Emperor of Haiti however still refuses to recognise the republic, or to withdraw his claim to the sovereignty of the whole island; although, after many failures, he appears to have abandoned all attempts to reconquer the republican territory.

Surface, &c.—Hispaniola is considered to be the most fertile island in the West Indies. Its outline is greatly broken by several promontories and peninsulas and other projecting points of land. Its surface exhibits a great variety on rather a large scale. Near the centre of the island, but somewhat nearer the northern than the southern shores, is a mountain-knot, called Cibao, the elevation of the highest summits of which are supposed to be not less than 7000 feet. From this point a range runs southward, and terminates on the southern coast in a broad and rugged promontory opposite the rocky island of Alta Vela. Three ranges, rising from 2000 to 5000 feet, branch off from the western side of these mountains towards the west. The two northern are immediately connected with the mountains of Cibao. The most northern gradually approaches the northern coast, which it skirts at a short distance from Cap Haïtien, and then continues near the shores to Cap St. Nicolas. The middle chain proceeds in a westerly direction until it nearly attains the Bay of Gonaïve, when it runs along the shore to its termination at Cap San Marc, south of the Bay of San Marc. The most southern chain is an offset of the mountain-mass of Mount Bahoruco, which occupies the centre of the peninsula opposite the island of Alta Vela. It runs along the southern shore at a short distance from it, through the whole length of the south-western peninsula, as far as Capes Tiburon and Dame Marie. These ranges perhaps occupy more than half the surface of the island, but contain between them two extensive valleys, or rather plains. The northern plain is called, after the river which flows through it, the Plain of Artibonite. In its eastern part are extensive savannahs, or natural meadows; but towards the west is a fruitful soil. The southern plain is called Cul de Sac. At its eastern extremity is the lake called Laguna de Henriquillo, which is 50 miles in circuit. The water is salt, and has no outlet. The surrounding country is exceedingly picturesque. West of it, at no great distance, is a smaller lake

of fresh water, called Saumacha. The country round these lakes is not cultivated, and abounds in game. The western district of this plain, which reaches to Port au Prince, is exceedingly fertile. Besides these two great plains several level tracts occur between the mountains and the shores, which are very fertile, but not of great extent.

East and south-east of the Cibao Mountains there is a very rugged and almost uninhabited mountainous tract, which seems to be connected with the range which runs along the northern shores from the bay of Monte Christi, on the west, to Vieux Cap Français, on the east, and descends to the coast with a steep declivity. Between this range and the Cibao Mountains is a wide and very fertile valley watered by the river Yague, and known as the Plain of San Iago. The remainder of the eastern part of the island is occupied by two large plains, lying east and west, with a range of low mountains between them, which issues from the uninhabited mountain tract, and terminates at the most eastern promontory of the island, Cap Engaño. On the north of this range is a plain, La Vega, 50 miles long and 25 miles wide, noted for its great fertility, though it has never been well cultivated. The rivers Cotuy and Yuna, which drain it, fall after their union into the Bay of Samana under the latter name. The southern plain, called Los Llanos, extends from the town of San Domingo to that of Higüey, about 80 miles in length, with a width of 30 miles; but it is only a savannah adapted for pasture-ground, the rank grass of which being burnt in the dry season, whilst the cattle take to the forests or the mountains, serves as a manure to the new grass, which springs up in the rainy season.

The coast, which is about 1200 miles in length, has a great number of harbours, which admit vessels of moderate size: some of them are spacious, deep, and safe. Near Cape St. Nicolas, at the north-western extremity of the island, is the port of St. Nicolas, which is 6 miles long, and capable of holding an immense fleet. Ships of the largest size may safely ride at anchor, sheltered from all winds, the harbour being surrounded on every side by mountains of considerable elevation. The harbour of Cap Haïtien, or Français, on the northern coast, is spacious, and though not so well sheltered, offers good anchorage. At the eastern extremity of the island is the Bay of Samana, which is very capacious, and offers excellent anchorage for the largest fleets, within the reef which blocks a large part of its mouth. The peninsula of Samana, which lies to the north of it, is about 32 miles long, and has an area of 225 square miles. The isthmus which connects the peninsula with the island is low and swampy, but the centre of the peninsula is traversed by a chain of mountains of which the Sugar-Loaf Mountain, near Cape Cabron, 1236 feet, is the highest. The harbour of the town of San Domingo is a very indifferent one, being too much exposed to the southern winds; but the ground is good for holding. In the Bay of Gonaïve are the ports of Port au Prince and Gonaïve. Port au Prince has two harbours, formed by some islets, which offer good and safe anchorage. The port of Gonaïve is rather large, and excellent in point of security, being formed by a little island, which leaves a narrow channel, but with sufficient depth of water. The island of Gonaïve in this bay has an area of above 200 square miles.

The geology of the island is but imperfectly known. Mountain limestone appears to be the prevalent formation. Schistose rocks occur in many places, having in Samana veins of calcareous spar. Quartz rocks occur frequently. Mica-slates are met with in the eastern part of the peninsula of Samana; but calcareous rocks are the prevalent formation. The most remarkable geological feature of this peninsula however appears to be the insulated conical limestone hillocks described by Sir R. H. Schomburgk ('Geog. Journal' vol. xxiii, p. 276.) as occurring in the vicinity of the Bay of San Lorenzo. These hillocks, of which there is a large number, are from 80 to 150 feet high, generally denuded of vegetation to a height of from 10 to 20 feet, and thence partially and sparingly overgrown with plants to the top. The action of the sea has undermined many of them, forming caverns in some instances 150 feet in extent, and 60 or 70 feet high, in which are numerous stalactites and stalagmites, some above 20 feet high. These caverns were formerly resorted to as places of assembly, for the performance of religious rites and for shelter from foes, by the aborigines, who appear to have regarded them with great veneration, and to have attached many singular legends to them. Gold in small quantities, copper, and platinum are said to have been found in the island. Iron ore occurs in many places, and in Samana are extensive veins of bituminous coal.

Climate, Productions, &c.—The climate of Hispaniola differs considerably from that of the other Antilles, the rainy season occurring in different parts of the year on the southern and northern coasts. On the southern it agrees with the rainy season of Jamaica, beginning with gentle showers from the south at the end of April. These showers continue for three weeks or a month, and are followed by dry weather, which lasts six weeks or two months. In July begin the abundant rains, which continue from August to November. The winter is rather cool, the thermometer rarely exceeding 70° and still more rarely descending below 60°. The northern coast has only showers between August and October; in November the rains cease for a short time, but in December and January they descend in torrents: afterwards they are moderate, and cease entirely in April. The heat of the summer is moderated by the prevailing northerly

winds. Hurricanes are as frequent on the southern coast as in Jamaica, but they occur rarely on the northern shores. Along the low lands and plains the yellow fever is very prevalent.

Fifty years ago Hispaniola was noted for its extensive plantations of sugar, coffee, cotton, indigo, and cacao, but they have now almost entirely disappeared, except those of coffee, which are much reduced. The present population having few wants, which the extreme fertility of the soil enables them with little labour or forethought to supply, and valuing their ease more than anything else, employ but a few hours daily, or even weekly, in productive labour. In Haiti a 'code rural,' promulgated by Boyer in 1826, provides for an enforced culture of the soil, but it does not apply to the proprietors of small portions of land, who are extremely numerous. Where pursued at all agriculture is carried on in a wretched manner. Coffee is the chief article of cultivation; the other articles of most importance raised are maize, millet, cassava, plantains, sweet potatoes, &c. Cotton is grown only to a small extent. Besides coconuts, mangoes, yams, and pine-apples, their gardens produce the fruits of the south of Europe, as figs, oranges, pomegranates, and almonds. The principal commercial wealth of the island is derived from the forests which cover the greater part of the mountains. The timber consists chiefly of mahogany-trees, which grow to a large size, and are still very numerous, espinellos, cedars, caps, lignumvite, fustic, palmettos, especially in eastern Hispaniola, and various other trees used for cabinet-work, ship-building, &c., with logwood and different kinds of dye-woods, which are exported to the United States, England and other parts of Europe. The total exports of the island do not however at the present time reach one-fifth of the exports of French Hispaniola alone under the French occupancy in 1790. The imports from Great Britain in 1852 amounted to 251,409*l*. Numerous herds of cattle pasture on the plains of San Domingo, and their hides and jerked beef likewise make an article of export. The horses are small, but the asses and mules are large and strong. Game abounds in the forests. Fish are plentiful along the coast and in the rivers.

The aborigines are now extinct, though it is stated that in 1717 there still existed about 100 individuals. But a considerable part of the present population consists of their descendants, mixed with the blood of Europeans and negroes. The relative numbers of the races have been already given. As far as can be judged the population is nearly stationary.

As already mentioned, the island has been, since February 1844, divided between the governments of Haiti and San Domingo.

The *Empire of Haiti* occupies the western, or what was formerly the French, part of Hispaniola. The area of Haiti is about 12,000 square miles; the population is about 740,000. The dominant race are negroes. The emperor, and most of the ministers and officers of state are negroes. All natives of Africa, Indians, and their descendants, termed alike by the constitution 'blacks,' may, after a year's residence, become citizens of Haiti; but whites are not admitted to citizenship, nor can they become proprietors of land. The emperor is to all purposes absolute: he maintains a court, with all its officers and paraphernalia, which purposes to be modelled on that of France. The revenue is obtained chiefly from customs and port dues, territorial imposts, sale of lands, &c. In 1850 the customs receipts amounted to 170,000*l*; the expenditure in the same year amounted to 216,856*l*. The established religion is the Roman Catholic; but other forms of worship are not prohibited. At the head of the church is the Bishop of Arcadopolis. Very little attention is given to education. A standing army is maintained.

The foreign commerce of Haiti is wholly in the hands of foreign merchants, who are however only permitted to reside in certain ports, and whose business is hampered by many irksome and mischievous restrictions. The coasting trade is carried on by Haitian citizens. The foreign commerce does not now exceed the annual value of 1,000,000*l*. The exports are chiefly mahogany and other timber, dye-woods, coffee, tobacco, and cotton. The imports are British cotton and woollen goods, cordage, hardware, cutlery, fire-arms, earthenware, glass, gunpowder, &c. From France are imported brandy, wines and liqueurs, silks and fancy goods; from the United States, provisions, lumber, and hides; from Germany and Holland, wines, and various of the commoner kinds of woollens and linens and other manufactured goods.

Cap Haitian, formerly Cap François, has been made by Faustin I. the capital and seat of government of the Haitian empire. It is situated on the northern coast, about 19° 45' N. lat., 72° 8' W. long., and contains about 13,000 inhabitants. The town is conveniently situated for commercial purposes, and carries on some trade with England and the United States. There are no public buildings of any consequence, and the private houses are mostly mean.

Port au Prince, population about 30,000, the former capital, is situated in about 18° 30' N. lat., 72° 10' W. long., between the large plain of Cul de Sac and a more narrow one extending along the southern shores of the Bay of Gonaïve. Both these plains are very fertile, but badly cultivated. The streets of the town are straight, and sufficiently wide and commodious; but the houses are low and mean, with the exception of a few built by the French, which outlived the revolution and the fire. Port au Prince has a considerable commerce with the United States and with Jamaica. On the

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same Bay of Gonaïve are Leogane and Gonaïve, two small but thriving places. Cayes, on the southern coast, 18° 11' N. lat., 73° 50' W. long., is one of the busiest towns in Haiti, having a considerable smuggling trade with Cuba, Jamaica, and other places. Vessels of large size can lie securely in its harbour; and the agents of several British houses have establishments in the town.

The *Republic of San Domingo* occupies the eastern or Spanish portion of Hispaniola. Its area is about 17,000 square miles; the population is about 200,000, a large portion of whom are mulattoes. At the head of the republic is a president elected periodically; but the institutions of the country are in a very unsettled condition. The republic is now recognised as an independent state by Great Britain, France, and other European powers, but not by the neighbouring empire of Haiti. Of the revenue and expenditure of the republic we have no recent and reliable particulars. The established church is the Roman Catholic; at its head is the Archbishop of Santo Domingo. Other forms of worship are permitted.

The commerce is chiefly centred in San Domingo city, but a good deal is carried on in the little town of Samaná, on the peninsula of the same name. The exports are for the most part the same as those of Haiti—mahogany and other cabinet woods; dye-woods; coffee, which grows well and of fine quality, though its culture is greatly neglected; cotton, &c.; with vegetables, cattle, and poultry to the neighbouring islands. The imports are cotton and woollen goods, hardware, cutlery, and the other ordinary useful and fancy manufactured wares, with brandy and wines. But both exports and imports are very small compared with what they might be if the remarkable capabilities of the soil and the important geographical position of the country were made fairly available.

The capital of the republic is the city of San Domingo, which is situated at the mouth of the Ozama, on the southern coast, in 18° 28' N. lat., 69° 59' W. long., and is the oldest European establishment in America, having been built by Columbus in 1504; the town of Isabella, which was erected on the northern coast in 1493, was abandoned. The population of San Domingo is about 13,000. The city is defended by ramparts, bastions, and outworks. The streets are regularly laid out, wide, but ill paved, and lined with houses in the old Spanish style. The city contains a cathedral above three centuries old, several churches, convents, and hospitals, the palaces of the president and archbishop, extensive barracks, arsenals, &c., but has a listless and decayed appearance. The harbour of San Domingo is capacious, but owing to a bar at its mouth vessels of much burden are obliged to anchor in the open roadstead. The trade of San Domingo is now very limited. [See SUPPLEMENT.]

HISTONIUM. [ABRUZZO.]

HITCHIN, Hertfordshire, a market-town and the seat of a Poor-Law Union, in the parish of Hitchin, is situated near the small river Hix, in 51° 57' N. lat., 0° 17' W. long.; distant 17 miles N.W. from Hertford, 34 miles N. by W. from London by road, and 81½ miles by the Great Northern railway. The population of the town in 1851 was 5258. For sanitary purposes the town is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry of St. Albans and diocese of Rochester. Hitchin Poor-Law Union contains 28 parishes, with an area of 61,170 acres, and a population in 1851 of 24,782.

The town consists of several streets, which are lighted with gas. Much straw plat is made; there are some breweries, and also a silk-mill; malting is extensively carried on. The town-hall is a new building. The parish church is a handsome edifice, supposed to have been built about four centuries ago. The south porch is a remarkably fine specimen of the perpendicular style. There are places of worship in the town for Independents, Wesleyan Methodists, and Quakers. The Free Grammar school, founded in 1640, has an income from endowment of 128*l* a year, and had 82 scholars in 1851. A girls school provides clothing and education for 36 girls. Hitchin possesses an infirmary, a mechanics institute, and a savings bank. A county court is held in the town. The market is on Tuesday, and there are fairs at Easter and Whitsuntide.

HOANG-HAI ('The Yellow Sea') is a large mediterranean sea, which runs into the eastern coast of Asia, being inclosed on the west and north by China proper, and on the east by the peninsula of Corea; on the south it is open and united to the Pacific Ocean. It lies nearly within the same parallels as the Mediterranean, which divides Europe from Africa, namely, 34° and 41° N. lat., and extends from 117° 40' to 127° E. long.

The northern portion extends in length from west to east somewhat more than 400 miles from the shores of the Gulf of Petchili, near the mouth of the river Pei-ho, to the coast of Corea, at the back of Hall's Group; and it comprehends two basins, being divided nearly in the middle by a peninsula, which projects towards the south-east, and forms a part of the province of Liao-tong. The strait, which lies between the most southern point of this peninsula and the northern shores of the province of Chan-tung, is about 60 miles wide, and it contains numerous small rocky islands. Between these islands are passages which lead to the most western basin, which consists of two gulfs, that of Petchili and that of Liao-tong.

The Gulf of Petchili washes the northern shore of Chan-tung and the eastern shore of the province of Petchili. These shores are low.

and cannot be seen from the deck of a vessel at a greater distance than about 9 miles. The uniformity of the soundings along these shores is unusual. At the distance of 10 miles from the beach they vary only between $4\frac{1}{2}$ and 6 fathoms, and at 12 miles between 6 and 8 fathoms. Large vessels cannot approach the shores, and must remain at anchor from 4 to 6 miles off. This part of the Hoang-hai is only navigated by flat-bottomed vessels, which find shelter in the embouchures of some small rivers. Where the gulf approaches the above-mentioned strait between Liao-tong and Chan-tung the shores rise higher, and are well defined. Here a range of mountains stretches from south-west to north-east at the distance of 10 or 12 miles from the sea, and between them and the shore is a lower belt of elevated ground in a state of high cultivation, covered with many towns and villages, and interspersed with scattered trees and several extensive woods. Along this coast the soundings are somewhat deeper than on the other, but not so deep as might be expected from the bold outline of the land; and there appear to be some harbours for larger vessels.

The northern portion of the western basin, or the Gulf of Liao-tong, is imperfectly known. The shores are rocky and high, but the soundings are rather regular and of moderate depth. Some good harbours for large vessels are known to exist. The mountains which inclose this gulf are in their upper part barren and nearly destitute of trees, but between them and the shores there are many fertile and well-cultivated tracts.

The water in this western part of the Hoang-hai is of a dirty yellow or green, which colour seems to be derived from that of the mud which constitutes its bottom. There are a few small islands in this part of the sea, but the group of three islands, called the Mostao, or Mistau, Islands, which lie partly in the strait between the western and eastern basin, are of moderate extent, and well cultivated and populous.

The eastern basin of the northern portion is very little known. In the most southern part of it, that which washes the north-eastern shores of the peninsula of Chan-tung, the navigation is safe, and there are only a few rocky islands. The soundings are regular and moderate, and there are some tolerable harbours for small vessels. The northern part is represented on the Chinese maps as containing several extensive groups of islands, especially along the shores of the peninsula of Liao-tong.

The most southern part of the Yellow Sea, or that which lies south of a line drawn from the most north-eastern cape of the peninsula of Chan-tung to the coast of Corea, at the back of Hall's Group, is at its southern extremity between the mouth of the river Hoang-ho and the south-west cape of Corea nearly 400 miles wide, but grows narrower as it proceeds north, being near its northern boundary hardly 200 miles across. The shores of this part of the Hoang-hai are high and rocky, with the exception of a tract of about 60 miles contiguous to the mouth of the Hoang-ho on the north, where the country consists of alluvium. Farther north on the peninsula of Chan-tung several ranges of high ground advance to the coast, and in this part some harbours of considerable extent are said to exist. The navigation along this country is not dangerous, though farther south between the mouths of the Hoang-ho and Yang-tse-kiang the sea is full of shoals and sandbanks. On the opposite side, along the coasts of Corea, the sea to the distance of 50 or 60 miles from the continent is literally dotted with islands and rocks, which are generally small. Though the number of islands renders the navigation dangerous, and requires great caution on the part of seamen, they contain numerous excellent harbours. The straits which separate the islands are generally from one mile to two or three or even four miles across, and are all close harbours, capable of containing in security all the navies of the world. They form in fact an almost endless chain of harbours communicating with each other. They appear to be all inhabited, and therefore must possess fresh water.

The Yellow Sea washes those parts of China proper which are most populous and best cultivated, and where the manufacturing industry is carried to the highest point. Accordingly the number of junks which are met with along its western coasts is very great; but along the coast of Corea these vessels are rarely met with.

(Staunton; M'Leod; Basil Hall.)

HOANG-HO ('Yellow River'), one of the largest rivers in the world, drains the northern provinces of China proper, a small portion of Mongolia, and the greatest part of Tangut. It rises in the high snow-covered mountains which fill up the greatest part of the southern districts of Tangut, at a distance of 1290 miles from its mouth in a straight line. But as there is perhaps no river on the globe which changes so frequently the direction of its course, and makes such large bends, its course is computed by Ritter to exceed 2380 miles. The countries drained by the Hoang-ho cover an area of 740,000 square miles.

The sources of the Hoang-ho have never been visited by any European, and are imperfectly known even in China. Where these true sources were situated was not exactly known until the emperor Kublai, of the Yuen or Mongol dynasty, towards the end of the 13th century, sent persons to explore the country surrounding them. According to the report made by these persons the sources of the Hoang-ho are found in a depression between the ranges of the Bayan

Khara or Pe-ling Mountains on the south, and the Kuen-luen range on the north. In this depression more than a hundred springs are stated to rise from a level swampy plain about 40 miles in circumference. The water brought up by these springs unites at a short distance from the plain in two lakes, called Ala-nor by the Mongols. This Ala-nor is therefore to be considered as the true source of the Hoang-ho.

The Ala-nor lies in $35^{\circ} 20'$ N. lat., and between 96° and 97° E. long. The river issuing from the lake on the east is called Tshi-ping-ho (the river with the red banks), and after having been joined by three tributaries it falls into the Alpine lake Oling-hai, from which it issues under the name of Hoang-ho. Its course being opposed by the immense rocky masses of the Kuen-luen, the river runs for more than 30 miles southward, when it resumes its eastern course and continues in that direction for about 160 miles. To avoid a high offset of the Bayan Khara range, which stands in its way, the Hoang-ho turns with a bold sweep to the west, as if it were returning to its sources, and flows in that direction about 120 miles, surrounding on three sides the eastern extremity of the Kuen-luen Mountains. But the wide-spread mountain-masses of the same system oppose its course farther to the west, and it turns by degrees to the north-east and east until it leaves the mountain region on arriving in Proper China at the town of Lant-tsheou, where it skirts the Great Wall, having run from its last great turning to this place about 520 miles. Its upper course lies entirely in Tangut, and extends to about 700 miles. On both of its banks the mountains rise with a steep and frequently precipitous acclivity beyond the snow-line, and the valley in which the river runs is very narrow, in many places so much so that there remains not a level wide enough for a road. No towns are found in this region, and the few inhabitants are savage tribes living on the produce of their herds, which consist mostly of sheep and yaks. They gather also the true rhubarb-root, which grows on the upper part of the mountains near the places covered with perpetual snow.

Below Lant-tsheou the Hoang-ho turns with a sharp bend northward, and flows in that direction with some deviation to the eastward through five degrees of latitude, crossing the Great Wall three times in the interval. Its course in this direction probably does not fall short of 430 miles. When the river has passed 41° N. lat. it meets the range of the In-shan Mountains, by which its course is turned to the east. After flowing near 41° N. lat. about 180 miles eastward, the mountains bordering on China proper on the north oppose its progress in that direction; and it turns to the south, crossing the Great Wall for the last time near $39^{\circ} 48'$ N. lat., $111^{\circ} 40'$ E. long., and runs through that mountain region a space of about 500 miles, until it enters the great plain of Northern China at the mouth of the river Hoey-ho. This middle course of the river amounts to about 1130 miles.

Where the Hoang-ho issues from the narrow valleys which its rapid current has scooped out in the snow-covered rocky masses of Tangut, and at the place where it begins to flow in a wider valley about 100 miles above Lant-tsheou, the fortress Tay-tshy-kuan is built. The valley which extends from this place to Lant-tsheou, and hence north and north-east to the mouth of the Thian-shui ($36^{\circ} 30'$ N. lat.), is compared by Father Martini, a native of Tyrol, with the valley of the Inn at Innsbruck. In this part of its course, especially above Lant-tsheou, the volume of its waters is greatly increased by several large affluents, among which the Huang-tshu, or Tai-tung-ho, originating in the Nanshan, flows to it from the north-west, and appears to have a course of more than 400 miles.

At the mouth of the Thian-shui the mountains on the east of the river disappear, and are replaced by a hilly region, in which tracts of fertile and cultivated land are intermixed with sandy hills. Proceeding farther north the extent of the fertile grounds decreases until, opposite the town of Ning-hia, it is replaced by the Steppe of the Ordos, a desert whose surface is mostly covered with sand-hills, but in the numerous depressions between them are extensive meadows and pasture-grounds, intermixed with tracts covered with thick bushes, the haunt of numerous wild animals. On the west of the river, in the vicinity of the town of Ning-hia, is a mountain range called Holang-shan, which rises to 3000 or 4000 feet above the surface of the river, and is stated not to exceed 3 or 4 miles in width. Its eastern declivity is overgrown with forests. The tract of country between the Holang-shan and the river is several miles in width and well cultivated, its soil though sandy being rendered fertile by numerous canals which are fed by the waters of the river. But this fertility decreases in proceeding northward, and disappears entirely when the river passes 40° N. lat. In these parts Ritter places the greatest elevation of the Gobi, or Great Desert; and the river at its most northern course runs in a valley greatly depressed below the surface of that extensive table-land, but it does not appear that it has a bottom along its bed, nor that any tract contiguous to it is cultivated. The edge of the Gobi being crowned by uninterrupted rocky masses which are known by the name of In-shan, the river is compelled to run eastward until it arrives at the numerous ranges which traverse Northern China east of the Hoang-ho, and are offsets of the Khing-khan Mountains of Mongolia. In a course of more than 500 miles from the mouth of the Thian-shui to the place where the Hoang-ho bends towards the south, not a single river above the size of a rivulet increases its

volume of water, and this fact more than any other indicates the extraordinary nature of the country which extends along this part of its course.

Where the Hoang-ho flows southward its course is very imperfectly known, as it has been seen by the Jesuits only at a few places, where they were obliged to pass it. Below the mouth of the river Targhuen (40° 30' N. lat.) its width amounts to about 800 feet, and farther down, at Paote-taheou, it is from 1200 to 1400 feet across, and so rapid that the imperial court required three days to pass, though great preparations had been previously made for that purpose. It is observed that at this part the current can only be stemmed by vessels when they have a strong wind in their favour, and that it cannot be used as a regular means of water-communication. Farther down, at Lung-men (Throat of Dragon), the bed of the river was originally narrowed by projecting high rocks, and also at some other places; but the rocks have been removed by art, and the bed of the river widened. This proves that the lowest part of its middle course is used as a navigable channel. In these parts, but the place is not more exactly indicated, are cataracts or rapids, which by the Jesuits are compared to those of the Nile. On both sides of the river high ranges lie in such a direction that they traverse the bed of the river obliquely. The number of rivers which fall into the Hoang-ho in the middle part of its course is very great, but most of them are of moderate size except the Fen-ho which joins it below Lung-men, and the Lu-ho, whose mouth is at no great distance above that of the Hoey-ho. These two rivers run about 250 miles. The country on both sides of the river is covered with a succession of mountain ranges and valleys. The mountains rise to a great elevation, but not above the snow-line, and contain many metallic ores and other minerals, among which coal is named. The valleys are generally very wide and well cultivated, producing every kind of grain which does not require a great degree of heat, for this region experiences severe cold in winter.

The lower course of the Hoang-ho begins at the sharp bend where at the confluence of the Hoey-ho it turns suddenly eastward in the direction of that river, and enters the great plain of Northern China. The general course of the river is to the east up to its mouth, a distance exceeding 650 miles. The Hoey-ho is the largest and most important of the affluents of the Hoang-ho. Its course probably does not fall short of 400 miles. It rises in the extensive mountain masses which lie between 34° and 36° N. lat., to the east of the first great northerly bend of the Hoang-ho. For about one-half of its course the Hoey-ho flows through a narrow valley between steep and high mountains. At Pao-ki it enters a large valley which widens considerably in proceeding farther east, but at the place where it joins the Hoang-ho it is shut in by two mountain ridges, forming the mountain pass of Thung-kuan, famous in the history of China. The lower valley of the Hoey-ho must be of great extent and of uncommon fertility, as the largest of its towns, Si-ngan-foo, more than once has been the capital of the empire; and even many centuries after the court had left it this place was compared by the Jesuits with Peking in size. From this town downwards the river certainly is navigable, but we do not know how far it is navigable above it. The great road leading from Peking to the southern provinces, especially to Su-tchuen and Yun-nan, lies through the lower part of the valley of the Hoey-ho.

After the Hoang-ho has left the Pass of Thung-kuan it enters the great plain of Northern China, but not immediately the low land, as for more than 150 miles its course lies through a hilly country. Along the river however is a low tract which grows wider in proceeding eastward; and its soil, which is formed of alluvium, is very fertile and well cultivated. The hills also have been subjected to cultivation by means of terraces. At its entrance into the low country, according to historical records, the Hoang-ho in former times divided into two branches, of which the northern ran to the north-east and north, and fell into the Gulf of Petchili. This arm seems to have been the principal branch, but at some later period it became unfit for navigation. On the northern side of the river, in this part of its course, morasses occur which are so extensive that they can only be traversed in several days. In these swampy grounds originates a river, called Wei-ho, which runs northward, and whose waters in the lower part of its course are used to feed the great canal. It is very probable that this Wei-ho (which is a feeder of the Pei-ho) runs in the ancient channel of the northern branch of the Hoang-ho.

At present the Hoang-ho runs in one channel eastward, and near the town of Kai-fong-foo it borders on a very low and flat country, exposed to occasional overflowings, which in China are more feared than war, plague, and famine. As the adjacent country is very low, it was at an early period considered necessary to protect it against the inundations by dykes built of granite of great strength. These dykes extend many miles along the southern bank of the river. This had the effect, which has also been experienced in the Po and the Rhine, of raising the bed of the river; so that even when the river is low its surface is considerably above the adjacent plain. This plain, whose soil is exclusively formed by alluvial detritus, is of extraordinary fertility, and covered with almost innumerable villages and towns. When therefore the river, being unusually swollen, breaks through the dykes, the loss of life and property is immense; and as the country subject to such inundations, according to the opinion of Barrow, is equal in area to the island of Great Britain, the truth of the assertion

made by the emperor Khien-long to Lord Macartney that the Hoang-ho gave him more trouble than all the other cares of government, may be understood in its full force. The towns in the province of Ho-nan, within range of the devastations of the river, are surrounded at a distance of about a quarter of a mile by strong ramparts of earth. In the reign of Khien-long a large canal was made for the purpose of preventing the too great accumulation of water in the Hoang-ho. This new canal begins at Y-fong-hien, in the province of Ho-nan, and extends in a south-eastern direction to an arm of Lake Hung-tseu-hu. It is nearly 100 miles long, and it is stated that it had the effect of lowering the general surface of the river by about 70 feet. Large tracts of land which formerly were always under water have been laid dry and rendered fit for cultivation.

About 70 miles above its mouth the Hoang-ho receives a great supply of water by the outlet of Lake Hung-tseu-hu. This lake receives not only the waters brought from the Hoang-ho by the New Canal, but also those of the river Hoai-ho. The numerous rivers which unite with the Hoai-ho drain the extensive country which extends between the Hoang-ho and Yang-tse-kiang, and most of them rise in the most eastern offset of the Pei-ling range, which is known by the name of Mu-ling: the whole course of this river exceeds 400 miles. The country drained by it is flat, but appears to be less fertile than other portions of the great plain. A short distance below the place where the outfall of Lake Hung-tseu-hu unites with the Hoang-ho are the two entrances of the Great Canal, which are lined with quays built of large square pieces of granite and marble, and are nearly a mile wide. In the upper course of the Hoang-ho the stream is said to be clear; but on its entrance into China proper its bed is hollowed out by its impetuous current in a yellow clayey soil, giving its waters a yellow tinge, which they retain till they have entered the sea. About 40 miles N.E. from the point where it is crossed by the Great Canal the Hoang-ho enters the Hoang-hai, or Yellow Sea, by a wide estuary.

(Du Halde, *Description de l'Empire de la Chine*; Staunton; Barrow; Ellis; Abel; Klaproth; Ritter, *Erkunde von Asien*.)

HOBART-TOWN. [VAN-DEKEM'S LAND.]

HOCHSTADT. [BLENHHEIM.]

HOCKLIFE. [BEDFORDSHIRE.]

HODDESDON. [HERTFORDSHIRE.]

HOEVORDEN. [DRENTHE.]

HOUGUE, LA. [MANCHE.]

HOENLOHE. [JAXT.]

HOENZOLLERN, until 1850 a sovereign principality in Germany, so called from a very ancient family of the same name, whose original seat was the ancient castle of Zollern, or Hohenzollern, which stands within two miles of Hechingen, on the road from Stuttgart to Schaffhausen. The family, which takes its origin from Count Thassilo, who died in 800, was divided towards the close of the 16th century into the two still existing branches of Hohenzollern-Sigmaringen and Hohenzollern-Hechingen. The territory is entirely inclosed between Württemberg and Baden; its surface is mountainous, and the soil is in general stony. Corn more than enough for the consumption is raised; flax is extensively cultivated; horned cattle and sheep are numerous; and the forests abound with fine timber. There are iron-mines in the northern part. The manufactures are unimportant. *Hohenzollern-Hechingen* (which takes its distinctive name from the chief town *Hechingen*, on the Starzel, a feeder of the Neckar, population 3400) occupies the more northern part, has an area of 116 square miles, and in 1850 had 20,471 inhabitants. *Hohenzollern-Sigmaringen* lies south of the former, occupies a surface of 334 square miles, and had in 1850 a population of 41,141. It is drained by the Danube and some of its small feeders. *Sigmaringen*, the chief town, is a small place on the Danube, with 1600 inhabitants. From the younger or Hechingen branch the royal family of Prussia is descended. The inhabitants are all Catholics.

By a treaty dated December 7, 1849, the reigning princes of Hohenzollern-Hechingen and Hohenzollern-Sigmaringen ceded all sovereign rights over their respective principalities to the king of Prussia, who pays to the prince of Hohenzollern-Hechingen an annual revenue of 10,000 thalers, and 5000 thalers a year to his legitimate heir, if any; and to the prince of Sigmaringen and his heirs 25,000 thalers a year. The princes still retain possession of all their estates; they have merely parted with the sovereignty. By a decree of the king of Prussia the title of Highness (Hoheit) is conferred upon the heads of the two families. By a family compact, dated February 8, 1850, and executed May 10, 1850, the prince of Hohenzollern-Hechingen made over all his hereditary possessions to Prince Antony of Hohenzollern-Sigmaringen.

The principalities were members of the Germanic Confederation, and in conjunction with several other small German states had one vote in the committee of the Federal Diet; but in the full assembly each of them had a separate vote. The relations of the principalities to the Confederation are now fulfilled by Prussia.

HOLBEACH, Lincolnshire, a market-town and the seat of a Poor-Law Union, is situated in 52° 48' N. lat., 0° 1' E. long., 37 miles S.E. by S. from Lincoln, and 105 miles N. from London. Holbeach Poor-Law Union contains 10 parishes, with an area of 76,782 acres, and a population in 1851 of 19,120. The parish is under the management

of a Local Board of Health. The living is a vicarage in the arch-deaconry and diocese of Lincoln.

The town of Holbeach consists of a long street, which forms part of the coach-road from Spalding to King's Lynn, and of a few shorter streets. The church is a large and very beautiful structure, chiefly of the decorated style, consisting of a nave, chancel, aisles, and square tower 85 feet high, which is surmounted by an octangular spire 100 feet high. There are chapels for Wesleyan and Primitive Methodists and Baptists. A market-house and court-house have been built within a few years. A county court and petty sessions are held in the town. The town has a public library and news-rooms, National schools, and a Free Grammar school, established in 1869, which has an income of about 300*l.* a year from endowment, and had 200 scholars in 1858.

The inhabitants of Holbeach are engaged chiefly in agriculture. The land in the neighbourhood is level and extremely fertile; besides large quantities of wheat and other common kinds of grain, canary, carraway, mustard, and coriander seeds are partially grown. Chicory is also grown and prepared for use. A market is held on Thursday; three fairs are held in the year.

HOLDERNESS. [YORKSHIRE.]

HOLLAND, the leading province of the kingdom of the Netherlands (which is sometimes also called Holland), is situated between 51° 45' and 53° 30' N. lat., 3° 45' and 5° 20' E. long., and is bounded N. and W. by the German Ocean, E. by the Zuyder-see and the provinces of Utrecht and Guelderland, and S. by those of Zeeland and Brabant. The surface is flat, and in many places below the level of the sea, against which it is protected by stupendous dykes built along the Zuyder-see and the banks of the rivers. The sea of Haarlem also, which has been lately drained [HAARLEM], was surrounded by dykes. To these dykes the country is indebted not merely for safety, but for existence. But the dykes are not the only defence against the encroachments of the sea: on the west coast is a triple row of sand-hills or downs, which form a barrier thrown up by the ocean itself. The country is traversed by canals in all directions. A railroad passing from Rotterdam through the Hague, Leyden, Haarlem, Amsterdam, Utrecht, and thence to Rotterdam, traverses a very important part of the province. From Rotterdam a line is in course of construction to Antwerp. Electro-telegraphic wires are laid down along both lines.

The soil of the province of Holland, like that of Gröningen, is marshy, and produces rich pastures, which support a remarkably fine breed of cattle, to the number of nearly a million, and large flocks of sheep: very little corn is grown, except in some parts of South Holland. Flax is cultivated more than hemp, and is of excellent quality. Gardens and orchards are carefully cultivated; some barley, oats, peas, beans, mustard, and other seeds are the chief crops in the northern part of the province; in the southern part more corn is produced. But pasturage prevails much more than arable cultivation, the produce of the dairy farms, butter, and cheese, constituting the chief wealth of the landholder. A remarkable feature of the country are the 'polders,' a name given to lands that are below the level of the sea or adjacent river, and, having once formed a lake or marsh, have been surrounded by dykes, and cleared of water by means of pumps worked by windmills or steam-engines. The lands thus reclaimed are very fertile, and some of them of great extent, as the Beemster polders, near Edam, in the northern part of the province, which are 15 miles in circumference, and the lands recovered from the sea of Haarlem. A large portion also of the Biesbosch, a marshy lake formed by the terrible inundation of 1421, has been recovered and converted into meadow land. The Biesbosch, so called from its being overgrown with rushes (Bies) lies south-east of Dort, on the confines of Holland and North Brabant, to which latter a portion of it belongs. The recovered lands have the appearance of islands rising out of the lake. At the time of the inundation 72 villages and 100,000 inhabitants were destroyed. The waters of the Maas after flowing between the islands of the Biesbosch form the channel called *Hollands-diep*. [MUSEUM.] The grain sown in the polders is sometimes destroyed by water, but rarely, for the mills are always at work, when there is any wind, lifting up the water to such a height as gives it a fall into the nearest river, canal, or sea. The effect produced on foreigners who visit the polders for the first time is one of surprise, not unmingled with alarm, at the apparent inversion of the natural order of things; luxuriant corn and rich grass crops growing, and fat cattle and sheep pasturing where water should lie; while the large sails of the canal barges flit past high above dykes, houses, and trees. Flowers are cultivated in the tract between Alkmaar and the Hague, but especially about Haarlem. [HAARLEM.] Hemp, flax, and madder are grown. Wood, both for construction and for fuel, is scarce. The manufactures, which are chiefly carried on in the towns, are important; they are linen, paper, woollen cloths (for which Leyden is famous), silk, leather, tobacco, sugar, &c. The gin distilleries of Schiedam are very extensive, and have been long celebrated. Large quantities of fine lime are made from the shells gathered on the coast of the North Sea. The fisheries on the coasts are important, and most industriously plied. The sleekness of the cows and horses, and the cleanliness of the dairies in Holland, are proverbial. The horses are all tender in the hoof, owing to the softness of the soil on which they are bred.

The province is divided into two governments: North Holland (Noord-Holland) and South Holland (Zuid-Holland).

North Holland extends north of the Haarlem-meer, and the mouth of the Old Rhine. It has an area of 955 square miles, and the population on the 31st December 1852 numbered 508,006. The Amstel and the Vecht flow through the south-east of the country, the Zaan through its centre. The Helder Canal, by which the largest merchant-vessels reach Amsterdam direct from the German Ocean without encountering the difficult navigation of the Zuyder-see, runs from Amsterdam to the Mars-diep, or strait that separates the Texel from the main land. It is 120 feet wide, 25 feet deep, and above 50 miles in length. North Holland is sometimes called West-Friesland. The chief towns are ALKMAAR; AMSTERDAM; HAARLEM. Among the other more important places we give the following:—

Amstelveen is a well-built town or rather village with 5600 inhabitants, situated between the Amstel and the Haarlem-meer, and 6 miles S. by W. from Amsterdam.

Broek, a village of 1500 inhabitants, composed chiefly of retired merchants and their families, is the much praised model of the precise neatness and punctilious cleanliness of the Dutch. The narrow lanes that intersect it are paved with bricks, strewed with sand or shell, and always clean. No horse or vehicle of any kind is allowed to pass along them. The houses are of wood, painted white and green, and roofed with glazed tiles of different colours. The front doors and windows are never opened except on great occasions, such as a funeral, a wedding, or a christening. The interiors of the houses correspond to the exterior in order, cleanliness, and tidiness; but have more the appearance of large baby-houses than the dwellings of men. The cow-houses here are curiosities in their way; they are washed out, walls and floors, several times a day; the cows' tails are fastened to hooks in the ceiling, lest they might by accident besmeer their sides with them. Broek is 6 miles N. by E. from Amsterdam; it is famous for its sweet-milk cheese.

Edam, a town of 4200 inhabitants, stands south-east of the Beemster polders, and near the Zuyder-see, in which it has a good harbour. The export trade in sweet-milk cheese from this port is important; the chief industrial products are salt and fish oil.

Enkhuizen, or *Enkhuysen*, situated on a peninsula in the Zuyder-see, 28 miles N. by E. from Amsterdam, is a well-built fortified town with about 5000 inhabitants. It was formerly the centre of the great deep-sea herring fishery; 400 large vessels used annually to sail from its harbour, which is now nearly choked up with sand. The town possesses 9 churches, an hospital, salt-refineries, and a cannon foundry; the town-house with its lofty tower is the most imposing structure. Its commerce is composed chiefly of butter, cheese, timber, and herrings; ship-building is carried on. This place has declined greatly from its former commercial and industrial activity. In 1853 only 11 vessels were engaged in the herring-fishery.

Helder, a small fortified town of 2800 inhabitants, stands on the Mars-diep, at the extremity of the spit of land in which North Holland terminates, opposite the Texel. A little east of Helder is the fine harbour of *Nieuwe-diep*, formed by piers and jetties, and admitting the largest merchantmen and men-of-war close to the quays, where they are sheltered from every wind; by this harbour the great Helder Canal enters the North Sea. The great *Helder Dyke*, which protects the extremity of North Holland from the fury of the storms to which it is exposed, is one of the most astonishing monuments of Dutch industry, perseverance, and skill. It is nearly 6 miles in length, and 40 feet broad on the summit, along which there is a good road; it presents to the sea a slant side of 200 feet, inclined at an angle of 40°, the whole constructed of granite blocks brought from Norway.

Hilversum, a small town 15 miles S.E. from Amsterdam, has 5000 inhabitants, who manufacture carpets and calicoes.

Hoorn, a city and sea-port, on the Zuyder-see, eastward of Alkmaar, with which it is connected by a canal, is well built, surrounded by old ramparts, and has about 9000 inhabitants. The great fleet of Admiral De Ruyter was built in Hoorn; but the importance of the place has vanished; the present trade consists chiefly in exports of butter, cheese, provisions, and fish. There is a naval college at Hoorn. The manufactures of woollen stuffs, carpets, &c.; the ship-building and the herring fishery, though still important, are insignificant compared to their former magnitude. Schouten, who first doubled Cape Horn or Horn, in 1616, and Tasman, the discoverer of Van-Diemen's Land and New Zealand, were natives of Hoorn.

Medemblik, north-west of Enkhuizen, on the Zuyder-see, had formerly an extensive foreign commerce; it has now scarcely any foreign trade, and its population is only about 3000. It contains a royal naval academy, and its chief commerce is in timber and cheese. The harbour is large and good.

Naarden, a fortress, on the south shore of the Zuyder-see, 12 miles E. from Amsterdam, has 3000 inhabitants, who manufacture silk and velvet. It forms the key of all the water communication of Holland, and is important for the defence of Amsterdam, with which it is connected by a fine canal.

Zaandam (commonly corrupted into *Saardam*), a town of 12,000 inhabitants, on the north shore of the Y, and at the mouth of the Zaan, which divides it into *Oost-Zaandam* and *West-Zaandam*. The houses are mostly constructed of wood and painted; each of them is

surrounded by a small canal and completely insulated. From a distance, the town has a most singular appearance; it seems to consist of a line of windmills, some of which are of gigantic size and have houses attached to them, extending along the Zaan, and forming a street nearly 5 miles in length. The number of these mills is variously stated, but it seems to amount to about 700; they are applied to the various purposes of grinding corn, draining the land, sawing timber, making paper, grinding tobacco into snuff, crushing rapeseed to express the oil, grinding colours for the painter, grinding stones into sand for the floors of the Dutch housewife, and grinding volcanic tufs from the Eifel into dust in order to form a cement called *trass*, which hardens under water and is much used in Holland. [RIFEL; ANDERNAACH.] The town is often visited for the purpose of seeing the hut in which Peter the Great worked and slept during his short stay here to learn ship-building in 1696.

To North Holland belong the islands, *Marken* and *Urk*, in the *Zuider-zee*; and *Wieringen* (20 miles in circumference; population, 1500); *Vlieland* (which consists chiefly of sandhills, and has 800 inhabitants); *Ter-schelling* (14 miles long, and 2½ miles broad; population 2500, residing in four villages on the south coast, and engaged in fishing); and *Texel*, at the entrance of the *Zuider-zee*.

The *Texel* is separated from the north of the province by the *Mar-diep*; it is 12 miles long, and 6 miles broad, and has 5000 inhabitants, mostly shepherds and fishermen. The island is famous for its breed of fine-wooled sheep. The northern part of the *Texel* was formerly a distinct island, but is joined to the southern part by a sand bank since 1629; it is called *Eierland* or *Egg-land*, from the great number of gulls' eggs found on it.

South Holland has an area of 1170 square miles, and had 584,098 inhabitants on the 31st of December 1852. It lies S. of the *Haarlem-meer*, and is traversed by the Old Rhine, the *Yssel*, the *Lech*, and by the large branches of the *Maas*, which form the islands of *Voorne*, *Overflakkee*, *Goeree* (now united to *Overflakkee*), *Putten*, *Beyerland*, *Ysselmonde*, *Dordrecht*, and *Rozenburg* W. of *Ysselmonde*. The chief towns are *Briel*, *Delft*, *Dort*, *Hague*, *Leyden*, and *Rotterdam*. The more important of the other towns are noticed here:—

Delfshaven, the port of *Delft*, stands on the right bank of the *Maas*, at the embouchure of the canal that leads from the *Hague* through *Delft*; it is a place of some trade, and has ship-building yards, and a population of 3000. The lighthouse marking the entrance to the *Maas* and the channel to *Rotterdam* is in 51° 54' 11" N. lat., 4° 9' 51" E. long.

Gorkum, a fortified town, on the right bank of the *Maas*, and traversed by the *Linge*, a feeder of the *Maas*, is well built, and has a good trade in corn, fish, horses, cheese, agricultural produce, &c. The population numbers about 9000; many of them are engaged in the salmon and herring fisheries. The chief manufacture is tobacco-pipes. There is a college in *Gorkum*.

Gouda, or *Ter-Gouw*, N.E. of *Rotterdam*, on the right bank of the *Yssel*, at the mouth of the *Gouw*, is a large fortified town, with a population of 13,000. The town has 5 churches, an hospital, an orphan-house, tobacco-pipe factories that give employment to 6000 men, brickworks, the clay for the supply of which is taken from the bed of the *Yssel*, rope-walks, gin-distilleries, and breweries. The most important buildings are the town-house and the church dedicated to *St. John*, which is famous for its splendid painted windows; both these buildings stand in the great square, in which markets are held. *Gouda* numbers also among its industrial products woollen-cloth and sail-cloth; it is famous as a cheese-market.

Helvoet-sluis, a small town of 2000 inhabitants, important for its fortifications, its harbour, and large naval dockyards, stands in the isle of *Voorne*, on the right bank of the *Haringvliet* branch of the *Maas*, which separates *Voorne* from *Overflakkee*. The Prince of Orange sailed from this port for England, Nov. 11, 1688. The ships that passed *Helvoet* and *Briel* in 1849 in and out numbered 2417 and 2539 respectively.

Katwyk, N. of the *Hague*, is a small place famous for the canal and the stupendous dykes and flood-gates executed by the engineer *Conrad*, for *Louis Bonaparte* in 1809, to assist the *Rhine* in its struggles to reach the sea.

Maasland-sluis, or *Maas-sluis*, stands W. of *Rotterdam*, at the extremity of the canal that enters the *Maas* opposite the isle of *Rozenburg*, and has 5000 inhabitants, many of whom are engaged in the herring- and whale-fisheries. Sail-cloth, ropes, leather, and fish-oil are the chief industrial products.

Ryswyk, a village of 2400 inhabitants near the *Hague*, deserves mention as the place where the famous treaty of peace was signed in 1697 between England, France, Holland, Germany, and Spain. The site of the house in which this treaty was concluded is now marked by an obelisk.

Scheveningen, on the coast, N.W. of the *Hague*, is the rendezvous of the gay world of the *Hague* in the bathing season; it is joined to the *Hague* by a straight and magnificent avenue of oaks and limes. It has 3000 inhabitants, and a splendid bathing establishment, which includes also the accommodation of an hotel. The population is chiefly engaged in fishing for the supply of the *Hague* market.

Schiedam, a well-built town, 5 miles W. from *Rotterdam*, with a good harbour, near the outflow of the *Schie* into the *Maas* has

5 churches, an exchange, glassworks, rope-walks, and white-lead works. The town is surrounded by windmills, and contains above 200 distilleries for the manufacture of 'hollands,' or Dutch gin, for which it is universally celebrated. It has a large trade in pigs, 30,000 of which are said to be annually fattened on the grains from the distilleries. The inhabitants, many of whom are engaged in the fisheries, number 10,600.

Schoonhoven, E. of *Rotterdam*, famous for its salmon fishery, stands in a marshy but well-cultivated district, on the right bank of the *Leek*, which here forms a good harbour, and receives the *Vliet*. The population is 2500.

Vlaardingen, the head-quarters of the Dutch herring fishery, for which it fits out annually from 80 to 100 vessels, stands on the right bank of the *Maas*. It is a pretty and a well-built town, with a population of 7600.

HOLLAND, PARTS OF. [LINCOLNSHIRE.]

HOLLINGBOURN, Kent, a village, and the seat of a Poor-Law Union, in the parish of *Hollingbourn*, is situated in 51° 16' N. lat., 0° 38' E. long., distant 22 miles W. by S. from *Canterbury*, 39 miles S.E. by E. from *London*. The population of the pariah of *Hollingbourn* in 1851 was 1312, of whom 312 were inmates of the Union workhouse. The living is a vicarage in the archdeaconry of *Maidstone* and diocese of *Canterbury*. *Hollingbourn* Poor-Law Union contains 23 parishes, with an area of 55,487 acres, and a population in 1851 of 13,751. The parish church of *Hollingbourn*, partly built about the year 1400, is of various styles. The Wesleyan Methodists have a small chapel, and there are National schools. Tanning and brickmaking are carried on. There are several corn-mills. A fair is held on June 16th.

HOLLOWAY. [MIDDLESEX.]

HOLMEFIRTH. [YORKSHIRE.]

HOLSTEIN, a duchy in the north of Germany, belonging to Denmark, and comprised between 53° 30' and 54° 24' N. lat., 8° 41' 22" and 11° 2' E. long., is bounded N. by *Schleswig*, from which it is divided by the *Eyder* and the *Kiel Canal*; E. by the *Baltic*, the territory of *Lübeck*, and the duchy of *Lauenburg*; W. by the *North Sea*, between the mouths of the *Eyder* and the *Elbe*; and S. by the *Elbe* (which separates it from *Hanover*) and the territory of *Hamburg*. Its greatest length from north-west to south-east, between the *Eyder* and the *Bille*, is 90 miles; from north-east to south-west, between the projecting peninsula facing the isle of *Fehmern* and the right bank of the *Elbe* above *Glückstadt*, 83 miles. The area is 3259 square miles; the number of inhabitants was 325,743 in 1803; 401,528 in 1826; and 479,364 in 1845; nearly all are of the Lutheran religion.

The central part of *Holstein* is a flat plateau covered with barren sandy moors, heathy bogs, and numerous small 'seen,' or lakes, from which the waters flow towards the *Eyder*, the *Baltic*, and the *Elbe*. The eastern slope is furrowed by numerous well-wooded and fertile valleys abounding in beautiful scenery; the western slope descends into the fertile grazing district of *Dithmarsh*, which is protected by dykes against the encroachments of the sea. [DITHMARSH.] On the plateau there is some light soil between extensive regions of bog, and here and there are a few trees. Towards *Kiel*, on the north, the surface is undulating and well wooded. Since the opening of the railway from *Altona* to *Kiel* across this dreary district, great improvements have been made by means of extensive drainage; and the granite boulders with which it is strewn, instead of lying valueless as formerly, have become a source of profit, and are quarried for transport to *Hamburg* and *Holland*, where they are in demand for building purposes. These boulders are supposed to have been carried at some long distant period from the Scandinavian peninsula by glaciers; except in these masses which lie on the surface there is no granite in *Holstein*.

The principal rivers are the *Elbe*, which has been already described [ELBE], and the *Eyder*. The *Eyder*, or *Eider*, rises in a small lake about 10 miles S. by W. from *Kiel*, and runs first northward through the *Westen-zee* to the *Schleswig* frontier, whence it runs west between the two duchies past *Rendsborg* to its mouth in the *North Sea* near *Tönning*, after a course of about 90 miles, for 70 of which it is navigable. The tide ascends the river as far as *Rendsborg*. Its principal feeders are the *Sorg* and the *Treen*, which join it on the *Schleswig* bank.

The *Stör*, a feeder of the *Elbe*, rises in the marshes a little south of the source of the *Eyder*, and runs in a general south-west direction past the town of *Itzehoe*, a short distance below which it turns south and enters the *Elbe* below *Glückstadt*.

The *Trave* rises in the *Warder-zee*, which is situated near the lake of *Plön*, the largest and most beautiful of the lakes of *Holstein*. It flows in a general southern course past *Segeberg*, receiving numerous small feeders from the lakes on either side, to *Oldeslohe*, where it sweeps round to the north-east, in which direction it traverses the territory and town of *Lübeck* and the shore-lake of *Binnen-wasser*, and enters the *Baltic* at *Travemünde*. The whole length of the *Trave* is about 60 miles. Its principal feeders are the *Steckenitz* and the *Wackenitz*, both of which join it on the right bank beyond the *Holstein* boundary. By the *Steckenitz* and a canal which joins it to the *Delvenau*, a feeder of the *Elbe*, a water-communication is established between *Lübeck* and *Hamburg*, which runs at a short distance east of the *Holstein* territory.

The other rivers of Holstein are small: of these the Alster, which joins the Elbe at Hamburg, and the Bille, which forms part of the boundary towards Lauenburg, may be mentioned. Common roads, which are however not well constructed, traverse the duchy from Altona to Lübeck, Kiel, and Rendsborg. A railway runs from Kiel to Altona, with branches to Rendsborg and Glückstadt. The Hamburg-Berlin railroad crosses a portion of the south of Holstein; and the branch line to Lübeck runs near its eastern boundary. Trade is also greatly facilitated by the Kiel Canal, made in the years 1777-84, at the expense of above two millions and a half of dollars, to form a communication, in conjunction with the Eyder, between the North Sea and the Baltic. It is 23 miles in length, 100 feet broad at the surface, 54 feet broad at the bottom, and 10 feet deep. It has six sluices, through which ships 100 feet long, 26 feet wide, and drawing not more than 9 feet water, can pass. Steamers ply from Kiel and the mouth of the Trave to all parts of the Baltic, and from the Elbe there is communication with all parts of the world.

Holstein, with the exceptions already made, is on the whole very fertile, especially in the reclaimed marsh-lands of Dithmarsh and the eastern parts which have of late years been rendered almost equal to the marsh-lands, chiefly by the use of marl. The climate is damp but healthy. The chief mineral products are salt, lime, gypsum, and amber; but there are no metals. Agriculture is well understood. The chief products are corn, more than sufficient for the home consumption, pulses, potatoes, hops, flax, and hemp. The breed of horses and of horned cattle is excellent. There are likewise sheep, swine, and abundance of poultry and game. Storks are very numerous: their huge nests may be seen on the summit of the gable-end of most of the farm-houses. The manufactures are unimportant. The situation of Holstein between two seas is highly favourable to commerce. The exports consist of corn, timber, horses, cattle, butter, tallow, beef, hides, and turf; the imports of colonial produce, wines, and manufactures. The provision houses of Hamburg are supplied with beef chiefly from Holstein. The herring fishery, and the Greenland whale and sea fishery, are sources of considerable profit. The principal seats of trade are Altona and Kiel.

The Holsteiners are an athletic race, generally exceeding the middle stature: the women are good-looking, and wear a quaint but becoming costume. They are not a purely Germanic people, for they are largely mixed with Slavic blood; nor is German their language, though they generally understand that tongue, but a compound of several dialects, in which the Slavic is an important element. The inhabitants do not all live clustered in towns and villages; the country is dotted with country seats and well-built farm-buildings. Education is universally diffused among the people of Holstein; there is a school in every parish, besides grammar-schools in all the important towns, and a university in Kiel.

The principal towns of Holstein are ALTONA, KIEL, and RENDSBORG. The more important of the other towns are noticed here.

Glückstadt, the capital of the duchy, situated on the right bank of the Elbe, half-way between Hamburg and the mouth of the river, has 6000 inhabitants. It is a pretty, regularly-built, trading town, intersected by canals. The strong ramparts which formerly surrounded it were demolished in 1814. It has a Lutheran, a Calvinist, and a Roman Catholic church, a gymnasium, a school of navigation, and other public institutions. The old arsenal is now used partly as a prison, partly as a workhouse. Glückstadt was declared a free port in 1830, and has much trade, and several ships engaged in the whale-fishery.

Blankensee is a large and remarkable village, most beautifully situated on the Elbe, 6 miles from Altona. The inhabitants, about 3000 in number, are mostly fishermen and pilots.

Elmahorn, 18 miles by railway N.W. from Altona, is a well-built town situated on the Krückau, a feeder of the Elbe, and has about 6000 inhabitants. It has considerable manufactures and a large trade in corn. The town is particularly noted for its shoes, of which vast numbers are made and sold in all of the fairs of the duchies of Schleswig and Holstein. Elmahorn is one of the few places in the duchies where Jews are allowed to reside.

Itzehoe, in a valley screened by wooded hills, stands on the Stör, midway between Altona and Rendsborg, being 30 miles distant from each, and has 5500 inhabitants. It was founded by Charlemagne in A.D. 809. During the Thirty Years' War it was twice taken by Tilly, and twice recovered by the Danes; the Swedes bombarded the town and nearly reduced it to ashes in 1657. The church of St. Lawrence and the convent attached to it (now a foundation for unmarried noble ladies) are the most interesting buildings. Itzehoe is or was the place of assembly of the provincial states of Holstein. In the neighbourhood are many handsome country seats, one of which, the castle of Breitenburg, is beautifully situated on the margin of the Stör.

Plön, on a narrow tongue of land between the greater and smaller lakes of Plön, is one of the prettiest places in Holstein. The castle of the former dukes of Holstein-Plön stands on a hill above the lake: population, 2700. The larger lake is 7 miles long, 4 miles broad, and encircled by wooded hills.

Preetz, 8 miles S.S.E. from Kiel, prettily situated on the edge of a small lake, has 5000 inhabitants. It owes its origin to a convent founded here in 1216, and now converted into a house for unmarried ladies of noble birth. The convent is joined to the town by a shady

avenue. The church and cloisters of the original structure are very interesting.

Oldesloe on the Trave, 6 miles above its entrance into the Lübeck territory, has about 3000 inhabitants, many of whom are employed in the productive brine-springs and royal salt-works in the vicinity. At *Segeberg*, a pretty little town higher up the Trave, is a limestone rock which rises abruptly from the level surface of the country to a height of 200 feet, while about 400 feet in depth of the mass are sunk in the earth. Large quarries are worked beneath this rock; its summit commands very fine and extensive views, comprising the towers and spires of Hamburg and Lübeck.

The king of Denmark, as duke of Holstein and Lauenburg, is a member of the German Confederation; his place is the tenth in rank, and he has three votes in the full council. The contingent for both Holstein and Lauenburg is 3600 men. After the peace in 1815, the king at different times signified his intention of introducing a representative constitution, and on the 28th of May, 1831, there appeared a general law for the establishment of provincial assemblies in the duchies of Schleswig and Holstein, to deliberate on public matters but with power merely to advise the crown. The states met every two years. Those of Holstein and Lauenburg consisted of 48 members; and their place of meeting was Itzehoe. On the death of Frederick VI. (Dec. 3, 1839) the question of the succession to the throne, which was regulated differently in the two parts of the monarchy, began to cause differences between Denmark proper and the duchies, which at last terminated in war. In Denmark the law of succession was such that in case of the extinction of the direct male line (a contingency now becoming every day more probable) the females of the same line should be called to the throne; but in the case supposed the law of the duchies ordains that the males of the collateral line, Holstein-Sonderburg-Augustenburg, should have the right to succeed. Another cause of jealousy was the demand of the Schleswig states in 1844 to be united to those of Holstein. This was refused by the king, and the states of Jütland passed a resolution pronouncing the proceeding of Schleswig as tending to a dissolution of the monarchy. Later in the year, Oct. 1844, the states of Holstein pressed the subject of the succession on the attention of the government, and in the following month the states for the Danish part of the monarchy assembled at Roskild, demanded a declaration from the king to the effect that the duchies "being integral parts of Denmark, could never be separated from it." In July 1846 appeared the Letter Patent of Christian VIII., declaring the law of succession in Schleswig and Lauenburg to be the same as in Denmark, but expressing doubts respecting Holstein which it would be the duty of government to clear up, in order to maintain the integrity of Danish states. Holstein protested, but the king refused to accept the protest. The representatives of Holstein then appealed to the German Diet, which passed a resolution confirming the right of the collateral line. Soon after Schleswig protested against separation from Holstein, and against any other succession than that of the house of Augustenburg.

To put an end to these quarrels among the parliaments of the several parts of the monarchy, and with a view to consolidate its component parts into one compact united state, Frederick VIII. soon after his accession issued (Jan. 28, 1848) a decree for a united parliament to consist of 26 delegates elected by Denmark proper and 26 by the duchies, with 4 delegates for each duchy nominated by the king. The duchies elected their deputies, but instructed them to insist upon a separate chamber to manage their own particular interests. The deputies met at Rendsborg (March 18, 1848), appointed a deputation to the king to demand—a separate chamber, a constitution for the united duchies, and a national guard—and appointed a provisional government. On the 3rd of April the deputies of the two duchies voted at Rendsborg the incorporation of Schleswig with the Germanic Confederation; the king of Prussia openly encouraged the hopes of the duke of Augustenburg. War ensued between Denmark and the duchies, assisted by Prussia and auxiliaries from all parts of Germany now in a state of revolution. Hostilities continued with varying success, and interrupted only for a short time by the armistice of Malmö, till the 25th of July, 1850, when the great and decisive victory gained at Idstedt by the Danes over the Schleswig-Holsteiners under general Willisen, who retreated on Rendsborg, threw the whole of Schleswig into the hands of the Danes. The last action of the war was the attempt to storm the fortress of Friederickstadt (Sept. 29, 1850), which was repulsed by the Danes. The Frankfurt Diet then commanded the immediate suspension of hostilities, and an Austrian army entered Holstein to carry into effect the interference of the diet for the re-establishment of peace. On the 18th of February 1852 the commissaries of the diet formally transferred the government of Holstein to the Danish commissary at Kiel; and according to the terms of the pacification the integrity of the Danish monarchy is secured; each of the duchies has a separate administration; Holstein and Lauenburg remain as before members of the Germanic Confederation, and the material but not political union of Holstein and Schleswig is guaranteed; and the succession was subsequently settled upon the second or Glücksburg branch of the collateral line of Holstein-Sonderburg, the duke of Augustenburg having resigned his claims in consideration of a pension.

The early history of Holstein is obscure. Charlemagne subdued the Saxons, who then inhabited it; removed 10,000 families of them

to Flanders, Brabant, and Holland, and declared the Eyder, on its northern frontier, to be the boundary between Germany and Denmark. The emperor Lotharius made Holstein and Stormarn a county, which he granted as a fief in 1106 to Adolphus, count of Schauenburg, whose son, Adolphus II. conquered Wagria. The family became extinct on the death of Adolphus VIII., and the states chose, in 1460, Christian I., king of Denmark, for their count, securing to themselves the right of choosing their princes among his descendants, which they actually exercised to the time of Christian IV. and Duke Philip, in 1597. Various changes took place in the sequel, in consequence of the division of the families into different branches, and the subsequent extinction of collateral lines; and it was not till 1733 that the whole came permanently under Danish government. The king of Denmark had a seat in the diet as duke of Holstein; but on the dissolution of the empire and the formation of the Rhenish Confederation in 1806, he declared all his German possessions to be parts of the kingdom of Denmark; however, on the formation of the German Confederation in 1815, he became a member of it, and Holstein was re-annexed to Germany.

HOLSWORTHY, Devonshire, a decayed market-town and the seat of a Poor-Law Union in the parish of Holsworthy, is situated in 50° 48' N. lat., 4° 22' W. long., distant 38 miles W. by N. from Exeter, 214 miles W. by S. from London. The population of the parish of Holsworthy in 1851 was 1833. The town is governed by a court-leet. The living is a rectory in the archdeaconry of Barnstaple and diocese of Exeter. Holsworthy Poor-Law Union contains 19 parishes and townships, with an area of 72,924 acres, and a population in 1851 of 9850. The parish church is ancient: it has some Norman piers and a plain Norman doorway. The tower is a remarkably fine one. The Independents and Wesleyan Methodists have places of worship. A National school was erected in 1848; the Bude and Holsworthy Canal, which unites with the Bude and Launceston Canal, passes near the town. The market is on Wednesday; there are two great markets and three fairs held in the year.

HOLT. [DENBIGHSHIRE; NORFOLK.]

HOLY ISLAND. [NORTHUMBERLAND.]

HOLYHEAD, Anglesey, North Wales, a parliamentary borough, sea-port, and market-town, in the parish of Holyhead, is situated in 53° 19' N. lat., 4° 38' W. long., distant 24 miles W. by N. from Beaumaris, 260 miles N.W. by W. from London by road, and 272½ miles by the London and North-Western, and Chester and Holyhead railways. The population of the borough of Holyhead in 1851 was 5622. Holyhead unites with Amlwch, Beaumaris, and Llangefni in returning one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry and diocese of Bangor.

Holyhead, or Caer Gybi, as it is called by the Welsh, is situated upon a small island of the same name at the western extremity of the island of Anglesey, with which it is united by the embankment and bridges of the great Irish coach road, and the Chester and Holyhead railway, and also by a stone bridge at a point where the arm of the sea, which bounds the island on its eastern side, is narrow enough to be spanned by one. Numerous Roman coins have been found in the island at different times; there are also a cromlech and other primeval remains. The town is straggling and irregularly built, but has some good houses. The road from the railway station to the lighthouse is lighted with gas. The parish church is mostly of the perpendicular style, and has been enriched externally with a good deal of rude but curious carving. The churchyard appears to be a portion of an ancient fortification; and is partly surrounded by a very curious and interesting Roman wall. The Wesleyan and Calvinistic Methodists, Independents, and Baptists, have chapels. There are National and British schools, a library, and a savings bank. The inhabitants are principally employed in the coasting-trade, and in ship-building and rope-making. Holyhead is the station of the Dublin mail steam-packets. The harbour is formed by a pier 900 feet in length, constructed chiefly of hewn limestone, and at the pier-head there is, during ordinary tides, a depth of 14 feet at low-water. The pier is the prolongation of an islet, which is connected with the island of Holyhead by a swing bridge of cast-iron, and by a viaduct for the railway, laid down to convey materials to the new harbour works. At the head of the pier is a lighthouse; on the land side is a triumphal arch of Anglesey marble, erected to commemorate the landing of George IV. in 1821. A wooden jetty is carried into the harbour. Holyhead has been selected by government as the site of a harbour of refuge. The works when completed will inclose about 316 acres, with a depth of more than six fathoms water.

At the northern extremity of Holyhead Island is the South-Stack lighthouse, built on the summit of a detached rock. The lighthouse rock is united to the island by a small suspension-bridge. The coast here is exceedingly wild and rugged; it has been worn by the waves into numerous caverns, and swarms, during a portion of the year, with sea birds. Holyhead Island has many barren spots, but includes good pasture for sheep, and a proportion of fair arable soil.

(Communication from Holyhead.)

HOLYWELL, Flintshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 53° 17' N. lat., 3° 7' W. long., distant 10 miles N.N.W. from Mold,

and 200 miles N.W. from London. The population of the borough of Holywell in 1851 was 5740. The living is a vicarage in the archdeaconry and diocese of St. Asaph. Holywell Poor-Law Union contains 14 parishes and townships, with an area of 64,834 acres, and a population in 1851 of 41,053.

The town is situated upon an eminence near the southern shore of the estuary of the Dee. Its mineral riches and the manufactures carried on in the neighbourhood have made Holywell one of the most important and flourishing towns in North Wales. The town is lighted with gas and paved. The parish church was mostly rebuilt in 1769. In the town are chapels for Independents, Baptists, Wesleyan Methodists, Wesleyan Reformers, Welsh Methodists, and Roman Catholics; National, British, Infant, and Roman Catholic schools; the Flintshire infirmary, and a savings bank. A county court is held in the town. The principal works are lead-smelting, and deal-merging works; copper works; a shot tower; flannel factories; and a paper mill. There are also collieries and lead-mines; large quarries of Aberdo limestone; and a Roman cement manufactory. Holywell owes its name to the famous Well of St. Winefred, which is situated close to the church, and was once in high repute for the cure of diseases. Near the spring are vestiges of the old British fortification of Dinas Basing, 'the fort in the bottom.'

(Communication from Holywell.)

HOLYWOOD. [DOWNSHIRE.]

HOLZMÜNDEN. [BRUNSWICK.]

HOMBURG. [HESSE-HOMBURG.]

HOMERTON. [HACKNEY.]

HONDURAS, Republic of, Central America, occupies the elevated country between the table-land of Guatemala and the plains of Mosquitos and Nicaragua. It lies between 14° 5' and 16° N. lat., and about 85° 30' and 88° 40' W. long.; but a narrow tract extends southward between Salvador and Nicaragua as far as the Gulf of Conchagua on the Pacific, 13° 30' N. lat. Honduras is bounded E. by the Mosquito territory, but the boundary line on this side remains undefined; S. by the republics of Nicaragua and Salvador, except where the narrow tract of land reaches down to the Gulf of Conchagua; W. by Guatemala; and N. by the Caribbean Sea. The area is about 30,000 square miles: the population is about 230,000, of whom three-fourths are ladinos or mulattoes.

Surface, &c.—The Caribbean coast from Cape Cameron to Cape Honduras bears, with a general concave sweep, due west; and thence to Caballo Point, and to the mouth of the Rio Motagua, a short distance east of which is the boundary of the republic, it bears W.S.W. Between Capes Cameron and Honduras the coast is low; thence westward it is for the most part high and rocky. The only available ports are Truxillo at the mouth of the river of the same name, which is merely an open roadstead in a bay formed by Cape Honduras; and Omoa, a small but good harbour near the western extremity of the republic. The whole of this coast is extremely unhealthy, and consequently very thinly peopled. The small tract owned by Honduras bordering on the Gulf of Conchagua, in the Pacific Ocean, is also low, subject to be inundated by spring tides, and very unhealthy; but in neither case does the miasmatic influence extend far inland.

The surface of the country is greatly broken. It may be described as a table-land traversed by several ridges of hills running from north-west to south-east with secondary ridges branching obliquely from them. The general level of the table-land is perhaps about 4000 feet; the highest part is the southern side, where it borders on Salvador. Close upon the shores of the Caribbean Sea a ridge of mountains, the Sierra Omoa, extends from Cape Honduras to Caballo Point, near which is Mount Omoa, 7000 feet high, which gives its name to the ridge. The culminating point of this ridge is the peak of Congrehoy, 87° W. long., which is 7500 feet above the level of the sea. The ridges which traverse the interior of Honduras do not attain any great altitude above the general level. Between the ridges are long, wide, open, and fertile valleys, which mostly descend gently to the great plain on the east. Near the western end of the state are the broad valleys of the Chamalicon and the Ulua, which are overgrown by thick forests of mahogany, cedar, and fustic trees. Along the southern side of the territory runs a ridge which divides the waters which flow into the Pacific from those which fall into the Atlantic; but only a few peaks attain any considerable elevation. From this ridge, and from the transverse ridges north-west of it, a series of high and steep hills rise from a broad-backed tract of high ground and connect the table-land of Honduras with that of Guatemala. The valleys between these ridges are of comparatively moderate width.

The principal rivers flow into the Caribbean Sea. Beginning on the west we have the Chamalicon, which rises on the Marendon Mountains near 14° N. lat. and flows in a generally northern direction into the Bay of Honduras a little east of Punta de Caballos. For a large part of its upper course it flows through a wild and uninhabited country; but as it approaches the sea the valley opens out to a great width, its slopes being covered with vast forests of valuable timber trees. Like most of the rivers of the state the navigation of the Chamalicon is impeded by a bar at its mouth. East of the Chamalicon is the Ulua, a much longer and more important stream. It is formed

by the union near Santiago of several branches, the longest of which rises not far from the borders of Salvador; it falls into the sea a short distance west of Punta de Sal after a course of about 300 miles; only a few miles of the lower part are navigable. The next river of any size is the Truxillo, the mouth of which forms the harbour of the same name. East of this is the Aguan, which after a course of about 100 miles discharges itself by two branches into the Caribbean Sea, about 20 miles east of Cape Honduras. None of these are navigable for more than a short distance, and then only by piraguas (a sort of river barges), except the Uluá and Chamalicon, which admit small schooners. The Choluteca, which falls into the Pacific at the Bay of Conchagua, a small stream draining a narrow valley, is the only river of the state which does not enter the Caribbean Sea. The roads throughout the republic are mere tracks worn by continual use.

Climate, Soil, Productions.—The climate, except along the coast, is on the whole salubrious, though the temperature is somewhat high. Gout is common in the elevated districts. The valleys opening to the sea are very fertile, but moist and unwholesome. Those from which the air of the sea is intercepted by ranges of hills are less humid and more habitable, but their fertility is not so great. On the table-land, and in the districts not contiguous to the Caribbean Sea, the dry season begins about the close of October, and lasts until the end of May; during which time only a few showers occasionally refresh the air. In the beginning of June thunder is frequent, and is followed by long and heavy rains. But even during this time it rains only in the evening and the night: from six o'clock in the morning till three or four o'clock in the afternoon, no cloud passes over the sky, and the air is dry and pleasant. Towards the middle of October the north winds set in with frequent thunderstorms, and after them the dry season begins.

The most important natural productions are the vast forests of mahogany, cedar, fustic, pimento, and numerous other valuable trees; but owing to the badness of the roads, the scarcity of labour, and other local causes, they are turned to comparatively little account. From the same causes, and from the indisposition of the inhabitants to steady labour in the fields, agriculture is in a very backward state; not only are immense tracts of fertile land wholly neglected, but the land which is under cultivation is very far from being rendered as productive as it easily might be. Maize, rice, some wheat and barley, frixoles, plantains, and various fruits and vegetables are the principal articles grown, but scarcely in sufficient quantities for the requirements of the inhabitants. In the western district of Gracias tobacco of very fine quality is raised, but not enough for exportation. The chief dependence of the husbandman is on the cattle, of which vast herds are reared on the plains in the interior. Yet though such large numbers are maintained, they form but a limited article of export, and tallow and hides are only exported to a comparatively small amount. Sheep are not so numerous as in some of the other countries of Central America. Horses are not much attended to, nor are they of superior kinds. Mules are numerous, they being generally used in the country for the transport of goods.

The manufactures are confined to the coarser articles of home consumption. The commerce is but small; the foreign trade is chiefly carried on through Belize. As already indicated the exports are principally of mahogany, cedar, Brasil, and other cabinet and dye-woods; sarsaparilla, hides, and the products of the mines. The imports are British cottons, woollens, and hardwares, with various French, German, and American goods. Honduras is the principal mining country of Central America. The chief mining districts are the southern and western portions of the republic, but some mines occur in every department. Gold is found in veins in quartzose rocks; and in grains in alluvial deposits in the ravines, and in the sands of several of the rivers. Silver mines occur in several places in the department of Tegucigalpa, and also more or less frequently in all the other departments. Copper is found of good quality in Choluteca and elsewhere. Lead and iron-ore are found in several places. Of the present annual products of the mines we have however no reliable statement. In Gracias occur veins of remarkably fine opals, as well as some yielding emerald. Jasper, asbestos, and cinnabar are likewise obtained. Excellent marble is wrought.

Divisions, Towns, &c.—Honduras is divided into seven departments—Comayagua, which occupies nearly the centre, and contains the capital of the republic; Gracias to the south-west, and Santa Barbara to the north-west of Comayagua, both of which extend to Guatemala, and Santa Barbara includes the coast as far east as Punta de Sal; Yoro, north of Comayagua, extends along the coast from Punta de Sal eastward to Cape Honduras, and contains the port-town of Truxillo; Tegucigalpa lies east of Comayagua, and is the chief mining district and most thickly inhabited department of the republic: on the north-east of it is the department of Juticalpa, which extends to the Mosquito territory; south of Comayagua is Choluteca, which stretches down to the Gulf of Conchagua, where is the little port-town of San Lorenzo, established a few years back in order to give the republic a port of entry on the Pacific. In the interior are few considerable towns; on the coast are only the small port-towns of Omoa and Truxillo.

Comayagua (*Valladolid de*), the capital, is situated in a fine but

unhealthy valley, at nearly an equal distance from the ports of Omoa and Truxillo, in 14° 30' N. lat., 87° 30' W. long., and contains 3000 inhabitants. The public buildings are a cathedral, several churches, a college, an hospital, &c.

Tegucigalpa contains from 8000 to 10,000 inhabitants, and is the most populous place in Honduras, being the chief town of the great mining district. In its neighbourhood are mines of gold, silver, copper, and iron. It is at a considerable elevation above the sea.

Omoa, on the Bay of Honduras, 15° 38' N. lat., 88° 5' W. long., 12 or 15 miles from the mouth of the river Motagua, is a small place inhabited by a few ladinos, but is a good deal frequented; the harbour, which is formed by a small bay, is very good. The goods imported from Europe or America are sent by barges to Gualán, on the banks of the Motagua. The town is very unhealthy.

Truxillo, farther to the east, formerly carried on an active trade with Havanna, but it now exports only mahogany and a few hides, with a small quantity of sarsaparilla and tortoiseshell to Belize. The town with its suburbs contains about 4000 inhabitants.

Government, &c.—The government is vested in a president and two chambers. The president is elected by the chambers, and assisted by a council of state consisting of the ministers and some other members. The chambers consist of a legislative assembly of 14 deputies, and a senate of 14 members. The republic has a debt of about 300,000 dollars. We have not a recent return of the revenue. The chief court of justice is the supreme court at Comayagua, which is presided over by three judges. The president is commander-in-chief of the militia. The established religion is the Roman Catholic, but other forms of worship are permitted. Education is in a very neglected state.

The coast of Honduras was discovered by Columbus in 1502. The Spaniards effected the subjugation of the country a few years later; from which time it remained a part of the Spanish kingdom of Guatemala until the declaration of independence by South America in 1820. Honduras was then comprised in the Mexican empire of Iturbide, on the dissolution of which in 1823, Honduras formed one of the federal states of Central America; but this union was also of short duration, and Honduras then became and has since continued to be an independent republic.

(Juarros, *History of Guatemala*; Haefkins, *Central America*; Baily, *Central America*, &c.)

HONDURAS, BRITISH, or Belize, a British settlement on the east coast of Central America, is bounded N. by Yucatan, W. by Vera Paz, S. by Guatemala, and E. by the Bay of Honduras and the Caribbean Sea. The settlement extends from 15° 54' to 18° 30' N. lat., and from 88° to 89° 30' W. long. The area is about 10,370 square miles, and the population, which consists chiefly of Caribs and negroes, is about 12,000.

The surface is very irregular. In the interior it is greatly elevated, while the coast is for the most part low, and fringed with reefs and small islands, termed keys, which render the navigation very hazardous. The country is watered by numerous rivers, the chief being the Belize, which is navigable for 150 miles from its mouth. The rocks are principally primary and calcareous. The easterly or sea-breezes which prevail during nine months of the year, temper the heat, which however is scarcely ever excessive; the thermometer seldom rises above 85° Fahr. even in the hottest time, and during the wet season it sinks to 60°. In June, July, August, and September heavy and frequent rains fall, and these are the most unhealthy months of the year, disease being engendered by the marsh miasmata arising from the lowlands and swamps. The soil by the coasts and rivers is a rich alluvial deposit, and very fertile. On the higher grounds are extensive forests of mahogany-trees of magnificent growth, and the logwood-tree abounds in the swamps. Cedar and other valuable timber-trees are among the natural products. The plantain is extensively cultivated. Maize, rice, cassava, arrow-root, yams, &c. are grown. Cotton, sugar, and coffee, though little cultivated, succeed well. In the woods the red tiger, the black tiger, the tiger-cat, the leopard, and other wild animals, and game, are found. Turtle abound on the keys.

British Honduras is governed by a Superintendent, and a Public Meeting, consisting of seven magistrates appointed by the inhabitants. The superintendent is immediately subordinate to the Governor of Jamaica, from whom he holds a commission. He is assisted in the administration of government by an Executive Council, consisting of the chief justice, the attorney-general, the officer commanding the land forces, and the public treasurer. An Act of the local legislature has however been passed by which the constitution of the council and assembly is proposed to be altogether remodelled. British Honduras is in the diocese of Jamaica. About 1000*l.* is voted annually by the legislature for the purposes of education.

The exports are chiefly of cochineal, which amounted to 169,140*l.* in 1851, of indigo and sarsaparilla, which commodities are altogether the produce of the states of Central America, and are brought to Belize merely in the course of transit to Europe. The total value of the exports in 1851 was 411,443*l.*, in 1852 it was 391,233*l.* The commerce of British Honduras is centred in the capital, and indeed only to town of any size, Belize, under which it is more fully noticed, and where will also be found mentioned various other facts relating to the settlement. [Belize.]

HONFLEUR. [CALVADOS.]

HONG KONG is one of the group of rocky islands situated at the mouth of the Canton River, about 37 miles from Macao, and 100 miles from Canton, in 22° 12' N. lat., 114° 13' E. long. The island is separated from the mainland of China by a narrow strait, which varies in width from less than a mile to 4 or 5 miles. The length of the island from east to west is about 8 miles; its breadth varies from 2 to 6 miles. The coast-line forms a succession of small bays and headlands. In Hong Kong Roads and Victoria Harbour is excellent anchorage, both opposite the town of Victoria. There is deep water for a man-of-war within a cable's length of the shore. The harbour lies between the mountains of Hong Kong and those of the mainland; yet is exposed to the violence of typhoons. The northern side of the island is traversed by a ridge of mountains which vary in height from 500 feet to upwards of 1000 feet. They present a steep declivity towards the coast, and their base approaches nearly to the edge of the sea. Mount Victoria is said to be 1827 feet high, and Mount Gough 1575 feet. These two mountains immediately overlook the town and harbour of Victoria. The elevation of Mount Parker, at the other or eastern end of the island, is said to be 1711 feet. The mountains furnish a supply of excellent granite for building; and there are numerous quarries which are skillfully worked by Chinese labourers. The southern side of the island is much less rugged. The land suitable for cultivation is small, and chiefly in one valley. Deep ravines extend from the interior towards the sea, and furnish a constant supply of good water. The mean temperature of Hong Kong in July is 88°. In October, November, and December the variations of the temperature are often from 10 to 20 degrees in the course of 24 hours. The northern side of the island is fully exposed to the north-western monsoon during the winter season. In the hot season the rain falls in torrents, and this is succeeded by a hot unclouded sun, which acts upon the undrained parts of the surface and creates malaria. The south side of the island enjoys the benefits of the south-western monsoon, and is healthier than the northern side; but it is destitute of a harbour of sufficient extent. An excellent road round the island has been constructed by the government at an expense of about 20,000*l.*—in many places it has been cut through granite rocks.

Hong Kong was taken possession of by the British during the war with China. By the Treaty of Nanking, signed August 30th 1842, it was ceded in perpetuity to Great Britain. On the 26th of June 1843 Hong Kong was regularly constituted a British colony. It is what is called a crown colony, that is, it has no legislative assembly, but is governed by orders from the Colonial Office at home. There is a legislative and executive council to aid the governor with assistance and advice. The governor, as superintendent of trade, is head of the consular establishments at the five ports opened in pursuance of the Treaty of Nanking. The offices of the government are at Victoria. There are a chief justice and an attorney-general, with other law-officers, and the usual departments of a colonial administration. All grave offences committed by British subjects must be tried at Hong Kong. The civil, judicial, and ecclesiastical establishments cost 28,415*l.* 2*s.* 10*d.* in 1852; the military expenditure amounted to 50,393*l.* The total revenue of the colony for the year ending March 31st 1853 was 23,432*l.* 13*s.* 5*d.*

The population on December 31st 1852 was 37,058, of whom 35,517 were Chinese. The inhabitants are engaged in trade, in agriculture, in fishing, and in stone-cutting. The number of boats anchored or plying in the harbour and bays of Hong Kong on December 31st 1852 was 1799, on board of which were 7154 men and 4675 women and children. The population of the city of Victoria was 14,671, of whom 11,283 were males and 3388 females. There are in Victoria an English Episcopal church, a Roman Catholic church, and four places of worship for Dissenters. The island contains also a Mohammedan mosque, and three Chinese temples. The city contains regular streets and bazaars for the Chinese, numerous large store-houses, substantial wharfs and jetties, two European hotels and billiard rooms, and various public buildings. A new government house is in course of erection. In consequence of the limited space between the beach and the base of the mountains, the town necessarily stretches in a line, which extends about three miles in front of the harbour. The town of Aberdeen and its vicinity had a population of 1208 in 1852. The town of Stanley and its vicinity had a population of 1617. At Aberdeen is a school for Chinese supported by government; and at Stanley are three schools, one connected with the Baptist Mission, one supported by the inhabitants, and the third supported by the government. The number of native schools in Hong Kong supported by government is 5, with 134 scholars in all. The number of Chinese coasting vessels which visited Hong Kong harbour during 1852 was 492; the number of salt-junks was 310, importing 173,000 piculs of salt. The number of vessels which arrived during the year was 1097, of an aggregate burden of 433,383 tons. A large amount of specie is remitted to India, chiefly in return for opium, which is sold to the Chinese along the coast. By the Peninsular and Oriental Company's steamers alone specie to the amount of more than a million and a quarter of pounds sterling was remitted to India in 1852. Much is sent also by other vessels, of which no account is taken, as the port is entirely free.

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HONITON, Devonshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Honiton, is pleasantly situated on an eminence on the Great Western road, near the left bank of the river Otter, in 50° 48' N. lat., 3° 11' W. long., distant 16 miles N.N.E. from Exeter, and 143 miles W.N.W. from London. The population of the parish, which constitutes also the municipal and the parliamentary borough of Honiton, was 3427 in 1851. The borough is governed by a port-reeve, and returns two members to the Imperial Parliament. The living is a rectory in the archdeaconry and diocese of Exeter. Honiton Poor-Law Union contains 28 parishes and townships, with an area of 83,950 acres, and a population in 1851 of 23,798.

The town consists chiefly of one broad handsome street, running east and west, with a shorter street crossing it at right angles. Through the main street runs a small transparent stream, which supplies the inhabitants with water. The streets are well paved and lighted, and contain many good houses. The parish church, which stands on a hill about half a mile from the town, was originally a small chapel for mendicant friars. A screen of curious workmanship was erected about the year 1482 by Courtenay, bishop of Exeter. St. Paul's church, a gothic structure in the centre of the town, was erected in 1837. The Grammar school, founded in 1614, has a small income from endowment, and in 1850 had 17 scholars, of whom 5 were free. There are in the town a Free school, a Girls Industrial school, an hospital, and some parochial charities. The principal manufacture is that of lace, which is a much-admired and very beautiful fabric, and is designated 'Honiton lace,' from the name of the town in which it is chiefly made. In the neighbourhood of Honiton are extensive quarries. Markets are held on Tuesday, Thursday, and Saturday; a fair is held on the Wednesday following July 19th.

HOO, a hundred in the lathes of Aylesford, Kent, which has been constituted a Poor-Law Union. The hundred contains 6 parishes, with an area of 22,306 acres, and a population in 1851 of 2457; it is bounded N. and E. by the Thames, S. by the Medway, and W. by the hundred of Shamwell. Hoo Poor-Law Union contains 7 parishes, with an area of 20,862 acres, and a population in 1851 of 2840.

HOOGLY. [CALCUTTA; HINDUSTAN.]

HOORN. [HOLLAND.]

HOPE, CAPE OF GOOD. [CAPE OF GOOD HOPE.]

HORBURY. [YORKSHIRE.]

HORDLE. [HAMPSHIRE.]

HORNBY. [LANCASHIRE.]

HORNCASTLE, Lincolnshire, a market-town and the seat of a Poor-Law Union, is pleasantly situated at the foot of the Wolds, in 53° 12' N. lat., 0° 7' W. long., distant 21 miles E. by S. from Lincoln, and 134 miles N. from London. The population of the town in 1851 was 4921. The living is a vicarage in the archdeaconry and diocese of Lincoln. Horncastle Poor-Law Union contains 68 parishes and townships, with an area of 114,068 acres, and a population in 1851 of 24,961.

The town of Horncastle has been of late years much improved, and many of the houses are well built. The church is partly of the time of Henry VII., but the greater part has been rebuilt. There are chapels for Baptists, Independents, and Wesleyan Methodists, National and Infant schools, a mechanics institute, two libraries, and a savings bank. A county court is held in the town. Corn and wool are the principal articles of commerce. The market is held on Saturday: there are three fairs in the year; that held in August is among the largest horse-fairs in the kingdom. At Horncastle there are traces of a fortification in the form of a parallelogram, inclosing an area of 20 acres, and comprehending a considerable part of the modern town. Roman coins and other antiquities have been discovered in the vicinity.

HORNCHURCH. [ESSEX.]

HORNNDON-ON-THE-HILL. [ESSEX.]

HORNSEA. [YORKSHIRE.]

HORNSEY. [MIDDLESEX.]

HORNU. [HAINAULT.]

HORSFORTH. [YORKSHIRE.]

HORSHAM, Sussex, a market-town, parliamentary borough, and the seat of a Poor-Law Union, is situated on a feeder of the river Arun, in 51° 3' N. lat., 0° 19' W. long., distant 28 miles N.E. from Chichester, 36 miles S. by W. from London by road, and 37½ miles by the Brighton and South-Coast railway. The borough is governed by two bailiffs and a steward, and returns one member to the Imperial Parliament. The population of the borough in 1851 was 5947. The living is a vicarage in the archdeaconry and diocese of Chichester. Horsham Poor-Law Union contains 10 parishes and townships, with an area of 55,902 acres, and a population in 1851 of 14,017.

The town consists of two streets crossing each other at right angles, with an open space in the centre, occupied by the court-house, a handsome gothic structure, in which the spring assizes for Sussex were held from 1799 till 1830: the midsummer quarter sessions for West Sussex are still held in it. The town is lighted with gas. St. Mary's church is a spacious and elegant building, in the early English style, with a lofty tower, surmounted by a spire. There are also a district church, and places of worship for Roman Catholics

Wesleyan Methodists, Independents, Baptists, and Quakers. A corn-market is held on Saturday, and a poultry market on Monday. Yearly fairs are held April 5th, July 11th, November 17th, and 27th, and on the Monday before Whitsuntide. There are in the town a Grammar school, founded in 1532, which has an income from endowment, of 412*l.* a year, with houses for the masters, and had 60 scholars in 1852; British and Infant schools; a savings bank; and a literary and scientific institution. Horsham is a borough by prescription. Petty sessions are held here.

HOETA. [ASOREA.]

HORWICH. [LANGASHIRE.]

HOUGHTON-LE-SPRING, Durham, a village and the seat of a Poor-Law Union, is situated in 54° 50' N. lat., 1° 27' W. long.; distant 7 miles N.E. from Durham, 265 miles N. by W. from London by road, and 236 miles by the Great Northern and North of England railways. The population of the town of Houghton-le-Spring in 1851 was 3224. The living is a rectory in the archdeaconry and diocese of Durham. Houghton-le-Spring Poor-Law Union contains 16 townships, with an area of 14,041 acres, and a population in 1851 of 19,564.

The town of Houghton-le-Spring is irregular, and nearly half a mile long; it stands at the head of a fine vale, sheltered on the north and east by limestone hills. It contains several handsome buildings. Houghton Hall is a large mansion, built in the reign of Elizabeth or James I. The church is cruciform, with a square tower springing from the intersection of the transepts and nave. The church contains the monument of Bernard Gilpin, 'the Apostle of the North.' There are places of worship for Baptists, United Presbyterians, and Methodists; and National, Infant, and Free schools. The Keeper Grammar school, founded in 1574 by the exertions of Bernard Gilpin, has an income from endowment of about 150*l.* a year, and had 42 scholars in 1851. Extensive iron-works and numerous coal-mines in the vicinity give employment to many of the population.

HOUGHTON REGIS. [BEDFORDSHIRE.]

HOUNSLOW, Middlesex, a small town, formerly a market-town, in the parishes of Heston and Isleworth, is situated on the Great-Western coach-road, in 50° 28' N. lat., 0° 21' W. long., distant 12 miles W. by S. from London by road, and 13½ miles by the Windsor branch of the South-Western railway. The population of the town of Hounslow in 1851 was 3514. The living is a perpetual curacy in the archdeaconry of Middlesex and diocese of London. Hounslow consists chiefly of a street extending about a mile along the high-road; it is lighted with gas, and is irregularly paved. The church is a neat modern building, with 12 stone cupolas or spires, and a belfry, in the Italian style. The chapel of ease, which it replaced, had been the church of a priory, founded here in the 13th century. The Independents and Baptists have places of worship, and there are Subscription and Infant schools. The high-road from London to Southampton branches off at the west end of the town of Hounslow, proceeding to the south-west. Previous to the opening of the railways to Southampton and Bath, Hounslow possessed one of the most extensive posting businesses in England, having nearly 500 coaches passing through it every day. Hounslow Heath was until the present century notorious as the scene of numerous highway robberies. On many occasions there have been military encampments on the heath westward from the town; spacious military barracks and grounds for military exercises are still maintained. The Hounslow Heath gunpowder-mills are on a very large scale. The greater part of the Heath is now inclosed, and many villas have been built around the town. (Communication from Hounslow.)

HOUSSA. [SOODAN.]

HOUSTON. [TEXAS.]

HOWDEN, East Riding of Yorkshire, a market-town and the seat of a Poor-Law Union in the parish of Howden, is situated near the left bank of the river Ouse, in 53° 44' N. lat., 0° 52' W. long., distant 20 miles S.E. by S. from York, 180 miles N. by W. from London by road, and 192 miles by the Great Northern, and Selby and Hull railways. The population of the town of Howden in 1851 was 2235. The living is a vicarage in the archdeaconry of the East Riding and diocese of York. Howden Poor-Law Union contains 40 townships and chapelries, with an area of 67,121 acres, and a population in 1851 of 14,231.

Howden contains some good houses, and is lighted with gas. The church was formerly collegiate. The present parish church is a portion only of the old building; the remainder forms an extensive and beautiful ruin, which has a lofty and well-proportioned square tower rising from the centre. The chapter-house, which is octagonal, and contains thirty canopied seats, was erected in the 14th century. Near the town, and now used as a farm-house, are the remains of an ancient palace of the bishops of Durham. The town contains chapels for Independents, Wesleyan and Primitive Methodists, and Roman Catholics. The Endowed Grammar school was founded in Queen Elizabeth's reign: the school-house forms part of the structure of the church. Howden possesses a National school, a mechanics institute, and a savings bank. On the Ouse, which is about a mile from Howden, is a ferry, with a small harbour for boats, to accommodate the town. In the neighbourhood of the town are several large sacking manufactories. Flax-dressing, hat-making, brick- and tile-making, and tanning are carried on. Several corn-mills are in the vicinity. A county court

is held in the town. The weekly market is on Saturday: fairs for horses and cattle are held every alternate Tuesday, and an annual fair in April. The great horse fair generally lasts a fortnight before October 2nd, which is the principal day. This is considered the greatest horse fair in England. It is the principal source of supply of horses for the army; it is also resorted to by foreign as well as British dealers and breeders.

HOWTH. [DUBLIN, County of.]

HOXNE, a hundred in the county of Suffolk, which gives name to a Poor-Law Union. The hundred of Hoxne is bounded N. by the river Waveney, which forms here the boundary between Suffolk and Norfolk; S. by the hundred of Loes, E. by the hundreds of Blything and Wangford, and W. by the hundred of Hartismere. Hoxne hundred comprises 26 parishes, with an area of 56,625 acres, and a population in 1851 of 16,894. Hoxne Poor-Law Union contains 24 parishes, with an area of 53,036 acres, and a population in 1851 of 15,585.

HOYA. [HANOVER.]

HUDDERSFIELD, West Riding of Yorkshire, a manufacturing and market-town, parliamentary borough, and the seat of a Poor-Law Union, is situated on the slope and summit of a hill above the river Colne, in 53° 38' N. lat., 1° 47' W. long., 35 miles S.W. from York, 204 miles N.N.W. from London by the North-Western, and the Manchester Sheffield and Lincolnshire railways. The government of the town rests in a body of Improvement Commissioners. The parliamentary borough, which was created by the Reform Act, returns one member to the Imperial Parliament. The population of the borough in 1851 was 30,880. The living is a vicarage in the archdeaconry of Craven and diocese of Ripon. Huddersfield Poor-Law Union comprises 34 parishes and townships, with an area of 69,064 acres, and a population in 1851 of 123,843.

Huddersfield is one of the chief seats of the woollen manufactures, and has also some branches of the cotton manufacture. Its situation on the high road from Manchester to Leeds, and its supply of water-power, together with the immediate proximity of coal and building-stone, and the great facilities of conveyance afforded by abundant railway and canal communications, have contributed to its increased wealth and population. The greater part of the houses of Huddersfield are neatly built of a light-coloured stone. The streets are well paved, and are lighted with gas. Considerable improvements have been recently effected in widening the streets and making the approaches and principal thoroughfares worthy of the increasing importance of the town. The market-place is a large area, surrounded with good houses and shops. The most important industrial products of Huddersfield are broad and narrow woollen cloths, serges, kerseymeres, cords, and a great variety of fancy goods, such as shawls and waistcoatings, composed of worsted, silk, and cotton. A commodious cloth-hall was erected by Sir John Ramsden, the proprietor of the town, in 1765, and enlarged by his son in 1780. This edifice is circular, two stories high, and 880 yards in circumference. It has an avenue of stalls for the sale of woollen cloths, dividing the interior into two semicircles. The main building is divided on the one side into separate compartments or shops, and on the other into open stalls. Upwards of 600 manufacturers attend this hall each market day. The doors are opened in the morning and closed at half-past twelve: they are again opened at three in the afternoon for the removal of cloth. Above the entrance is a cupola with a clock and bell for regulating the time allowed for business.

The parish church of St. Peter's was rebuilt in 1837; the new church, which is in the perpendicular style, cost about 10,000*l.* The floor of the old church is now the floor of the crypt, under the new one. Trinity church, erected in 1819 at a cost of 12,000*l.*, is in the pointed gothic style. St. Paul's church, in the early English style, was built by the parliamentary commissioners in 1831. Besides these, in March 1851, there were 4 places of worship for Episcopalians, 9 for Methodists, 2 for Independents, 2 for Baptists, and 1 each for Quakers, Roman Catholics, Unitarians, and Mormons. The total number of sittings provided was 15,787. The Methodist chapel in Queen-street is one of the largest belonging to the connexion in England. The Roman Catholic church is a handsome structure. The number of public day-schools in the borough in March 1851 was 17, with 2932 scholars; private schools 30, with 1101 scholars. The number of Sunday schools was 21, with 4634 scholars. A Proprietary College, founded in 1838, is in connection with London University, and had 190 scholars in 1853. There is also a Collegiate school under the superintendence of members of the Established Church. The Philosophical Hall, a Grecian building, completed in 1837, belongs to the Philosophical Society, and is used for important public meetings. There is a large mechanics institute. The town possesses subscription libraries, a commercial news-room, and a savings bank. The water-works, about four miles west from the town, are admirably constructed. The infirmary, a large and elegant stone-building of the Doric order, situated on the Halifax road, is supported mainly by voluntary contributions. Lockwood Spa baths are about half a mile from the town, in the sheltered valley of the Holme. The buildings are elegant; the waters are strongly sulphureous; the baths comprise cold, tepid, warm, vapour, and shower baths.

There are many streams in the neighbourhood; the Holme and

Colme unite in the town and fall into the Calder 3 miles below it. Upon these streams a number of mills are erected for the manufacture of woollens, and for fulling and washing the cloths. The hills about the town are cultivated to their summits, and produce excellent crops. Many handsome residences are built in the vicinity. Markets are held weekly on Tuesday, and fairs for cattle and horses on March 31st, May 14th, and October 4th. There are several breweries, chemical factories, dye-houses, &c. A county court is held in the town.

HUDSON RIVER. [NEW YORK.]

HUDSON'S BAY TERRITORIES. Hudson's Bay is an extensive mediterranean sea on the eastern side of North America. It is connected with the Atlantic Ocean by Hudson's Strait, which extends about 360 miles from east-south-east to west-north-west, and is from 90 to 100 miles wide. The surface of Hudson's Bay is greater than that of any of the inland seas of the Old Continent, the Mediterranean only excepted. Its southern part is called James's Bay. From the most southern corner of James's Bay to Repulse Bay, which may be considered as the most northern point of Hudson's Bay, is upwards of 1000 miles (between 51° and 66° N. lat.). It is more than 500 miles across in its widest part. The coasts are generally high, rocky, and rugged, and in many places precipitous, except along the south-western shores between Cape Henrietta Maria and Cape Churchill, where they are generally low and swampy, and frequently exhibit extensive sands. The depth of water in the middle of the bay has been taken at 150 fathoms, but it is probably greater. The northern part of Hudson's Bay is occupied by Southampton Island, which is formed of high rocky masses, and seems to consist of numerous smaller islands, separated from one another by straits, which however are always closed by ice. It does not appear to be inhabited.

The countries which inclose Hudson's Bay on all sides constitute by far the greatest portion of the British dominions in North America; but they are not known under any one general denomination, and may therefore be described here under the name of the 'Hudson's Bay Territories.' These countries extend between 49° and 70° N. lat., and from Cape Charles in Labrador (near 55° W. long.) to the Rocky Mountains and the mouth of the river Clarence at Demarcation Point, between 141° and 142° W. long. The area exceeds 2,000,000 square miles.

This immense country may be divided into four natural regions. The most eastern is the sterile region, which lies along the shores of the sea, and extends far inland. East of Hudson's Bay it extends as far as the Belle Isle Strait, and includes the whole of Labrador. That portion of it which lies west of Hudson's Bay is called the 'Barren Grounds.' The rein-deer and the musk-ox are abundant, but there are few fur-bearing animals. This district is inhabited by Esquimaux and a few forlorn families of Indians. The winters are longer and more severe than in Greenland in the same latitude.

The second region extends on both shores of James's Bay, and along the southern shores of Hudson's Bay, as far westward as Cape Churchill. It extends inland to the ridge which forms the northern boundary of Canada, and to the lakes Superior, Winnipeg, Deer, and Wollaston. Along the shores and several miles inland it is mostly occupied by swampy tracts, which are separated from one another by comparatively narrow and dry but low ridges. Farther inland the country is generally well wooded, and produces the fur-bearing animals in great abundance.

To the west of the wooded region is the savannah region, which extends to the foot of the Rocky Mountains, and northward to the lake of Athabasca and the Peace River. Its surface stretches out in extensive plains, intersected only by the beds of several rivers, which are considerably below the plains. In the bottoms, along the rivers, trees grow abundantly. The soil of the plains is rather sandy and dry, and entirely destitute of wood, but supports a thick grassy sward, on which numerous herds of buffaloes and several kinds of deer find abundant pasture.

The fourth region is the valley of the Mackenzie River. It comprehends the country between the sterile region and the Rocky Mountains north of Lake Athabasca. The river generally runs through a bottom, rarely more than a few miles wide, whose alluvial soil is in many places covered with trees of moderate height. Towards the Barren Grounds the surface rises rapidly into high hills, which in many places attain 1000 and even 1500 feet of elevation, and frequently run parallel to the course of the river. White spruce-trees grow at the base of these hills as far as 68° 30' N. lat., north of which they become very stunted and straggling, and soon disappear. The delta of the Mackenzie, which is 90 miles in length (from 67° 40' to 69° 10' N. lat.), and from 15 to 40 miles in width, is formed by flat alluvial islands, which divide the various branches of the river.

Numerous large rivers traverse this extensive country. The most important of those on the east side of Hudson's Bay and James's Bay may be here named. These are—Great Whale River, East Main River, Rupert's River, and Harrecannane River. Most of the rivers on the east, like those in the south and west, issue from, or in some part of their course expand into lakes. Two very important rivers, on account of their situation, are the *Moose* River and its affluent the *Abbittobe*. Both issue from lakes situated on the high ground which separates Canada from the territories of the Hudson's Bay Company, and at no great distance from the upper branches of the *Ottawa*; and they are

accordingly used as the most convenient means of communication between both countries. The *Abbittobe* Lake, which may be considered as the source of the river, is about 60 miles long, and somewhat less than 20 miles broad. The river, which issues from it, runs west, but afterwards declines to the north, falling into the *Moose* River after a course of about 200 miles. The *Moose* River itself rises about 60 miles from the shores of Lake Superior, and falls into James's Bay after a course of about 230 miles.

Between the mouth of the *Moose* River and Cape Churchill are the embouchures of the *Albany* River, the *Severn*, the *Hayes* River, and the *Nelson* River. The *Albany* River runs about 500 miles, and the *Severn* about 250 miles in a straight line. *Hayes* River runs about 220 miles. About five miles from its mouth, on its west bank, stands Fort York, the principal settlement of the Hudson's Bay Company in these countries.

The *Nelson* River is only inferior to the *Mackenzie*; its remoter branches rise in the Rocky Mountains. All the waters which descend from the eastern declivity of that range between 47° and 53° N. lat., unite in two large rivers, the southern and the northern branch of the *Saskatchewan*. Both branches unite, about 420 miles from their source, below Carlton House, and the united river falls into Lake *Winnipeg* after a straight course of above 200 miles more. Lake *Winnipeg* extends from north-north-west to south-south-east between 50° 30' and 53° 50' N. lat., 96° and 99° 25' W. long. It is about 240 miles long, and its breadth varies from 5 to 50 miles. West of it are the two lakes, *Winnipegosis* and *Manitoba*, which together occupy in length nearly the same extent as Lake *Winnipeg*. They are united by the *Waterhen* River, which does not exceed 20 miles in length, and they discharge their waters into *Winnipeg* Lake by *St. Martin's* Lake and *Dauphin* River. *Winnipeg* Lake has its surplus waters carried off by *Nelson* River, which issues from the northern extremity of the lake, and after expanding several times into lakes, empties itself into Hudson's Bay, near the mouth of *Hayes* River, after a course of 350 miles in a straight line. The *Churchill* River, called in its upper course the *Mississippi* and *English* River, rises in *Methye* Lake, nearly 500 miles from its mouth in a direct line, but probably more than 700 miles along the windings of the river. It enters Hudson's Bay west of Cape Churchill. In its course it forms several lakes, on the shore of one of which is *Fort Nelson*. At the mouth of the river is *Fort Churchill*.

The largest river of this country is the *Mackenzie*. Its most southern branch is the *Athabasca* River, which rises on the eastern declivity of *Mount Bronn*, and falls into the western portion of *Athabasca* Lake. [ATHABASCA.] The river which issues from the north-western extremity of the lake is called *Stone* River, but at its confluence with *Peace* River it takes the name of *Slave* River. *Peace* River rises on the western side of the eastern range of the Rocky Mountains, within 300 yards of the *Tacootchesse*, or *Frazer* River, which falls into the Pacific. Within the mountains it is a large stream navigable for boats; it afterwards makes its way through a narrow gorge bounded by lofty mountains covered with perpetual snow. Through the plains it flows in a direct line for more than 300 miles, when it unites with *Stone* River, and under the name of *Slave* River flows first north and then north-by-west to *Great Slave* Lake. This lake extends between 109° and 117° 30' W. long., or about 250 miles from east to west, with an average breadth of 50 miles. Its total area is more than 12,000 miles.

From the north-western corner of the *Great Slave* Lake issues the *Mackenzie* River, which varies in breadth from one to three miles, except in a few places where it is narrowed by rocky hills. It flows first nearly west, declining by degrees to the west-north-west, till it meets *Mountain* River, now more generally called the southern branch of the *Mackenzie*. The remaining course of the *Mackenzie* is north-by-west to the Arctic Ocean, which it enters in 69° 10' N. lat. by several mouths. The division of the main stream into branches commences at 67° 40' N. lat.; the several mouths of these branches are spread over a space of about 40 miles along the shores of the Arctic Ocean. The most western of these branches is formed by the junction of the *Peel* River with one of the minor streams sent off by the *Mackenzie*. *Peel* River rises in about 64° N. lat., 130° W. long., and has a course of about 200 miles before uniting with the branch of the *Mackenzie*. Near 60° N. lat. the *Mackenzie* receives the *Great Bear* Lake River, which brings down the surplus waters of the *Great Bear* Lake. The form of the *Great Bear* Lake is very irregular; its area is about 8000 square miles: it lies between 65° and 67° N. lat., 117° 30' and 123° W. long. *Mackenzie* River, including the *Athabasca* branch, traverses 15 degrees of latitude, and its whole course has been estimated at 2000 miles. *Coppermine* River rises on the western border of the *Barren* Grounds, and finds its way to the Arctic Ocean after a course of about 200 miles. [COPPERMINE RIVER.] About midway between the source of the *Coppermine* River and the head of *Chesterfield* Inlet in Hudson's Bay rises *Back* River, discovered in 1834 by *Captain Back*, who descended it from 108° W. long. to its mouth. In its north-eastern course of more than 300 miles it forms several lakes. Its mouth is in 67° 15' N. lat., and between 95° and 96° W. long.

The climate of the sterile region is much colder than *Greenland* under the same latitude. At *Winter* Island (66° 11' N. lat., 83° 30' W. long.) the mean annual temperature does not exceed 7° Fahrenheit;

the maximum of heat observed is 54°, and the minimum -42°. At Fort Franklin, which is about 230 feet above the sea, and only one degree farther south (65° 12' N. lat., 132° 13' W. long.), but situated in the valley of the Mackenzie, the mean annual temperature is 17°, the maximum of heat 80°, and the minimum -58°. The mean annual temperature at Fort Chippewa, on the banks of Lake Athabasca (58° 43' N. lat.) does not rise above the freezing point, being 30°.

The wealth of the country consists in its animals, particularly rein-deer, musk-ox, moose-deer or elk, bears, wolves, foxes, beavers, otters, and raccoons, which are killed on account of their flesh or for their skins. Water-fowl are very numerous, and the lakes contain an abundant supply of fish.

The native tribes consist of Esquimaux and Indians. The Esquimaux occupy nearly the whole of the sterile region on both sides of Hudson's Bay, and the Indians wander about in the other regions. The southern tribes of the Indians belong to the Crees, but the northern seem to have sprung from another stock. They are divided into small tribes, rarely consisting of a hundred families, and yet each tribe occupies an immense tract of country. As they mainly rely for their subsistence on the produce of the chase, they are frequently exposed to starvation, which diminishes their numbers, or at least prevents their increase. The Europeans in the territory may amount to some thousands. They are either settled in the establishments of the Hudson's Bay Company for the purpose of receiving the furs and forwarding them to the places of embarkation, or they travel through these countries for the purpose of collecting them.

The *North-Western Territory* is a designation which may be applied to that portion of the British possessions which lies to the west of the Rocky Mountains. In the North-Western Territory the Rocky Mountains form two ranges nearly parallel to each other and to the coast, and from 80 to 100 miles apart. The western range is much the lower; the eastern range has some summits which attain an elevation of from 15,000 to 16,000 feet above the level of the sea. Several rivers rise between the two ranges. Frazer River has its sources in the western range, runs southward about 500 miles, and falls into Juan de Fuca Strait. Its course is rapid, but the river is navigable for canoes except where the navigation is interrupted by rapids.

Along the coast the country is mountainous, and opposite Vancouver Island this mountainous character is maintained over a width of about 80 miles, from the mouth of the Frazer River to Smith's Inlet, a distance of about 200 miles. The declivities of the mountains reach the shores of Queen Charlotte Sound, which separates Vancouver Island from the continent. Farther north the mountain groups are more isolated, the breaks being occupied by valleys and inlets, through which numerous streams discharge their abundant waters. The shores are generally high, and rise with a steep ascent frequently to an altitude of from 300 to 700 feet. The climate in the valleys and inlets along the coast is mild and moist, and the vegetation vigorous. The country farther inland, extending to the declivities of the Rocky Mountains, and occupying a width of about 100 miles, is an uneven plain crossed in all directions by rocky ridges of moderate elevation. There are many lakes, some of which are large, and the climate is very humid. Forests of timber-trees of large growth, and dense masses of underwood, cover nearly the whole country. The fur-bearing animals are very numerous, especially beavers and otters. The moose-deer is also abundant. Seals are very common along the whole of the coast. The Hudson's Bay Company have stations on Frazer River and elsewhere in the interior. Salmon, trout, and other fish abound in the rivers, and the natives obtain a great part of their subsistence by fishing. They live in houses, and seem to enjoy more comfort than the tribes east of the Rocky Mountains.

The hunters and traders employed by the Hudson's Bay Company generally cross the Rocky Mountains near the sources of Peace River. In Queen Charlotte Island, which is about 100 miles north from Vancouver Island, gold was discovered to a small extent in 1852. Vancouver Island has been granted by the British government to the Hudson's Bay Company, under certain limitations, for purposes of colonisation. [VANCOUVER ISLAND.]

Labrador was discovered by John Cabot in 1479, and it is probable that his son Sebastian entered and partly surveyed Hudson's Bay in 1512. It was re-discovered by Hudson in 1610. Meanwhile the French had colonised Canada, and thence carried on an active fur-trade with the Indians inhabiting the countries west of Hudson's Bay. In 1668 Prince Rupert sent a vessel, the party on board of which erected Fort Charles on the bank of Rupert's River in James's Bay.

The Hudson's Bay Company, established for the express purpose of procuring furs, was incorporated by Charles II., May 2nd, 1670. This company founded several establishments, and has ever since prosecuted the trade under the direction of a governor, deputy-governor, and committee of management, chosen from among the proprietors of the joint-stock, and resident in London. The company's charter never having been specially confirmed by Act of Parliament, another company entitled the North-West Company was established in 1783 by some parties who considered that all British subjects were entitled to trade in those regions. The jealousy and hostility which arose between the agents of the Hudson's Bay Company and the North-West Company impeded the operations of both parties for a series of

years. In 1821 a junction of the two companies was effected. The terms of the original charter give to the "governor and company, and their successors, the sole trade and commerce of all those seas, straits, bays, rivers, lakes, creeks, and sounds in whatsoever latitude they shall be, that lie within the entrance of the straits commonly called Hudson's Straits, together with all the lands and territories upon the countries, coasts, and confines of the seas, bays, lakes, rivers, creeks, and sounds aforesaid, that are not already possessed by or granted to any of our subjects, or possessed by the subjects of any other Christian prince or state, with the fishing of all sorts of fish, whales, and sturgeons, and all other royal fishes, in the seas, bays," &c. &c.; and the territory was to be holden of the crown "as of our manor of East Greenwich, in our county of Kent, in free and common socage, and not in capite, or by knight's service; yielding and paying yearly to us, our heirs and successors, for the same, two elks and two black beavers, whensoever and as often as we, our heirs and successors, shall happen to enter into the said countries, territories, and regions hereby granted." Under this grant the company state that they "have always claimed and exercised dominion as absolute proprietors of the soil in the territories understood to be embraced by the terms of the grant, and which are more particularly defined in" an "accompanying map, and they have also claimed and enjoyed the exclusive right of trading in those territories." These territories from 65° to 55° N. lat. reach on the west to 105° W. long.; south of 55° N. lat. the boundary stretches in a south-western direction to the Columbia River, about 116° W. long.; the territory extends on the south to 49° N. lat. the boundary-line of the United States, in the western part, and to Canada in the eastern part. Over the remaining part of the continent lying east of the Rocky Mountains, and extending north to the Arctic Ocean, the Hudson's Bay Company obtained by royal licence, May 13th, 1838, the exclusive privilege of trading for a period of twenty-one years from that date. This right of exclusive trading also includes the British territory westward of the Rocky Mountains. The trade of the Hudson's Bay Company thus extends to the Pacific Ocean, and to 141° W. long., where the Russian territory commences. The principal establishment of the company west of the Rocky Mountains is at Fort Vancouver, on the north bank of the Columbia River, 90 miles from the sea, and at the head of ship-navigation. Fort Vancouver consists of an oblong picketed inclosure, 600 feet long by 200 feet broad, containing dwellings, workshops, and granaries, surrounded by an open village, large farms, prairies, and woods, belonging to the company. (Mackenzie, *Voyages from Montreal to the Frozen and Pacific Ocean*; Franklin, *First and Second Journey to the Polar Sea*; Richardson, *Fauna Boreali-Americana*; Captain Back, in the *London Geographical Journal*; *Parliamentary Papers*.)

HUDSON'S BAY AND HUDSON'S STRAIT. [HUDSON'S BAY TERRITORIES.]

HUE. [COCHIN CHINA.]

HUELGOAT. [FINISTÈRE.]

HUESCA. [ARAGON.]

HUESCAR. [GRANADA.]

HUIS, L'. [AIN.]

HULL, or KINGSTON-UPON-HULL, in the East Riding of Yorkshire, a port, a municipal and a parliamentary borough, and a county in itself, is situated in 53° 44' N. lat., 0° 10' W. long., on the left bank of the Humber, and in the angle between this river and the Hull; 53 miles E. from York, and 174 miles N. from London by railway. The municipal borough is governed by 14 aldermen, one of whom is mayor, and 42 town councillors. The population of the parliamentary borough in 1851 was 84,690. The management of the poor of Hull is regulated by a local Act.

Previous to 1296 the town bore the name of Wyke-upon-Hull. For more than a century before this date the town had a good trade in the export of wools and leather, and in the import of wines. In 1296 the name was changed to Kyngeston-super-Hull, by Edward I., who, seeing the natural advantages of the place, had purchased it, and then began the formation of the harbour—thus laying the foundation of the permanent prosperity of the town. From this time the town improved rapidly. In the 27th of Edward I. the harbour was completed, and the town received a charter constituting it a free borough. In the next year a mint was established here by royal ordinance; and in 1316 a ferry was established across the Humber between Barton and Hull for the conveyance of passengers, cattle, and goods. In 1326 the fortifications were finished, and in the reign of Edward III. the town supplied 16 ships and 500 men for the invasion of France, whilst London upon the same occasion furnished only 25 ships and 700 men. At the commencement of the great civil war the magazines of Hull were stored with a large quantity of arms, which the Parliament desired to transfer to London. Charles I. sent the earl of Northumberland to take possession of the town in his name, but the authorities refused to admit him, and they received Sir John Hotham, who was sent as governor by the Parliament. The king soon after (April 23, 1642) besieged the town, but was repulsed after repeated sanguinary contests. During the short period of excitement which attended the downfall of the Stuarts, the town, fort, and citadel were in the hands of the Roman Catholic party. But measures were concerted and acted upon with such decision and promptitude that the governor was taken in his quarters before he had even heard of such

a design. The anniversary of this event is still celebrated by the name of 'the town-taking day.'

Hull is situated in a low level plain about 20 miles from the mouth of the Humber, and is protected in some places from the overflow of the tides by embankments, and in others by an artificial raising of the surface. The general level of the surface of the streets varies from 6 inches to 6 feet below the high-water mark of spring tides; the outfall of whatever drainage there is in the town is interfered with by the flow of the tide, which in all cases has to be shut out by flood-gates. Baths and washhouses have been in operation for some years. The town is lighted with gas.

The oldest and most densely inhabited part of Hull (Old Kingston) is now completely insulated by the Humber on the south, the Hull on the east, and on the west and north by a chain of docks and basins, which occupy the site of the old fortifications. In Souleates parish, which extends northward from the Old Dock, there are some handsome streets, most of which have been laid out within the present century. Still more modern is that portion of the town called Myton, which lies westward from the Humber Dock. A part of the town built along the left or Holderness bank of the river Hull, and called the Garrison-side, is connected with Hull by a bridge of four arches. Of the old fortifications there remain only two forts, by which and several batteries on the left bank of the river Hull the town and harbour are defended. The citadel, which stands on a triangular piece of ground between the Humber, the Hull, and the new Victoria Docks, and has a battery of 21 guns, commands the entrance of the Hull roads and the Humber. It is surrounded by a rampart and ditch, and is occupied by a regular garrison.

The public buildings connected with the trade and commerce of Hull are the custom-house, the dock-office, the pilot-office, the excise-office, the exchange, the chamber of commerce, the post-office, the stamp-office, the corn-exchange, and several banks. The upper part of the pilot-office is used as a telegraph station for signalling vessels in the Humber. The mansion-house is a plain brick edifice, at the rear of which is a court-house: the other law-courts are the county court and the court of venire, in which the recorder presides, for determining civil causes, and which has a jurisdiction over the town and county of Hull. The new jail and house of correction, in Kingston-street on the Humber bank, cost 30,000*l.* The public rooms in Jarratt-street form a handsome structure, and contain a great variety of offices, besides baths, assembly-rooms, a lecture-room, and a well stored museum. The places of amusement are the Victoria Concert Rooms, the Theatre Royal, and the Queen's Theatre. A neat equestrian statue of William III. is in the market-place. The Wilberforce Memorial at the end of Junction-street is a fine fluted Doric column, placed on a square pedestal, and surmounted by a statue of Wilberforce, who was a native of the town. The column with the statue is 80 feet high. There are botanic and zoological gardens in the western outskirts of the town.

The number of places of worship in the borough in March 1851 was 51, containing 36,177 sittings. Of these places of worship 15 belonged to the Church of England, 15 to four sections of Methodists, 8 to Independents, and 4 to Baptists. The number of Sunday schools was 39, with 8112 scholars. Of these Sunday schools 17 were under the superintendence of Methodists, 10 were connected with the Church of England, and 5 with Independents. There were 4 literary institutes, with about 1000 members, and with libraries comprising about 4200 volumes.

Among the educational charities are—the Trinity House school for 36 boys, who receive a nautical education; Cogan's Charity school for 40 girls; and a Roman Catholic Free school. The Free Grammar school, the school-room of which, rebuilt in 1578, is said to be one of the best in England, was founded by Bishop Alcock, a native of Beverley, in 1438. In 1853 it had 90 scholars. The Hull College, a proprietary school founded in 1838, is a handsome Grecian building. The total number of day-schools in the borough in March 1851 was 244, of which 27 were public schools, with 5090 scholars, and 217 were private schools, with 5119 scholars. The general infirmary was commenced in 1782; two wings were added to it in 1840. There are also two dispensaries, a lunatic asylum, and the Hull and East Riding School of Medicine and Anatomy.

The Holy Trinity church is the most ancient in Hull, and is an elegant cruciform structure, with a lofty and beautiful tower springing from the intersection. The nave and chancel have a total length of 272 feet; the breadth of the nave is 172 feet; of the chancel 70 feet; and the length of the transept is 96 feet. The transept is said to be the oldest brick-building, not Roman, in England. The chancel is in the decorated style, and was erected in 1270; the tower was built in 1312; and the nave, which is in the perpendicular style, dates from 1492.

The Charter-house is an endowed institution, which has 57 apartments for the residence of as many poor persons; the Trinity-house, founded in 1366 for the relief of decayed seamen, and the widows of seamen, now occupies handsome and extensive premises in Trinity-lane, with apartments for 12 elder brethren, and a number, not limited, of younger brethren, a separate suite of rooms for widows, a marine school, and a marine hospital.

In former times the chief articles exported from Hull were wool,

woolbells, and leather: the imports were wine, and timber. At the present time the coasting-trade is an important branch of the shipping business of the port. For many years there has been extensive commercial intercourse between Hull and the ports in the Baltic, with the north of Germany, Holland, Belgium, and Denmark. The chief articles imported are timber, corn, iron, wool, flax, hemp, tallow, hides, pitch, tar, rosin, bones, horn, &c.; the exports are principally hardware, and woollen and cotton goods. The industrial establishments of Hull include ship-building yards, rope-walks, and manufactories of canvass, chains, chain-cables, and steam machinery; corn-mills, bone-mills, colour-mills, crushing and oil-mills; steam saw-mills; chemical factories, potteries, tan-yards, sugar-refineries, flax- and cotton-mills, and an organ factory. The Greenland fishery owed its revival about 1766 and its subsequent importance to the mercantile enterprise of Hull, but since 1819 the number of ships engaged in this fishery has been gradually diminishing, and few, if any ships are now sent from this port to Greenland. Of late years Hull has become a principal steam-packet station. Ocean steamers ply regularly between Hull and Newcastle, Leith, Aberdeen, and Yarmouth; also to Antwerp, Bremen, Copenhagen, Hamburg, Rötterdam, and St. Petersburg (?). River-packets and steam-tugs ply between Hull and Gainsborough, Selby, Goole, York, Barton, New Holland, on the opposite bank of the Humber, Thorne, and Grimsby. The facilities of communication by roads and water are numerous; and the town is connected by railways with all parts of the kingdom.

The Old Dock, formed in 1775, is 1703 feet long, 254 feet broad, and 23 feet deep; the wharfs and quays cover an area of above 13 acres. The entrance by the Old Dock basin is 211 feet long and 80 feet broad. The Humber Dock, at the west part of the town, completed in 1809, is 914 feet long, 342 feet broad, and 31 feet deep; the area of the wharfs exceeds 10 acres. The basin by which it opens into the Humber is 434 feet long and 253 feet broad. The Junction Dock, completed in 1829, connects the Old Dock and the Humber Dock. Its length is 645 feet, breadth 407 feet; the locks are 120 feet long, 36 feet broad, and 25 feet deep; the draw-bridges are each 24 feet wide. The Railway Dock near the terminus of the Hull and Selby railway, and the Victoria Dock to the east of the citadel have been recently constructed. The Victoria Dock is one of the largest docks in the town. The amount of customs duties received at the port during 1851 was 353,623*l.* 10*s.* 2*d.* The number and tonnage of vessels registered at the port of Hull on the 31st December 1853 were as follows:—Sailing-vessels, 228 under 50 tons, tonnage 8223; above 50 tons, 223, tonnage 48,438; steam-vessels, 12 under 50 tons, tonnage 291; 30 above 50 tons, tonnage 7418. The number and tonnage of vessels which entered and cleared during 1853 were:—Coastwise, sailing-vessels, inwards, 772, tonnage 56,133; outwards, 854, tonnage 73,847; steam-vessels, inwards, 596, tonnage 95,629; outwards, 603, tonnage 97,693.

The ships and tonnage (inclusive of both sailing- and steam-vessels) employed in the colonial and foreign trade of the port of Hull for the years 1851, 1852, and 1853, are presented in the following table:—

Year.	Inwards.				Outwards.			
	British.		Foreign.		British.		Foreign.	
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
1851	1185	295,859	1483	212,709	843	235,781	1081	173,368
1852	1087	285,957	1220	175,775	758	223,260	950	139,193
1853	1107	285,641	1753	269,212	776	217,411	1285	190,591

The declared value of British and Irish produce exported from Hull in 1851 was 10,126,421*l.*; in 1852 it was 9,894,253*l.*; in 1853 it was 10,788,790*l.*

The market-days are Tuesday and Friday: annual fairs are held on the second Tuesday in April, on the 11th of October for horses, horned cattle, &c., and on the following day for toys, pedlery, &c.

(Communication from Hull; Parliamentary Papers.)

HUMBER. [YORKSHIRE.]

HUNDSRÜCK. [GERMANY.]

HÜNFELD. [FULDA.]

HUNGARY. This name has been used sometimes in a more general, sometimes in a more limited sense. Under the denomination of Hungarian Hereditary Dominions were comprehended Hungary proper, Slavonia, Croatia, Transylvania, Dalmatia, and the Military Frontier. The kingdom of Hungary united under the same civil government, as determined after the peace in 1815, comprehended Hungary, Slavonia, and Croatia, to the last of which the circle of Carlsstadt (which previously made part of Illyria), and the Hungarian Littoral, Küstenland, or sea-coast, were annexed in 1822. After the revolutionary movements of 1848-49, Croatia, Slavonia, and the Banat were separated from Hungary: the Küstenland had been previously formed into a distinct district. The kingdom, within its present limits, is bounded N. by Moravia, Silesia, and Galicia; E. by Transylvania and the Bukowine; S. by Serbia and Slavonia; and W. by Styria, Lower Austria, and Moravia. It extends from 16° to 25° 3'

E. long., and from 46° to 49° 34' N. lat. The kingdom is now divided into five districts, which are named from the chief town in each, and of which the area and population, according to the last census, are as follows:—

Districts.	Area in English Square Miles.	Population in 1850-51.
Presburg	13,310	1,612,203
Kaschau	15,210	1,410,463
Grosswardeln	13,619	1,459,119
Buda-Pesth	13,532	1,599,819
Oedenburg	13,664	1,782,658
Total	69,325	7,864,262

Hungary is on all sides separated from its neighbours by natural boundaries. From Presburg to Skalitz it is bounded by the river March, and from Skalitz, by the Carpathian Mountains, which run in a north-east direction to Mount Trojatska, thence eastward, near the frontier of Galicia, and afterwards to the south-east to the vicinity of the Buckowina. From the border of Transylvania the frontier runs, with many great bends, first to the west, and then to the south, to Maros near Soborsin. On the south, from Soborsin to its junction with the Theiss at Szegedin it is divided from the Banat by the Maros, and thence by the Theiss to its junction with the Danube, which thence separates the kingdom from Slavonia; and from Essek to the Styrian frontier the Drave separates it from Slavonia and Croatia. On the west various small rivers divide Hungary from Styria and lower Austria.

Surface, Soil, Climate.—The surface, hydrography, &c., of the kingdom of Hungary are noticed generally under AUSTRIA, EMPIRE OF. The northern and western parts of the kingdom are very mountainous. The Carpathians on the north and east, and the Alps on the frontier south of the Danube, surround almost the whole kingdom like a girdle, and send out numerous branches which cover a large part of the kingdom with elevations varying in magnitude and character. These heights inclose many beautiful valleys drained by large and small rivers, verdant meadows, rich corn-fields, and gardens, yielding a variety of excellent fruit, vineyards many leagues in extent, and vast forests. The Carpathians, which begin at Presburg and sweep round the north and east frontier of Hungary and Transylvania, cover all the country between the 48th and 49th degrees of latitude, and are divided into several groups, distinguished by different names. [CARPATHIAN MOUNTAINS.] The loftiest summits are the Eisthal (8100 Vienna feet), the Lomnitz (8133 feet), the Hundsdorff, Csabi, Wysoka, Mengsdorfer, Hreben (each above 7500 feet), and the great Kryvan (according to Wahlenburg, 7538, and to Townson, 7818 feet.) Of the numerous valleys inclosed in the Carpathian Mountains, the Waagthal (Valley of the Waag) is generally considered the most beautiful, but there are numerous others perhaps equally picturesque; for instance, the Mengsdorferthal, which is distinguished by the grandeur of its forms, its magnificent views, and noble waterfalls. In the Carpathians and in other mountains there are innumerable caverns, some of which are remarkable for stalactites of extraordinary beauty, and in others are found the fossil remains of enormous animals, the gigantic inhabitants of the primitive world. But while the northern and eastern part of the kingdom is covered with mountains, the southern and central portions spread out into vast plains and sandy wastes; such as the Jaszag between the Danube, and the Theiss, the plains of Natron east of the Theiss, and much of the country bordering on the Banat. The Banat itself is physically an extension of the southern part of Hungary, but as mentioned above is now politically separated from it, and annexed to SERBIA.

Nearly the whole of Hungary lies within the basin of the DANUBE; into which all the numerous rivers flow, except the Poprad, which flows in a northern direction. The Theiss, itself a branch of the Danube, is one of the chief rivers, and its basin may be considered as forming a distinct part of Hungary: it is noticed under AUSTRIA, EMPIRE OF, under which article, or DANUBE, the lesser rivers are also mentioned. The Drave, the Raab, the Leitha, the March, the Waag, the Gran, &c. flow directly into the Danube. The Zagva, Sajó, Hernad, Bodrog, Koros, Maros, Temes, &c. flow into the Theiss. Of the lakes the most considerable are,—1, the Platten-see [BALATON], 46 miles long, and from less than 1 to 9 miles broad; 2, Neusiedler-see, or Fertő, which has an area of 120 square miles, but is very shallow, and the water of which is so impregnated with salt and soda as to be quite unfit for use: both of these lakes are in the western part of the country. The Palitsch lake is 14 miles in circumference, and both it and the White Lake, also near the right bank of the Theiss, are strongly impregnated with natron. There are numerous lakes among the Carpathians which are situated from 4000 to 6300 feet above the level of the sea. On the banks of the Danube, Theiss, Drave, and other rivers are extensive marshes which cover 2000 square miles. The Hamag, in Oedenburg, is a quaking bog, 18 miles long and 9 miles broad, and contains some small lakes, or meres. It is overgrown with reeds, rushes, and in many parts with low bushes, and has some little copses of alder and beech. In 1813 a canal several

miles in length was dug through the Hamag, but it was nearly destroyed by inundations in the same year. Many canals have been made in different tracts of Hungary, partly to drain the marahas, and partly for the purposes of commerce.

The only railways in Hungary are the Vienna, Presburg, and Pesth line, which connects these towns, and is continued eastward from Pesth to Szolnok with an extension, not yet completed, to Debreazin, and a short branch southward to Felegyhaza. There is also a short branch from the Vienna and Glognitz railway to Oedenburg, which is to be continued round the foot of the Neusiedler-see to the Danube.

The soil of Hungary is for the most part clayey and sandy. The best and richest mould is in the southern part, on the rivers Koros, Theiss, and Danube: the northern part is in general clayey and often stony. The districts next the Carpathians are the most barren. The climate varies considerably. In the counties nearest the snow-covered mountains it is so cold, and the winter so long, that the snow generally begins in September, and does not melt till May or even June. In the southern parts the air is warm, and the winter short; and the snow seldom lies on the ground more than three or four weeks. Notwithstanding the generally unfavourable opinion of the climate of Hungary, it is said to be on the whole very healthy, and that disorders are neither so frequent nor so fatal as in the neighbouring countries.

In the abundance, variety, and value of its natural productions Hungary excels almost any country in Europe. Corn is the main product of Hungarian agriculture, but in the north there is not sufficient for home consumption, while the south exports to Germany and Italy. Barley and rye are grown in the north; oats everywhere in great abundance; wheat, millet, and maize in the south. Maize is very extensively cultivated. Potatoes are now cultivated to a great extent. Garden vegetables of every kind are of good quality and abundant. More millet is produced than is require for home consumption. Fruit grows everywhere, even at the foot of the Carpathians. There are whole forests of cherry, plum, and chestnut-trees. In the south, lemon and orange-trees blossom the whole summer in the open air, and the fruit ripens perfectly well. No country in the world, France perhaps excepted, produces such an abundance and variety of wines as Hungary; and with respect to quality, aroma, and general excellence, the wine of the Hegyalla district is renowned throughout the world by the name of Tokay. Timber is most abundant, there being in Hungary proper 9,000,000 acres of forests of oak, beech, lime, birch, maple, and pine. Tobacco grows everywhere, except in a few of the colder counties, and is nearly as good and cheap as the American.

The productive land in Hungary (including Croatia, Slavonia, and the Banat, which had not then been separated from it) was thus occupied in 1846:—Arable land, 20,592,410 English acres; pasture, 4,539,571 acres; meadows and gardens, 4,509,131 acres; vineyards, 1,595,913 acres; forests and woodlands, 15,900,970 acres. The grain grown in the same year was, in English quarters:—Wheat, 5,077,460; rye, 4,046,694; barley, 4,775,911; oats, 6,324,242; and maize, 3,394,233.

Of domestic quadrupeds the horned cattle bred on the luxuriant pastures of Hungary are some of the finest in Europe; a race peculiar to the country, of a grayish-white, with large wide-spreading horns, is remarkable for size and beauty. The horses are small and weak, but swift and hardy. Of sheep the number is estimated at above 15,000,000. Great improvements have been made in the breed by the importation of merinos from Spain. Hundreds of thousands of swine are bred in the forests. The markets of Debreazin and Oedenburg are probably the largest in the world for swine and lard. Besides four-footed game of all kinds, the forests are the retreat of bears and of hordes of wolves. Domestic poultry of every kind is extremely plentiful. In the great heath of Debreazin there are millions of geese; turkeys are seen in large flocks, and vast numbers of pigeons, wild and tame, do no little injury to the corn-fields. The standing waters, marshes, and lakes are full of wild-fowl, especially countless flocks of wild geese and ducks. Flocks of bustards, often to the number of 40 or 50, are seen in the extensive plains. There are various species of birds of prey, the eagle, the vulture, falcon, &c.

The mineral treasures of Hungary entitle it to the name of South America in miniature: Beudant, Von Humboldt, and other scientific travellers have noticed the striking analogy between the two countries. It has metals of every kind except tin; and very considerable quantities are annually obtained of copper, lead, and iron; gold, silver, antimony, and quicksilver are also profitably worked. Hungary produces likewise a great variety of precious stones, such as amethyst, agate, jasper, opal, Hungarian diamonds, garnets, &c. The more useful mineral products are coals and salt, of which very large quantities are obtained. The country abounds in mineral springs; the number is said to be about 300, many of which are highly celebrated, and much frequented for their medicinal virtues.

The Hungarians have not yet attained to any degree of eminence in manufactures. But the inland trade of the kingdom is very active, and the foreign commerce of great importance. The exports consist of the natural produce of the kingdom; the imports chiefly, though not entirely, of manufactures (of which woollens, cottons, silks, and linens make one-half of the whole imports), and some foreign luxuries. The value of the exports is said to exceed that of the imports by about a third.

Divisions, Towns, &c.—Hungary was, until the last few years, divided into four circles, which were subdivided into 46 counties. It is now divided into five districts, Presburg, Kaschau, Grosswardein, Buda-Pesth, and Oedenburg, which are subdivided into 45 counties. The circles are named after their capitals: of these BUDA, OEDENBURG, and PRESBURG are noticed under their titles; Kaschau and Grosswardein, with some of the other more important towns of Hungary, we notice here. It is necessary to observe however, in reference to the population here given, that the estimate usually includes what are called the suburbs; but these often really comprise the neighbouring villages which are connected with the market-town.

Grosswardein is situated on the left bank of the Sebes Koros, in 47° 1' N. lat., 21° 54' E. long.: population, with the suburbs, about 19,000. The town itself is strongly fortified. The chief buildings are the cathedral and churches; there are a gymnasium, a royal academy, and national and other schools.

Kaschau, or *Kassa*, is situated on the right bank of the Hernad, in 48° 37' N. lat., 21° 17' E. long., at an elevation of 1060 feet above the level of the sea; with the suburbs it contains above 20,000 inhabitants. It contains several fine buildings, the principal being the Elizabeth-pfarrkirche, erected about the middle of the 14th century, and much the finest gothic church in Hungary, two or three other ancient churches, a court-house, gymnasium, theological school, a royal academy with museum and extensive library, &c. A small tributary of the Hernad, which flows through the town, forms in the central square an island, upon which stands a statue of John Nepomak.

At Arad, on the right bank of the Maros, on the southern border of the kingdom, population with suburbs 14,000, is a busy commercial town, having a considerable trade in corn, the principal cattle-market of the kingdom, and a large tobacco manufactory. It contains a gymnasium and other schools, and is the seat of a Greek bishopric. *Bacs*, the chief town of the county of Bacs, stands on a tributary of the Danube, 160 miles S. by E. from Buda-Pesth, and contains 3000 inhabitants. *Baja*, on the left bank of the Danube, 90 miles S. from Buda, population 14,500, contains a castle, Roman Catholic, Greek, and Protestant churches, a Jews' synagogue, several schools, &c. The market for swine is a very large one. *Bars*, or *Barsch*, 60 miles S. by W. from Buda, is situated on the Gran, which divides it into Old and New Bars. It is the mart of a rich corn and fruit district, but has much less trade than formerly. *Bekes*, at the confluence of the two branches of the Koros known as the Black and the White Koros, population 15,000, formerly a fortified town, has now a considerable corn and cattle trade. *Beregh*, or *Bereghazasz*, the capital of Beregh county, Upper Hungary, is a town of little consequence. *Bihar*, 8 miles N. from Grosswardein, population 3000, is a place of some local importance. *COMORN*, or *Komorn*. *Csaba*, 7 miles S.S.W. from Bekes, is noticeable as the largest village in Europe: it contains 23,000 inhabitants; Roman Catholic and other churches and schools; and has a considerable trade in grain, fruit, wine, hemp, flax, and cattle. *Csongrad*, at the confluence of the Koros with the Theiss, is a well-built and was once an important town, but has greatly declined. *DEBRECZIN*. *ERLAU*. *Felegyhaza*, about 60 miles S.E. from Buda-Pesth, population 17,000, has extensive cattle, corn, and fruit markets, and a large trade in wine. *Földvár*, population 9000, on the right bank of the Danube, is the first stopping-place below Buda-Pesth of the steamers which ply on the Danube: it is only noted for its sturgeon-fishery. *FÜNFKIRCHEN*. *GRAN*. *Güns*, 12 miles S. by W. from Oedenburg, population 6000, is almost wholly inhabited by Germans, and is the centre of an old German tribe called Hienzen. The town is famous for a remarkable and successful defence made against the forces of Sultan Solyman the Magnificent in 1532: it retains now little of its ancient fortifications besides the old castle. Some silks and woollens are made here. It contains Lutheran and Roman Catholic churches, a gymnasium, and an orphan asylum. *Jasz-Beregy*, on both sides of the Zagya, 37 miles E. from Buda-Pesth, population 17,500, has markets for cattle, horses, and corn. The principal buildings are the churches, convents, a gymnasium, town-hall, &c. In the centre of the town is a marble obelisk: a tomb is pointed out as that of Attila. *Ketzemet*, 50 miles S. by E. from Buda-Pesth, population 42,000, contains several churches, gymnasias and other schools, a school of arts, an orphan asylum, an hospital, and other benevolent institutions. It has five yearly markets: its cattle market is the largest in the kingdom. The breeding of cattle and horses is largely carried on in the district. A great deal of wine is made; there are extensive soap factories and tanneries. *Kremnitz*, an important mining town, lies in a deep valley, 8 miles W. from Neusohl: population, 6000. It contains a castle, churches, a mining hospital, and a mint. Smelting-works, paper-mills, and vitriol, vermilion, and earthenware works are in its immediate vicinity. *Miskolcz*, at the foot of the beautiful valley of Dics-Gyor, 25 miles N.E. from Erlau, population 28,000, contains several churches, a synagogue, schools, &c.; has a large trade in wine, and is the market-town of a mining district from which iron of fine quality is obtained. *Mohacs*, on the western arm of the Danube, 25 miles below Baja, is a station for the steamers. It contains a castle, the summer residence of the Bishop of Fünfkirchen, several churches,

and a gymnasium. *Newháuel*, population 6500, on the right bank of the Neutra, and on the Pesth and Vienna railway, is not now a town of much consequence. It was formerly a strongly-fortified place, and noted for having been several times besieged and taken both by Christians and Turks. No traces of the ancient fortifications remain. *Neusatz*, on the left bank of the Danube, opposite Peterwardein, with which it is connected by a bridge of boats, population 20,000, is a modern town, having been founded about 1700. Owing to its convenient situation on the Danube it is a busy and flourishing place, but contains little of general interest. *Neusohl*, or *Besztercebanya*, population 6500, or with the suburbs 10,000, on the right bank of the Gran, about 85 miles N. from Buda-Pesth, is the finest town of the principal mining district of Hungary. It contains a bishop's palace, a Roman Catholic and a Protestant gymnasium, smelting-houses, and the ruins of an ancient castle. *Neutra*, or *Nyitra*, population about 6000, or with the suburbs 20,000, stands on the right bank of the river Neutra, about 50 miles E.N.E. from Presburg. It is one of the oldest towns in Hungary; and with the ancient castle, cathedral, and bishop's palace, which are seated on a rocky eminence overlooking the river, has a very picturesque appearance. *Nyir-Egyháza*, 30 miles N. from Debreczin, population about 16,000, contains Roman Catholic, Lutheran, Reformed, and Greek churches, and has some salt and soda works. *Paks*, on the right bank of the Danube, 60 miles S. by W. from Buda, population 9000, contains Roman Catholic and Lutheran churches, and is a place of some trade. *Raab*, on the right bank of the river of the same name, near its junction with the Danube, about 45 miles S.S.E. from Presburg, population 18,000, is a steam-boat station and a place of considerable trade. It contains a cathedral, several churches, a gymnasium and other schools, and government tobacco manufactories. *Rosenau*, on the Sajó, is a mining town, situated in the midst of remarkably fine scenery: population, 7000. It is the seat of a bishopric; contains several churches, convents and upper and popular schools; and carries on manufactures of linen and woollen cloths, earthenware, leather, &c. *Saros-Patak*, on the right bank of the Bodrog, 35 miles S.E. from Kaschau, population 6000, is the seat of a celebrated Calvinistic college. *Schemnitz*, or *Selmeczbánya*, about 65 miles N. by W. from Buda-Pesth, the chief town of the mining district, is situated in a mountain gorge, and with its suburbs, or rather connected villages, contains 22,000 inhabitants. Here is a noted mining academy. *Stuhlweissenburg*, 38 miles S.W. from Buda-Pesth, population about 5000, or with the suburbs 20,000, is the seat of a bishopric, and contains a few fine buildings; but is situated in a low boggy site, and is an ill-paved and dirty place. The cattle-markets are very large; and there are manufactures of leather, woollens, &c. *Szathmar-Nemethi* is situated on the right bank and on an island in the river Szamos, 60 miles E.N.E. from Debreczin: population, 15,000. It contains a cathedral, a Roman Catholic collegiate school, and three or four churches. A good deal of wine is made in the vicinity. *Szarvas*, on the left bank of the Koros, 33 miles N.W. from Csaba, population 14,000, contains two or three churches, and upper and popular schools. *Szegedin* occupies a low site on both banks of the Theiss, at its confluence with the Maros: population, 84,000. The old town, or central town, in which are the residences of the merchants, is on the right bank of the Theiss; the new town is on the opposite bank, and is connected with the old town by a bridge of boats. There are several churches, convents, and schools, an old Turkish fortress, a theatre, town-house, very large market-place, &c.; but the streets are ill paved and lighted. Szegedin is one of the most active commercial towns in the kingdom. It exports wine in considerable quantities, corn, seed, tallow, &c.; and imports manufactured goods from Vienna and various German towns. Its manufactures are woollen goods, leather, soap, and tobacco. It is also celebrated for the construction of the boats and floating-mills employed on the Hungarian rivers. *Szentia*, on the right bank of the Theiss, 35 miles S. from Szegedin, population 14,000, has a market of some local importance, but is chiefly noted as the scene of a great victory gained in 1696 by Prince Eugene over the Turks. *Szentes*, near the left bank of the Theiss, 40 miles N. from Szegedin, is another market-town of local importance only. *Szolnok*, on the right bank of the Theiss, 40 miles N. from Szentes, is a place of some trade, and contains 12,000 inhabitants. *Tata*, or *Dotis*, near the right bank of the Danube, 13 miles N.E. from Comorn, population 9000, contains an old castle, an ancient church, and a residence of Count Esterhazy, where is a celebrated wine-tun, which contains 34,700 English gallons, and is generally filled with fine Hungarian wine. *Theresianopol*, *Maria Theresienstadt*, or *Szabadka*, about 27 miles S.W. from Szegedin: population, with the suburbs, about 40,000. The public buildings are, several churches, convents, upper and popular schools, a town-hall, and extensive barracks. There are manufactures of linen, tobacco, and leather; and large markets for the sale of horses, cattle, sheep, hides, wool, and grain. *Tirmau*, 30 miles N.E. from Presburg, population 7000, is celebrated for a large and well-filled wine-tun. The town is locally known as Little Rome, on account of its numerous churches and convents. *Vasarhely*, the name of two large straggling towns: *Hold-Mező-Vasarhely*, on Lake Hodos, 16 miles N.E. from Szegedin, population 26,500; and *Somló-Vasarhely*, on the Torna, population 25,000. In both towns the inhabitants are mainly dependent on the

wine and tobacco trades. *Waizen*, on the left bank of the Danube, 21 miles from Buda-Pesth by the Presburg railway, is an episcopal city with 12,000 inhabitants. It is divided into three quarters—one occupied by Roman Catholics, another by Protestants, and the third by Raitzen, or members of the Greek Church. Waizen is one of the oldest towns in Hungary, and contains Roman and other antiquarian remains. The chief modern building is the cathedral erected in 1777, and rendered conspicuous at a distance by its lofty dome. *Wesprim*, or *Veszprém*, also the seat of a bishopric, is about 27 miles W.N.W. from Stuhlweissenburg: population, 9000. The bishop's residence occupies the summit of a steep eminence, once the site of one of the most important fortresses in Hungary. A minaret, the only relic left of the former Turkish possessors of the town, is now used as a watch-tower against fire. Near the town is a round templar or baptistry church. *Zombor*, near the left bank of the Danube, and on the Franzens or Bacsér Canal, 30 miles N. by W. from Bacs: population, with the suburbs, 21,000. It has some trade in corn and cattle, and manufactures silk goods.

Government, &c.—The Constitution of Hungary, previous to the insurrection of 1848, was called a limited monarchy, of which it had indeed all the forms, but aristocracy was predominant. The diet consisting of the Catholic prelates, the magistrates, the representatives of the inferior nobles, and the representatives of the towns possessed considerable power. These classes called themselves the nation, and treated the peasantry as an inferior race, whose business it was to pay all the taxes (the nobles, about 350,000 in number, being exempt), and to bear all kinds of burdens. After the suppression of the revolutionary movements, the government was placed on nearly the same footing as in other provinces of Austria. The vassalage of the people and the feudal privileges of the nobles, which were abolished during the supremacy of the popular party, have not however been re-established.

There is perhaps no country of the same extent which contains such a variety of nations as Hungary. The Magyars, or proper Hungarians, are originally an Asiatic people; there are also Wallachians, Armenians, Germans, Italians, Jews, Servians, and a medley of tribes distinguished by names not easily accommodated to English orthography or English pronunciation; Rusniaks, Slovacs, Croats, Wendians, improperly called Vandals (these four and the Servians are of Slavonian origin). The inhabitants, except the Jews, are all Christians. The Roman Catholic religion is predominant; but Joseph II. established complete toleration, and his successors went much farther, and placed the other Christians on an equal footing with the Roman Catholics, so that all enjoy by law equal religious liberty, though not perhaps with equal security. The Roman Catholics, in 1846, and consequently before the division of the kingdom, numbered 6,086,280. The members of the Greek Church are divided into United (that is, such as have joined the Roman Catholics, and are often blended with them) and the Not-united: the former numbered about 605,800, the latter 725,700. The Protestants were returned as—Lutherans 220,400, Calvinists 858,300, but there is little doubt that these numbers are much under-stated. Jews are returned as 265,820. The Roman Catholic have three archbishops of Colocza, Erlau, and Gran, and several bishops. The United Greeks have four bishops. The Not-united Greeks have an archbishop and bishops. The Protestants have no bishops, but are governed by superintendents and synods.

With respect to education Hungary is in a backward state, though there are schools in every parish. The public provision made for the education of the people (including however the provinces since separated from Hungary) was as follows in 1846:—A university at Pesth, 8 schools of art, 21 lycœums, 28 grammar schools, 17 schools of philosophy, 95 gymnasia, 40 special, and 12 general schools—in all 222 upper schools. There were popular schools in every parish or district, but the total number is not given. The higher classes of Hungarians are highly educated and polished men, and in general remarkably well versed in foreign languages.

History.—The oldest known inhabitants of the country were the Pannonians. In the year 377 the Huns established a power here, which was vastly increased under Attila, but was overthrown in 489 by the Goths and Gepids. These yielded in 526 to the Lombards; and when the latter removed to Italy, in 568, the Avari entered, who extended their dominion to Bavaria, but were conquered and compelled to embrace Christianity by Charlemagne. In the 9th century the Magyars, originally a people from central Asia, penetrated into the country, and conquered it in ten years. Their chiefs divided the country among them: Arpad, their leader, took half for his own share; the remainder was divided among the inferior chiefs and their followers, and the ancient inhabitants became slaves. Arpad's grandson Geysa embraced the Christian religion, and his son Stephen, the last duke, assumed in the year 1000 the title of king, and added Transylvania to the kingdom. Ladislaus I. and Colomann subdued Transylvania and Croatia, and, after many wars, Dalmatia; Bela II. obtained Bosnia; Emerich, Servia; and Andrew II. and his son Colomann, Galicia. The family of Arpad became extinct in the male line in 1301. In 1310 Charles, brother to Louis IX. of France, was crowned king of Hungary, which he raised to a high degree of splendour. Charles having married a sister of Casimir, king of Poland, Louis, one of his sons, succeeded to that kingdom in 1370. This prince, who is called Louis

the Great, reigned from 1342 to 1382, and his united kingdoms extended from the Baltic to the Adriatic. On his death Poland and Hungary were again separated, and internal troubles broke out. Sigismund, who reigned from 1386 to 1437, lost almost all the annexed dominions; the Turks approached the frontiers, and took part in all the intestine broils. Under Ladislaus V. and VI. these powerful enemies were successfully resisted by the brave John Hunyades, whose son Matthias I. was made king in 1458. He proved a very able and fortunate monarch: he brought under his dominion Moldavia, Wallachia, Moravia, Silesia, Lusatia, and great part of Austria, forming an empire of 256,000 square miles in extent, about equal to the present Austrian empire. After his death in 1490 the kingdom fell to pieces; civil commotions and bad government made it an easy prey to the Turks; and Louis II. lost his crown and life in the fatal battle of Mohacs, which so weakened the Hungarians that they were unable for 160 years to free their country from the Mohammedans. Ferdinand I. of Austria, who had married the sister of Louis, being raised to the throne, the strength of Austria was indeed added to that of Hungary, but he was obliged to leave Ofen and the finest part of Hungary in the hands of the Turks, who were not expelled till 1686. This was partly owing to the unpopularity of the house of Austria, whose despotic habits and religious intolerance were most distasteful to the Hungarian nobles. Hence arose continued disputes, and frequent insurrections, in which the insurgents even went so far on some occasions as to call the Turks to their aid. This was done by the celebrated leader Tekely, who with his allies had nearly got possession of Vienna in 1688, which was chiefly indebted for its preservation to the Poles under John Sobieski. The treaty of Carlovitz, 1699, delivered Transylvania and Hungary from the Turkish yoke. The fatal civil wars and insurrections ceased in 1711, and the house of Austria has since remained in possession of the country.

In 1848-49 however the Austrian sovereignty was seriously imperilled. For some years a powerful national party had been organised and an active opposition maintained in the diet, chiefly under Count Szecheny, while patriotic feelings had been by every possible means stimulated throughout the country. The Austrian government had in vain endeavoured to repress the movement, and the diet of 1847-48 opened with more of hope and energy than ever on the part of the national party. Louis Kossuth, the avowed leader of the more advanced liberals, had been returned as representative for the county of Pesth. The Austrian government appeared inclined to conciliate the Hungarians, and the emperor gained great popularity by opening the diet by a speech in the Magyar language. The proceedings of the diet were however soon interrupted by news of the successful revolution in Paris, which created intense excitement, and was speedily followed by a large increase of the popular demands. The emperor yielded to most of the earlier popular requirements. A Hungarian ministry was formed, and various liberal measures passed the diet and received the royal assent. These measures formed Hungary and Transylvania into one kingdom, established an annual diet indissoluble by the king, very largely extended the suffrage, created a national guard, abolished all feudal privileges, and made numerous other concessions to the popular will. But they contained in them the germ of future mischief. With the intense feeling of nationality which always appears to render the Magyar blind to everything but the dominance of the Hungarian name and race, proposals had been made, which, if fully carried out, would have rendered Croatia and Slavonia subordinate to Hungary, and the use of the Magyar language necessary in all official communications. The Croats and Slavonians assembled and denounced the measures of the diet, and declared their determination not to obey the orders of the Hungarian ministry; at the same time they demanded from the emperor that Croatia, Dalmatia, and the Slavonian counties [SERBIA] should be united into a province, with a diet and ministry of its own. From protests and votes, they soon passed to action; an army was formed, and under their Ban, Jellachich, proceeded to invade Hungary, whose regiments were at this time in Italy. The Hungarian people freely supplied money, volunteers offered themselves abundantly, the government raised troops, and found excellent commanders in the numerous Polish officers who proffered their services. The Emperor of Austria issued a proclamation ordering the Croats to retire to their own country; but their leader had good reason to question the sincerity of the command, and did not hesitate to disobey it. The policy of the emperor was to play off the races against each other: dreading the strength of both, he wished to weaken both. As soon as he felt himself strong enough he threw off the mask. A royal commissioner, Count Lemberg, was sent with orders to dissolve the diet, and assume the direction of affairs. He was about to enter Pesth for this purpose when the populace, excited almost to frenzy by the speeches of their leaders, set upon him as he was crossing the bridge between Buda and Pesth, dragged him from his carriage, and assassinated him. From this time all hope of reconciliation may be said to have passed away. The Hungarian ministry resigned its functions, and a Committee of Defence was established to carry on the government, with Kossuth as its president. Their military proceedings met on the whole with remarkable success. On the abdication of Ferdinand, the Hungarian diet passed a resolution refusing

to acknowledge the right of the new emperor to the sovereignty of Hungary, and declaring that no allegiance was due to Francis Joseph until crowned with the consent of the nation. But the Austrian councils were now directed by men of firmer resolves; and the reply was a manifesto announcing the emperor's determination to reduce the revolted provinces by force of arms. Windischgratz marched into Hungary at the head of a large Austrian army, before which the Hungarian forces were fain to retreat. The diet now adopted the resolve of sending a deputation to the Austrian camp to treat for peace. The deputation headed by the patriotic Count Louis Batthyany accordingly went, but instead of treating, Windischgratz seized them as traitors. Buda-Pesth was occupied by the Austrians (Jan. 3, 1849), and the diet removed to Debrecsin. The war went on with varying success, but dissension broke out among the Hungarian leaders both in the council and the camp. General Görgei, who was appointed to the command of one of the most important divisions of the patriotic army, openly censured the proceedings of the national government in addresses to his troops. The chief command of the army had been given to a Polish general, Dembinsky, to the great annoyance of the superior Hungarian officers, a majority of whom refused to serve under him. Dembinsky was accordingly deposed by a council of officers. The government was too weak or too infirm of purpose to crush this insubordination. Kossuth repaired to the camp, but instead of insisting on obedience to the government, he succumbed to the decision of the officers, and nominated General Vetter as commander in the place of Dembinsky. Vetter however was soon made to give way to Görgei. These internal disputes were paralysing the movements of the main body, and might have been fatal, had not a renewal of strength been brought by the courage and the successes of the troops commanded by Damyanics; and when they joined, a great battle was fought at Szolnok, on the Theiss, followed by others at Hatvan, Becake, and Issaszeg, in which the Austrians were wholly defeated. In Northern Transylvania the Hungarians, under the Polish general Bem, met with brilliant successes, not only defeating the Austrians under General Lüdgers, but driving out also the Russian auxiliaries under Puckner. The Emperor of Austria having published the outline of a constitutional charter by which the whole Austrian empire was to be rendered 'one and indivisible,' and Hungary reduced consequently to a mere Austrian province, with the loss of all its long-cherished and peculiar privileges, Kossuth proposed to the diet to declare the independence of Hungary. His proposition was carried at once; and on the next day, April 14th, 1849, Hungary was declared to be an independent state, and Kossuth was chosen to be president of the provisional government, which was to conduct affairs until the future form of government should be decided on.

The declaration of independence was received with disfavour by the Hungarian officers, and does not appear to have been welcomed by the army generally or the great body of the people. It brought matters to a crisis. The army after a series of successes advanced to Buda, which after a short siege was stormed and taken. The government, with the diet, returned to the ancient capital. Görgei, notwithstanding his insubordination, was not only maintained in the supreme command of the army, but appointed minister of war. Availing himself of his additional power he removed from their commands Dembinsky, Guyon, and other foreign officers, with such of the native officers as were known to be attached to the government. He then pronounced against the declaration of independence. His retention as commander-in-chief and minister of war was of course incompatible with the maintenance of the government. Kossuth wished to remove him, but shrunk from the attempt. Resembling Lamartine in the extraordinary power which his eloquence possessed over the popular mind, Kossuth resembled him also in infirmity of purpose. When promptness was most needed he hesitated. When decision alone could avert ruin he wavered. He did so now, and the last hope of Hungarian independence vanished. It may indeed be doubted whether the utmost energy would not now have been too late. For the Emperor of Russia, on the plea that the declaration of independence threatened the dismemberment of the Austrian empire, announced his intention to interfere. A powerful Russian army, commanded by Paakiewitch, crossed the Hungarian frontier, and formed a junction with the Austrians under Haynau. Detached bodies of Hungarian troops in vain attempted to check their progress; and the main body slowly retreated towards Arad, leaving the capital open to Haynau, who took possession of it. The Hungarian army now concentrated in front of Arad, whither the government had removed, Haynau quickly followed, and succeeded in crossing the Theiss near Szoreg, after a hard fought battle in which the national forces, under Bem, were defeated with the loss of more than 10,000 men.

The government now giving way to despair sought to open separate negotiations with the Russian commander; these proved unavailing; and they then offered to invest Görgei with full powers to treat for peace. These he refused to accept; and eventually they resolved to appoint him dictator. Kossuth thereupon issued a proclamation, August 11th, 1849, in which he announced his own resignation of power into the hands of Görgei, and the investiture of the latter with dictatorial authority. Having solemnly 'before God and the people' charged Görgei to do his best to save the national existence, Kossuth fled into Turkey. Görgei immediately concluded the

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negotiation he had already commenced with the Russian commander, by agreeing as governor and dictator to surrender unconditionally. Accordingly, on the 17th of August, his army 24,000 strong, with 150 guns, laid down their arms. Görgei directed the officers of the various garrisons and detachments scattered throughout the country also to surrender; most obeyed, but a few refused. Their resistance was of course unavailing, and the war was virtually at an end. A large number of the officers and soldiers as well as civilians succeeded in escaping into Turkey, where they were hospitably received. Austria and Russia made a united demand that the refugees should be given up to Austria, or at least expelled from Turkey, but the Porte nobly refused to do either, notwithstanding the threats of the Northern powers to use force; and England and France having announced their intention to support the Sultan's determination by sending a fleet, if necessary, the refugees were permitted to remain without further molestation.

In Hungary the suppression of the revolution was followed by a series of trials and executions, attended by circumstances of extreme cruelty. The country has been continued under military rule, until quite recently. All the national privileges have been abrogated, and the people have been subjected to a succession of severe coercive measures. Almost the only permanent benefit which has been secured by the revolution appears to be the abolition of the feudal privileges and distinctions, which have not been reimposed, and are not likely to be, as it is not the policy of the government to restore the power of the nobles.

HUNGERFORD, Berkshire, a market-town and the seat of a Poor-Law Union, in the parish of Hungerford, is situated on the river Kennet, in 51° 26' N. lat., 1° 31' W. long., distant 27 miles W. by S. from Reading, 64 miles W. by S. from London by road, and 61½ miles by the Great Western railway. The population of the town of Hungerford was 2255 in 1851. The living is a vicarage in the archdeaconry of Berks and diocese of Oxford. Hungerford Poor-Law Union contains 21 parishes and townships, with an area of 95,867 acres, and a population in 1851 of 20,131.

The town of Hungerford consists chiefly of one long street, in the centre of which is the market-house. The streets are lighted with gas and paved. Besides the parish church there are chapels for Wesleyan and Primitive Methodists and Independents. Near the church is the Free Grammar school, which in 1851 had 54 scholars, of whom 9 were free. The annual income from endowment is 204 and a house. There are also National schools and a savings bank. A county court is held. The town is dependent on agriculture. The market is on Wednesday. There are four fairs in the course of the year; two of them are sheep fairs. The Kennet is not navigable, but the town possesses water communication by the Kennet and Avon Canal. The river fishery is strictly preserved.

HUNS, HUNNI, the name given by historians to several nomadic Scythian tribes which devastated the Roman empire in the 5th century. These people inhabited the plains of Tartary near the borders of the Chinese empire for several centuries before our era, and were known to the Chinese by the name of Hiong-nu, and also Han. They made many incursions into China, and it was to put a stop to them that the Chinese built their great wall, about two centuries B.C. In aftertimes they became divided into the Northern and Southern Huns. The Northern Huns, defeated by the Chinese about A.D. 93, emigrated westward as far as the Volga, where they met the Alanni, or Alani, another powerful Scythian tribe, which they routed and drove beyond the Tanais, or Don. The Huns then encamped in the plains between the Volga and the Tanais, and as far south as the ridge of the Caucasus, where they remained for more than two centuries. Under the emperor Valens they first crossed the Cimmerian Bosphorus, drove before them the Ostrogoths and Visigoths, and obliged the latter to cross the Danube, when the emperor granted them lands in Thrace. The Huns were joined by numerous other Scythian hordes, and were looked upon with equal dread by the Gothic and Teutonic nations and by the Romans. Their features and general appearance are described by the Roman historians as hideous and repulsive, and their manners as savage in the extreme. ('Amianus,' b. 31.) The Huns being now on the frontiers of the empire, had frequent wars with the Romans, and their incursions were dreadful though not lasting. After the death of their chief, Attila, the various tribes under his sway quarrelled among themselves, and, being attacked by the Goths, were driven back beyond the Tanais. Part of them settled in Pannonia, to which they gave the name of Hungary, but the present Hungarians, or Magyars, came from a different and much later immigration. Under Heraclius many of the Huns embraced Christianity. After that period their name is no longer mentioned in history.

HUNTINGDON, the capital of Huntingdonshire, a market-town, parliamentary and municipal borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Ouse, in 52° 21' N. lat., 0° 11' W. long., 59 miles N. from London by road and by the Great Northern railway. The population of the municipal borough in 1851 was 3882; that of the parliamentary borough was 6219. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Huntingdon and diocese of Ely.

Huntingdon Poor-Law Union contains 33 parishes and townships, with an area of 75,031 acres, and a population in 1851 of 20,994.

The town is connected with the village of Godmanchester by a causeway across the meadows, which in time of floods are overflowed by the Ouse. In this causeway are three bridges: the principal one, over the main channel of the Ouse, is of stone, and ancient; it has six arches. The principal street extends about a mile north-west from the bridge over the Ouse, and contains many respectable houses; it is lighted with gas and paved. All Saints church, rebuilt in 1820, is of the late perpendicular style, but is much mutilated. St. Mary's church has a fine tower in the perpendicular style; the chancel is early English. There are places of worship for Independents, Wesleyan Methodists, and Quakers. The market-place is tolerably spacious; the town-hall is a good brick building, containing court-rooms and an assembly-room. There are a county jail and house of correction, and a borough jail. Among the old structures must be named Oliver Cromwell's house, which is still designated Cromwell House. The trade of the town is principally in wool and corn: the market is on Saturday; fairs are held on the Tuesday before Easter, and on the second Tuesday in May. Patent bricks and tiles are manufactured. There are a small theatre, an old bath in a neglected state, and a race-course; the races are in the beginning of August. The town has an infirmary and dispensary, a savings bank, a literary institution with a museum and library, a county library, National and British schools, Walden's Charity school for boys, Fishborne's Charity school for girls, a Girls school of Industry, and an Infant school. The Grammar school, founded about A.D. 1200 by David, earl of Huntingdon, afterwards king of Scotland, has an income from endowment of 100*l.* a year, with a house for the master. It possesses two exhibitions for the Cambridge University. The number of scholars in 1852 was 67. At this school Oliver Cromwell received part of his education. The Grammar school is attached to St. John's hospital, the master of which is patron of the school. The County school for boys is supported by voluntary contributions.

Huntingdon is on the Ermine-street, and stands near the site of a Roman station. In the year 917 Edward the Elder built, or rebuilt, a castle at Huntingdon, of which traces of the outworks yet remain. In 1645 the king's forces entered Huntingdon after a short resistance, and plundered it. Henry of Huntingdon, one of our ancient chroniclers, and Oliver Cromwell, were born in this town.

HUNTINGDONSHIRE, an inland county of England, situated between 52° 8' and 52° 36' N. lat., 0° 8' E. and 0° 30' W. long. It is bounded N. and N.W. by Northamptonshire, S.W. by Bedfordshire, and on all other sides by Cambridgeshire. The area of the county is 230,865 statute acres, or 361 square miles. The population of the county was 64,183 in 1851. It is in size one of the smallest of the English counties, only Middlesex and Rutland being less.

Surface, Hydrography, and Communications.—Huntingdonshire has no high hills. An elevated ridge enters the county from the south, near Potton in Bedfordshire, and runs northward till it subsides in the valley of the Ouse near Huntingdon. Another elevated tract runs west from the border of Cambridgeshire to Huntingdon, and from thence turns north-west to the valley of the Nene at Wansford, west of Peterborough: to the north and north-east of this ridge the county is comprehended in the great fen district of the lower Ouse, Nene, and Welland.

The principal rivers are the Ouse and the Nene, with their respective tributaries. The *Ouse* touches the border of the county about a mile and a half above St. Neots, and flows past that town along the border to the junction of a stream from the neighbourhood of Higham Ferrers (Northamptonshire); after which it flows in a northerly direction to Huntingdon; thence in an easterly direction to Holywell, on the border of the county below St. Ives; and from thence along the border of the county to Karith, where it enters Cambridgeshire: its whole length within the county or on the border is 23 miles, all navigable. There are several feeders of the Ouse, which are all small.

The *Nene* runs along the border, and has no part of its course within the county. It first touches the county at Elton, below Oundle, whence it flows northward to Wansford; it then turns eastward to Standground Sluice, a little below Peterborough, where it leaves the county. The old channel of the river is only in parts made use of for the navigation. The *Forty-Foot Drain*, or *Vermuden's Drain*, is a navigable cut from the Old Nene, near Ramsey, to the Old Bedford River in Cambridgeshire, which belongs to the system of the Ouse.

The *'Meres'*, Ramsey, and Ugg, are large pools or lakes. Whittlesea Mere was the largest of this class of lakes, covering an area of several square miles, affording excellent sailing and fishing, and much frequented in the summer by parties of pleasure. It has recently been drained and reclaimed for cultivation. [BEDFORD LEVEL.] Ramsey Mere and Ugg Mere are visited by abundance of aquatic wild-fowl. A considerable part of the county is destitute of springs, and is supplied with water from ponds.

The high north road to Edinburgh enters this county on the south-east side between Gaxton in Cambridgeshire and Huntingdon; and passing through Huntingdon, Stilton, and Norman Cross, quits the county on the north-west side. Another road from London, which passes through Barnet and Baldock, unites with the high north road

at Alconbury Hill, between Huntingdon and Stilton. The Lincoln road turns off from the high north road at Norman Cross, and runs by Peterborough into Lincolnshire. A road which branches off from the north road through Baldock, on the border of the county, passes through Kimbolton, where one branch leads to Leicester, and another to Nottingham. There are roads from Huntingdon to St. Neots, Cambridge, Ramsey, and other places. The Great Northern railway enters the county near St. Neots, and proceeds through it past Huntingdon, in a northern direction to Peterborough; its whole length in Huntingdonshire being about 25 miles. The Cambridge, St. Ives, and Huntingdon railway runs from the Great Northern railway at Huntingdon to the Eastern Counties line at Cambridge. A branch from this line runs from St. Ives north-eastward to March.

Geological Character.—Huntingdonshire belongs to the oolite system. The south-eastern part of the county is occupied by the iron-sand, which rises into low hills in Huntingdonshire. The rest of the county, excepting the Fens, and perhaps a narrow strip on the western side of the county, is occupied by the Oxford clay, which forms the separation between the middle and lower assemblage of oolites. The thickness of this formation is probably from 500 to 700 feet: its position is nearly horizontal. On the south-eastern border of the county is some greensand. The hills on the confines of Huntingdonshire and Northamptonshire which overhang the valley of the Nene are of the stonebrash, or forest marble.

Climate, Soil, Agriculture.—The climate of Huntingdonshire partakes of that of the inland counties. The low and flat districts, which are mostly drained fens, are subject to fogs, and not so healthy as the higher parts; but when well drained and cultivated, they become more healthy. Only a very small portion of the surface of the county is unproductive. The soil varies considerably, and may be said to lie in patches of gravel, sand, and clay, intermixed with muddy alluvial vegetable earth, wherever the level of the surface is lowest, and the waters have formerly flowed over it, or stagnated upon it. Peat is found in many spots and dug out for fuel. The clay predominates generally.

Although water abounds, there are not many springs, but the inhabitants are supplied from ponds, rivers, and wells. The farms are mostly of considerable extent. Wheat, barley, oats, beans, rape, and clover are largely raised. Mustard seed is grown to some extent in this county. On the borders of the Ouse and Nene are some very rich meadows.

A great part of the county is in pasture. The county of Huntingdon is rather bare of trees. In the marshy parts willows grow rapidly, and are profitable. Horses are invariably used for the plough. The cows kept for the dairy are mostly of the Yorkshire or Durham breed of short-horns. The sheep are mostly of the Leicester breed. The hogs are of the Berkshire or Leicestershire breeds, with various crosses.

Divisions, Towns, &c.—The county of Huntingdon is divided into four hundreds as follows:—Norman Cross, north; Hurstingstone, east; Leightonstone, west; Toseland, south. There is one parliamentary borough, and county and market-town, HUNTINGDON, including the municipal boroughs of Huntingdon and Godmanchester; and four other market-towns, Kimbolton, RAMSEY, ST. IVES, and ST. NEOTS. Kimbolton we describe here, the others will be found under their respective titles.

Kimbolton, is on the western side of the county, 11 miles W. by S. from Huntingdon, and 68 miles N. by W. from London: population of the parish 1853. The town is pleasantly situated, but is small and unimportant. The church has a tower at the west end surmounted with a lofty spire; it contains some fine specimens of carved wood. The Moravians, Baptists, and Wesleyan Methodists have places of worship. The Grammar and Agricultural school, founded in 1600, had 14 grammar scholars, and 18 agricultural scholars in 1852; a Boys school and an Infant school are supported by the Duke of Manchester. Kimbolton Castle, an ancient stone building, the seat of the Montagues, dukes of Manchester, was the residence of Catherine of Aragon, first wife of Henry VIII., after her divorce: it has since undergone many alterations. Some lace is made in Kimbolton. The market is on Friday, and there are two yearly fairs.

The following are some of the more important villages, with their parish population in 1851, and a few other particulars:—

Alconbury, 5½ miles N.N.W. from Huntingdon, population 967, is situated on the line of the Ermine-street; the church, which is chiefly in the early English style, consists of a chancel and nave, with clerestory and aisles, and has a tower at the west end, surmounted with a spire. There are a chapel for Wesleyan Methodists, and National schools. *Brampton*, 2 miles S.W. from Huntingdon, population 1231, is situated on the river Ouse; the church is a handsome edifice, partly perpendicular, the chancel is decorated, the tower at the west end is of the 17th century. *Buckden*, 4 miles S.W. from Huntingdon, population 1172; the church is a fine specimen of perpendicular architecture: the tower at the west end is surmounted with a handsome spire. Near the church are the remains of the Bishop's Palace. The chief part of the edifice was erected about 1480, by Bishop Rotherham. The Wesleyan and Primitive Methodists have places of worship. There are Endowed, National, and Infant schools. Some fine residences for families are in the vicinity. *Elton*, near the right bank of the river

Nene, 20 miles N.W. by N. from Huntingdon: population, 878. The church has a fine tower, in the perpendicular style. The nave and chancel are of the decorated style. The Wesleyan Methodists have a chapel, and there are Woolley's Endowed school for boys, a school for girls, and a hospital for aged widows. *Eynesbury*, 9 miles S. by W. from Huntingdon, population 1233, is an ancient village close to the town of St. Neots. The church consists of a nave, chancel, and aisles, with clerestory, and a tower on the south side of the chancel. The Free school for boys and girls was founded by the Rev. William Palmer, rector of the parish. *Fenstanton*, 5 miles E.S.E. from Huntingdon, population 1070; the church consists of chancel, nave with clerestory, and aisles; a tower with a broach spire is at the west end. There is a magnificent east window of seven lights, 17 feet wide. There are two chapels for Baptists; National and British schools, an Infant school, and a Free school. *Great Gidding*, 12 miles N.W. from Huntingdon: population, 563. The church is chiefly early English. There are chapels for Baptists and Wesleyan Methodists, and a public school, chiefly supported by Earl Fitzwilliam. *Godmanchester*, population of the municipal borough 2337, a suburb of Huntingdon, forms a part of the parliamentary borough of Huntingdon. The church has a tower and spire of good outline, built in 1625; some parts of the church are late perpendicular. The Baptists and Independents have places of worship. There are a Grammar school for boys, founded in 1561, which had 36 scholars in 1852, a school of Industry for girls, and an Infant school. Godmanchester was for many centuries famed for the goodness of its husbandry. It appears to be the site of the Roman Duroliponte, or Durolipona. *Holywell*, on the left bank of the river Ouse, which here divides the county from Cambridgeshire, 7 miles E. by S. from Huntingdon, population 915; is named from a well at the foot of the hill on which the church stands, to which numerous devotees in former times resorted. The church is chiefly early English; the tower, at the west end, is decorated, the west side has a fine perpendicular doorway. *Sawtry*, 9½ miles N.N.W. from Huntingdon, is in the parishes of Sawtry All Saints, and Sawtry St. Andrew, and the extra-parochial district of Sawtry St. Judith, their populations being respectively 693, 420, and 230. All Saints church is chiefly in the early English style, with a low spire at the west end, but has undergone many alterations. In the church is a good sepulchral brass of a knight and lady, of the date of 1404. St. Andrew's church consists of a chancel, a nave with south porch, and a tower; some portions are early English. There are here a chapel for Wesleyan Methodists, and National schools for boys and girls. *Somersham*, 9 miles E.N.E. from Huntingdon: population, 1653. The church consists of chancel, nave with clerestory, aisles, and a tower at the west end. The chancel is early English, the tower is of the early decorated style. The streets are paved, the cost being defrayed from an endowment left for that purpose. The Baptists and Wesleyan Methodists have places of worship, and there is an endowed National school. Fairs are held in June and November. *Sancton* is on the Nene, 19 miles N. by W. from Huntingdon, and one mile and a quarter from Peterborough: population, 1762. The church, which has a tower and lofty spire, is a fine building in the decorated style; the south doorway is early English. There are a Wesleyan Methodist chapel, and a National school. *Stilton*, formerly a market-town, is on the high north road, 18 miles N.N.W. from Huntingdon: population, 803. The Stilton cheese takes its name from this village, but very little of it is now made here or in the neighbourhood. The church is chiefly of the perpendicular style. There are a Wesleyan Methodist chapel and a National school. *Warboys*, 7 miles N.E. from Huntingdon: population, 1996. The church is a spacious edifice, of various dates. The tower is a very fine early English one; and in the church is a handsome font of the same period. There are National, British, and Infant schools. *Yaxley*, once a market-town, is on the right of the high north road, 15½ miles N.N.W. from Huntingdon: population, 1445. The village is small, and irregularly laid out, but the houses are neatly built, and the situation, on a fine gravelly eminence, is good. The church is a spacious cruciform edifice, of the perpendicular and decorated style; it has a tower and fine crocketed spire with pinnacles and flying buttresses. The Wesleyan and Primitive Methodists and Unitarians have places of worship; and there is an Endowed school. Yaxley is called Takesle in Domesday Book.

Divisions for Ecclesiastical and Legal Purposes.—Huntingdonshire is in the diocese of Ely, and it constitutes an archdeaconry. The county is included in the Norfolk circuit; the assizes and quarter-sessions are held at Huntingdon, where is the county jail. Huntingdonshire and Cambridgeshire form but one shirevalty. By the Poor-Law Commissioners Huntingdonshire is divided into three Unions—Huntingdon, St. Ives, and St. Neots. These Unions contain 87 parishes, with an area of 202,362 acres, and a population in 1851 of 60,085. County courts are held at Huntingdon and St. Neots. The county returns two members to Parliament, and two members are returned for the borough of Huntingdon.

History and Antiquities.—Two Roman stations are considered to have been in this county—Durolipons, or Duroliponte, near Godmanchester; and Durobriva, at Water Newton, on the Huntingdonshire side of the river Nene. Stone-coffins, coins, fragments of Roman pottery, a small urn, and other Roman remains, have been dug up

at various places in the county. Of ancient roads, the Roman Ermine-street crossed the county, from south-by-east to north-by-west, through Durolipons and Durobriva, and nearly in the line of the present north road through Royston. The Via Devana crossed the county, passing from near Cambridge by Durolipons to Ratae, or Leicester.

In the earlier part of the Saxon period this county was included in the kingdom of the Eastern Angles, and is said to have been even then called Huntedunescyre, or Huntendunescyre: it was subsequently annexed to Mercia, and shared the fate of that kingdom. Waltheof, son of Siward, an Anglo-Saxon noble who held the earldom or county and most of the land in it, having married Judith, William the Conqueror's niece, was made by that monarch Earl of Huntingdon. He was afterwards beheaded by the Conqueror's order. The earldom of Huntingdon was successively conferred on Simon de St. Liz, and David, prince (afterwards king) of Scotland, who married Maud, or Matilda, daughter of Waltheof. The earldom is now in the possession of a branch of the Hastings family.

There were anciently two abbeys in the county; one at Ramsey, and one of the Cistercian order at Sawtry St. Judith. There are no remains of the buildings. At Stoneleigh was a small priory of Augustine canons, and a Benedictine nunnery on the site of Hinchinbrook House.

Of the churches, Woodstone had in the tower, before its recent re-erection, some portions of Anglo-Saxon architecture. Alwalton, Bury, Conington, Fletton, Hartford, and Ramsey have some portions of Norman architecture. The tower of Chesterton church is a good specimen of early English, with a fine spire. Upton, Leighton, Bromswold, and Wootton churches have also some fine portions of early English architecture. Elton church is partly of the decorated style; and St. Neots is a fine example of the perpendicular.

In the civil wars of Charles I. Huntingdon was plundered in 1645 by the Royalists under the king's own command. In 1648 the Earl of Holland and the Duke of Buckingham with 100 horse were beset in St. Neots. The Duke of Buckingham forced his way through the Parliamentary soldiers, but the Earl of Holland surrendered without resistance.

Statistics.—According to the Returns of the Census, taken in 1851, it appears that there were then in the county 196 places of worship, of which 96 belonged to the Established Church, 46 to Methodists, 30 to Baptists, and 7 to Independents. The total number of sittings provided was 45,023. The number of Sunday schools was 130, of which 77 belonged to the Church of England, 26 to Methodists, 19 to Baptists, and 8 to Independents. The number of Sunday scholars was 9444. The total number of Day schools in the county in 1851 was 280, of which 95 were public schools with 6631 scholars, and 185 were private schools with 2552 scholars. There were 4 evening schools for adults in the county, with 60 pupils. Of literary and scientific institutions there were 3 in the county with 242 members, and with 1936 volumes in the libraries belonging to them. In 1852 there was 1 savings bank in the county at Huntingdon. The amount owing to depositors on November 20th 1852 was 64,067*l.* 17*s.* 1*d.*

HUNTLY, Aberdeenshire, Scotland, a burgh of barony and market-town in the parish of Huntly, is situated in 57° 27' N. lat., 2° 48' W. long., near the junction of the rivers Bogie and Doveran, and on the road between Aberdeen and Elgin, distant about 40 miles N.W. from Aberdeen. The population of the town in 1851 was 3131.

The town is clean, and lighted with gas, and the streets are generally well built. The principal streets cross each other at right angles, and form at the point of intersection a market-place. An ancient bridge crosses the Doveran, and a modern one the Bogie. Besides the parish church there are chapels for Free Church and United Presbyterians, Episcopalians, Independents, and Roman Catholics. In the neighbourhood are the ruins of Huntly Castle, destroyed in 1594; near which is the modern mansion, Huntly Lodge, the seat of the Duke of Richmond.

HUNTSVILLE. [ALABAMA.]

HURDWAR. [HINDUSTAN.]

HURIEL. [ALLIER.]

HURLEY. [BERKSHIRE.]

HURON, LAKE AND DISTRICT. [CANADA.]

HURRAR, called also HARRAR and ADHARI, is a country with a large commercial town of the same name, in the eastern part of Africa, and situated between Ankober, the capital of Shoa, and the harbour of Burburah.

According to the accounts of the natives of the adjacent countries, the town is so large that it takes two hours to go round it at a quick pace. It is surrounded by a wall of stone and mud, which is about 12 feet high and 3 feet thick, and kept in good repair. There are 5 gates. The houses are generally built of stone and whitewashed, with flat roofs. There are however some few huts resembling those in Shoa. The emir and the principal inhabitants have houses of two stories. There are said to be many mosques within the town, which is well supplied with water from numerous springs in its vicinity. Close to the town is a river called Sambi.

The inhabitants are rigid Mohammedans, and, according to D'Abbadie, there is a law in force which prohibits any white man from entering the town. The principal occupation of the people is that of tilling the soil, which for several miles around is highly

cultivated, producing coffee, wheat, jowari, barley, and a variety of fruits and vegetables. The kaat (a small plant, the leaves of which are said to possess an intoxicating quality) is said to be very abundant. The ground is irrigated by artificial means from numerous springs. Coffee is the most important article produced, of which large quantities are annually exported to the sea-coast, to the ports of Burburah and Zeila, and thence to Arabia. There are weavers, blacksmiths, and gold and silver smiths. The lances made in Hurrar are in high estimation. Kafilas arrive at all seasons. The principal are those which pass between Hurrar and Burburah and Zeila, which two last-mentioned places may be considered as the ports of Hurrar. The March kafila is the largest, and consists usually of 2000 camels. They export coffee, jowari, ghee, ostrich-feathers, gum, myrrh, and wur: the last-mentioned article is like saffron in appearance, and is used by the Arabs as ointment for cooling the body; it is also mixed up with flour and made up into cakes, which are said to be very palatable. They export also to Burburah slaves, both male and female, and receive in return blue and white coarse cloth, Indian piece-goods, European prints, silk, silk-thread, red cotton-yarn, beads, zinc, copper-wire, frankincense, and some smaller articles. There are also annually three kafilas to Zeila. The imports are the same as those from Burburah, but the exports are increased by some articles, as wheat, millet, beans, &c.

Smaller kafilas depart almost every month to Shoa, except during the rainy season. They chiefly export articles obtained from Burburah and Zeila, especially blue cloth, red cotton-yarn, &c.; and receive in return slaves, mules, and horses. Other kafilas trade between Hurrar and Arusi and Chercher, two towns or encampments of the Gallas, situated west and south-west of Hurrar: the articles of export and import are imperfectly known.

The climate of Hurrar is said to be similar to that of Shoa, but not quite so cold. The language bears an affinity to the Amharic, but the Arabic character is used in writing. The ruler of Hurrar has the title of Emir, and the succession is hereditary. He is frequently at war with the Galla tribes.

(*London Geographical Journal*, vols. xii. and xiv.; D'Abbadie, *Letter*; *Transactions of the Bombay Geographical Society*, vol. ii.)

HURSLEY, Hampshire, a village and the seat of a Poor-Law Union in the parish of Hursley, is situated in 51° 1' N. lat., 1° 23' W. long., distant 5 miles S.W. from Winchester, and 67 miles S.W. from London. The population of the parish of Hursley in 1851 was 1532. The living is a vicarage in the archdeaconry and diocese of Winchester. Hursley Poor-Law Union contains four parishes, with an area of 16,200 acres, and a population in 1851 of 2570. The parish church is a handsome and costly building in the decorated style, erected within the last few years at the expense of the Rev. J. Kebble, vicar of Hursley. There are in the village National schools. Hursley Park adjoins the village; the mansion is finely situated, and the park is well stocked with deer.

HURSTPIERPOINT. [SUSSEX.]

HURWORTH. [DURHAM.]

HYDASPES. [HINDUSTAN.]

HYDE. [CHESHIRE.]

HYDRA ISLAND. [GREECE.]

HYDRABAD. [HINDUSTAN.]

HYERES, a town in the French department of Var, situated 11 miles E. from Toulon, on the southern slope of a hill that looks over a beautiful plain covered with plantations of the orange, citron, vine, olive, pomegranate, mulberry, and palm, and terminating in the Mediterranean, stands in 43° 7' N. lat., 6° 7' E. long., and has 9966 inhabitants. It is considered one of the healthiest winter residences in the south of France, being protected by hills from the north-west winds and also from the direct influence of the south-west, which sometimes blows with great violence in this part of the Mediterranean. The interior of the town is not inviting; most of the streets are steep, narrow, and ill-paved; the highest part is covered with rocks and the ruins of an ancient fortress, from which run two massive walls that formerly inclosed the town. On a steep rock in this part stands a curious old church, which has been classed among the historical structures of France. Below it is an ancient chateau, now used as the town-house, which fronts the market-place. Lower down is the principal square, which is adorned with a column surmounted by a white marble bust of Massillon, who was a native of Hyères. The suburbs form the handsomest part of the town; there are several fine houses and hotels, and visitors chiefly reside here. In the suburb of St.-Laurent, on the sea-shore, there is a large establishment for the manufacture of salt. Wine, brandy, perfumes, oil, silk, orange-flowers, and fruits are the chief articles of trade. The isthmus,

which joins the rocky peninsula of Giens to the mainland of the department of Var, lies between two large roadsteads, that of Hyères on the east, and that of Giens on the western side. The roadstead, or Gulf of Hyères, is protected on the south side by the three islands of Porquerolles, Port-Cros, and Levant, which are fortified, and form, with the many rocky inlets near them, the group called *Iles d'Hyères*. There was an ancient town on or near the site of Hyères. Several Roman remains have been found. (*Dictionnaire de la France*.)

HYMETTUS. [ATTICA.]

HYRCA'NIA, a province of the ancient Persian empire, was bounded N. by the Caspian Sea, E. by the Oxus, which divided it from Margiana, S. by the northern offsets of the Montes Sariphi (now Hazari), which divided it from Ariana and Parthia, and W. by a range of mountains called by Ptolemy Koronus, and with the river Charindas formed its limits towards Media. Its boundaries differed considerably at various times. Its proper limits were nearly coincident with those of Masanderan, and its name is supposed to be still preserved in the modern Gurkan or Jorjan, a town to the east of Asterabad. Hyrcania was a plain sloping from the mountains towards the Caspian Sea, and was according to Strabo very fertile, producing grapes and figs; though the land was not much cultivated by the inhabitants.

Previous to the Persian conquest Hyrcania appears to have been subject to the Chorasmii. (Herod., iii. 117.) It formed, together with the Parthi, Chorasmii, Sogdi, and Arii, the 16th satrapy of Darius Hytaspes, and contributed 300 talents. (Herod., iii. 93.) After the dissolution of the Persian empire Hyrcania became subject to the Macedonians; but it remained in their power for only a short time. (Strabo, p. 350.) It appears afterwards to have become independent; since Josephus ('De Bello Jud.' vii. 27) mentions a king of the Hyrcanians in the time of Vespasian, who had possession of the passes through the mountains, which are known by the name of the Caspian Gates.

Strabo informs us that there were several towns in Hyrcania, of which the most important were Talabroce, Samarane (the Samarane of Ptolemy), Carta, and Tape. Arrian mentions ('Anab.' iii. 28) Zadracarta, which (as well as Tape) was probably identical with Carta, as the capital; and Ptolemy gives us as the capital a town Hyrcania, which he places in the eastern part of the province. The principal rivers were the Maxera, the Socana, which is perhaps the same as the modern Gourgaun, the Sarneius (Atrak), the Syderis, and the Charindas.

HYTHE, Kent, a municipal and parliamentary borough, a market-town and Cinque Port in the parish of Hythe, is situated on the south coast in 51° 5' N. lat., 1° 5' E. long., distant 15 miles S. from Canterbury, and 65 miles S.E. by S. from London. The population of the municipal borough of Hythe in 1851 was 2857; that of the parliamentary borough, which includes the towns of Folkestone and Sandgate, with some smaller places, was 13,164. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry and diocese of Canterbury.

Hythe, so-called from the Saxon word Hyth, a haven, is believed to owe its origin to the decay of West Hythe and Lympne, or Limne (the Portus Lemanianus of the Romans), which are now both inland. It was early a place of importance, being one of the Cinque Ports, and having once had, according to Leland, a fair abbey and four parish churches. The town stands principally at the foot of a steep hill or cliff, which appears to have been on the sea shore when the town was founded, though now about half a mile from it. Hythe consists chiefly of one long street, parallel to the sea, with some smaller ones branching from it, or parallel to it. The town-hall and market-place, rebuilt in 1794, are in the centre of the town. The church, which is situated on the slope of the hill above the town, is a cruciform edifice, partly Norman and partly early English, with a tower at the west end. Under the chancel is a remarkably fine groined crypt. The Wesleyan Methodists and Independents have places of worship. There are in Hythe two hospitals, or almshouses, of ancient foundation, National and Infant schools, a savings bank, a public library and reading-room, a dispensary, barracks, and a small theatre. A county court is held. The market is on Thursday: fairs are held on July 10th, and December 1st. Hythe has numerous visitors during the bathing season. The scenery in the neighbourhood is exceedingly picturesque. Within the last two or three years excavations have been made at Lympne, and many Roman remains discovered, as well as clear traces of the ancient port and town.

HYTHE. [HAMPSHIRE.]

IAXT. [JAXT.]

IBERIA was the ancient name of Spain in use among the Greek writers. The Iberi are said to have occupied also Southern Gaul as far eastward as the Rhone, where they bordered upon the Ligurians. (Strab., Casaub., 166.) They were a distinct race from the Celtes, who at a remote but unknown period had crossed the Pyrenees, and occupied the central parts of the peninsula, and from whose admixture with the Iberi the Celtiberi sprang. The aboriginal Iberi however seem to have retained possession of the south and east parts of the country from the Straits of Calpe to the Pyrenees, until the epoch of the Carthaginian invasion. The Lusitani were probably also of Iberian race. The Aquitanians, who were a distinct people from the Celtic Gauls, are supposed to have been of Iberian extraction. William Humboldt asserts that the Basque language is the remains of the old language of the Iberian race which at one time spread over Spain, Southern Gaul, part of Italy, and the islands of Corsica, Sicily, and Sardinia, and he attempts to prove this by the affinity between the proper names in those countries. [SPAIN.]

Iberia was also the name given by the Greeks and Romans to a country south of the Caucasus, having Albania to the east, Colchis to the west, and Armenia to the south, and corresponding to the central or principal part of modern Georgia. Lucullus and Pompey first carried the Roman arms into Iberia. Eutropius (lib. viii.) says that the king of the Iberi paid allegiance to Trajan, who at the same time gave a king to the neighbouring country of Albania. In the reign of Constantine the Iberians were converted to Christianity by a captive woman. The country of the Iberi is described by Strabo (Casub., 499) as well peopled, and the inhabitants as having made some progress in civilisation. The central part was a plain drained by the Cyrus (Kur) and its branches. The country was reduced to the form of a province by the Persian Sapor. The Georgians, who call themselves *Karkh*, but are called *Virk* by the Armenian historians, are the descendants of these Iberi.

IBRAÏL, IBRAÏLOW, or BRAÏLOW, a large town in Wallachia, is situated on the left bank of the Danube, 15 miles S. from Galatz, 103 miles N.E. from Bukharest, and has about 20,000 inhabitants. It stands nearly opposite the Turkish fortress of Matchin, and is the chief shipping port of Wallachia, whence the corn and other products of that principality are exported. The town has of late years risen rapidly in extent and importance. Its population in 1838 was estimated at only 6000. The harbour, formed by an arm of the Danube, is sheltered by an island. There are extensive granaries and warehouses in the town. Between 600 and 700 vessels enter and leave the harbour annually. Many of the inhabitants are engaged in the sturgeon fisheries of the Danube. In the wars between the Turks and Russians in the 18th century the town was more than once besieged and taken by the Russians, who burnt it in 1770. After the peace of Kutschuk-Kainardji in 1774 the town was strongly fortified in the European manner; but the Russians took it again in 1828, and demolished its defences. It was restored to Turkey by the treaty of Adrianople.

ICARIAN SEA. [ÆGEAN SEA.]

ICELAND (*Ísland*, in the native language), a large island in the North Atlantic, and a colony of Denmark, extends from 63° 24' to 66° 33' N. lat., 13° 25' to 24° 31' W. long. Its shape resembles somewhat that of a heart, with the point turned towards the south. Cape Nord, at its north-west extremity, is about 200 miles from the east coast of Greenland. Its area is 38,200 square miles: the population was estimated at 60,000 in 1850.

The coasts of Iceland, especially the western part, are deeply indented with fiords, or inlets of the sea, which are the estuaries of the rivers which flow from the numerous mountains and glaciers of the interior. The island is crossed from east to west by ridges of rugged and irregular mountains, which run nearer to the south than to the north coast, the longer rivers flowing towards the north. From these ridges numerous offsets branch out in all directions towards the coast, run through the various peninsulas, and terminate in high and steep promontories. Between these offsets in the vicinity of the fiords are fine valleys, in which the inhabitants have erected their dwellings; and many of the low mountains are covered with a coarse grass, which affords summer pasture to their cattle. The best inhabited spots are on or near the banks of the fiords, where factories are built for the purpose of trade and shipping. But the majority of the inhabitants live in detached cottages or farms, a certain number of which constitute a parish, having a church and an incumbent of the episcopal Lutheran communion as in Denmark. The interior of the island is a dreary desert, through which one may travel 200 miles without meeting any trace of human existence. It consists partly of snow mountains called *Jökula*, or *Jökula*, many of which are also volcanoes, and partly of vast tracts covered with lava, scorise, and volcanic sand. There are also several lakes, the largest of which, called *Myvatn*, is about 40 miles round; its banks are barren and

gloomy, and infested by clouds of gnats. The most extensive mass of icy mountains is that called *Klofa Jökul*, in the south-east part of the island, which lies behind another range of mountains that line the coast, and forms a mass of ice and snow estimated to cover no less than 3000 square miles. Magnificent glaciers cover the sides of the mountains, beginning at a great height, and sloping with a very rapid descent towards the plains. These icy masses are often rent by the internal heat and eruptions of the volcanoes, and fall down in terrible avalanches upon the plains. The glaciers present the same phenomena of progressive motion as those of Switzerland, and they deposit their moraines of large fragments of rocks. Vast agglomerations of basaltic pillars are seen in many places, as well as of tufa, and some mountains are covered with thick incrustations of sulphur.

There are numerous boiling springs, such as the Geysers in the south district of the island, which throw up at periodical intervals columns of boiling water to a considerable height. That known as the Great Geyser ejects a column more than 10 feet in diameter, which is estimated by many writers to reach above 200 feet in height; but Mr. Barrow asserts that it never attains 100 feet. The eruptions are preceded by a loud report like that of artillery. The Reykium and the sulphur springs of Krisúvik are near the south-west coast; those of Reykiadal in the west district; and those of Reykiahverf and Krabla in the north. There are also floods or bores of boiling mud, numerous cones and craters of volcanoes now quiescent, and columns of dense smoke and steam issuing from many spots in the immediate vicinity of the Geysers. The whole island appears to be of volcanic formation, and there are still numerous volcanoes in full activity: occasionally eruptions of fearful violence occur, such as that in 1755 from the volcano of Katlegia, near the east coast, which destroyed 50 farms; and one in 1783 of a still more terrible character from the Skeidara and other volcanoes of the Klofa Jökul ridge, which covered several fertile districts with lava, while the ashes and the effluvia corrupted the water and the atmosphere all around, the fishes were driven away from that part of the coast, and famine and pestilence followed, which in two years carried off 9000 people, and destroyed thousands of horses and cattle. The eruptions of Mount Hecla are frequent, but not so violent or destructive: one lasted from the 2nd to the 4th of September 1846, when ashes ejected from it were carried as far as the Orkney Islands. The highest mountain in Iceland is believed to be the Snæfell Jökul, which rises in one of the western peninsulas near the village or factory of Stappen, and was reckoned by early travellers to be 6862 feet high, but by later observations has been reduced to 4600 feet. Mount Hecla has been reckoned at 5210 feet; but according to recent observations it is only 4500, or even 4300 feet. On the southern and western coasts volcanic islands have risen from the sea, some of which still remain, while others have disappeared. In 1783 one rose from the sea on the west coast; it disappeared in the course of a month.

Formerly there were many forests in Iceland, but they have disappeared. The trees that now exist appear stunted in their growth, and seldom rise above 10 feet, and wood has become very scarce. It is alleged, but without sufficient reason, that the climate has become colder, and is less favourable to vegetation. It often happens in the spring that vast masses of floating ice drifted from the coast of Greenland are impelled by the wind and current against the western coast of Iceland, where they do considerable mischief and affect the temperature of the atmosphere. Instances have occurred of icebergs having been stranded of such a size as to have required several years to melt, and which have not only injured the hay harvest by cooling the atmosphere, but have driven away the fish from the coast by chilling and freshening the sea. Polar bears are carried on these masses to Iceland, and commit depredations among the cattle, and even attack men; they are however soon hunted down and destroyed.

It appears that corn was once cultivated to a considerable extent, but the inhabitants now find it more to their advantage to attend exclusively to the rearing of cattle. The number of farms is about 6000: rent is paid either in money or produce. The number of horned cattle in Iceland is estimated at about 40,000; sheep, 500,000; horses, 55,000: about 1,000,000 lbs. of wool are annually exported. Hay is the great harvest of Iceland. Those who live on the coast attend to fishing, which is very productive. There are no manufactures, properly so called; but coarse cloth, gloves, mittens, and stockings, with furniture and other articles required for domestic use, are made. Fancy silver trinkets, displaying considerable ingenuity, are also made by the peasantry. The common food of the people is butter, milk, and fish; fresh meat and rye bread are holiday fare. The *Lichen Islandicus*, or Iceland Moss, is a common article of food. Coffee, wine, and other luxuries are obtained in the factories on the coast, and are used by the wealthier class. The exports consist of cod and other dried fish, whale oil, salted mutton, wool, eider-down, and sulphur, which is abundant. Turf is the common fuel of the inhabitants; fossil wood impregnated more or less with bitumen

abounds on the island, but little use is made of it. Iron and copper are found, but are not worked for want of fuel. The rein-deer, which were at first introduced from Norway, have greatly multiplied, and live in a wild state.

Iceland is divided for administrative purposes into three large fiordunugs, or districts; these districts are divided into syssels, or sheriffdoms, a sysselman being a magistrate and receiver of the king's taxes in each of them. There is a governor-general, called stiftamtman, appointed by the king for five years, who resides at Reikjavik. He has under him two amtmen, or deputy-governors, one for the western, and the other for the northern and eastern districts. The affairs of the island are regulated by the althing, a council composed of 20 members, 1 for the town of Reikjavik, and 1 for each of the 19 syssels.

Reikjavik, the capital, is the only town in Iceland. It contains about 900 resident inhabitants, and is built on the south side of an inlet of the Faxefjord, on the south-west coast of the island. It consists of two streets: one built only on one side, fronting the shore, and entirely occupied by merchants and tradespeople; the other, striking off at an angle from it, contains the houses of the bishop of Iceland, of the tataroed, or president of the supreme court of judicature, of the landfoged, or receiver-general, and other persons not engaged in trade. The house of the governor, the house of correction, and the church, stand by themselves at the back of the town: the church contains a free library of 6000 volumes for the use of the inhabitants. The houses, with two or three exceptions, are constructed of wood, with a storehouse and a small garden attached to them, in which most of the common vegetables, as cabbages, Swedish turnips, small potatoes, and parsley, are cultivated, but they never arrive at any degree of perfection, and in some seasons entirely fail. To the south-west of Reikjavik is the peninsula of Alfanes, adorned with the church and school of Bessetad, and a number of pretty cottages. Gardá, in the same neighbourhood, is the residence of the archdeacon of Iceland; and Hafnarfjord, or Havnefjord, a small sheltered port some distance south of Reikjavik, contains 18 or 20 houses and a dry-dock: the population is about 100. The population of Reikjavik is more Danish than Icelandic.

In the northern district there is a kind of town or village, called Eyafjordur, and a factory, called Husavik, on the Skjalafandafjord, from which sulphur from the neighbouring mines is shipped. Holm has dwindled into insignificance. Other factories are scattered about the coast, especially in the west. These factories generally consist of one or two merchants' houses, with warehouses, and perhaps a shop; and they are built at the most convenient places for shipping the produce of the district, and also for the fisheries.

The Icelanders are the genuine descendants of the old Scandinavians or Norsemen; they are tall, but not generally corpulent, with a florid complexion, flaxen hair, and an open frank countenance. The women are shorter and more inclined to corpulence than the men; a certain degree of beauty is not rare among the girls. Longevity is not common: cutaneous disorders and pulmonary diseases are frequent. Contagious leprosy of the worst kind is indigenous in the country: there are four hospitals for lepers, but they are very inferior establishments.

Elementary education, and even a certain degree of superior information, is very generally spread among the Icelanders. There is a high school, or college, with three professors, at Bessetad, near the capital Reikjavik, in which most of the clergy are educated; but a few visit Copenhagen to complete their studies. During the last century the Icelanders have paid much attention to their early literature; and the Icelandic language and literature have of late years been studied by many scholars in Germany and England, but much more by those of Denmark.

The Icelandic language is the standard of the northern or Scandinavian dialect of the Gothic language: the Swedish, Danish and even the Norwegian, have been more or less subject to the influence of the Teutonic or German branch of the Gothic, whilst the Icelanders have preserved theirs pure as they imported it from Norway in the 9th century. This was the language called Dönsk Tunga in the middle ages, and was called by the Icelanders at first Norræna, which word corresponds to Nairn or Norse, the corrupt dialect spoken till lately in part of the Orkneya. Since the language has been no longer spoken in Scandinavia, it has been styled exclusively Icelandic.

Iceland was discovered in the middle of the 9th century. The first settlement was made in 874 by a Norwegian named Ingolf, who established himself at Reikjavik. He was soon followed by other Norwegians, many of them of distinguished families, who fled from the dominion of Harold Harfagra, tyrant of Norway. They established a republican government, appointed magistrates, and had their annual Althing, or national assembly, which was held at Thingvalla in the south part of the island. A few years back the Society of Northern Antiquaries of Copenhagen published, under the title of 'Islandinga Sögur,' (Historical Monuments of Iceland,) two very curious works on the discovery and settlement of Iceland, by the earliest Iceland historian, a clergyman named Are Thorgillson, surname Frode, or the learned, who lived at the end of the 12th century. The works are entitled 'Islandinga Bok,' and 'Landnamabok,' and enter into very minute details: they were edited by the eminent Danish antiquaries J. Sigurdsson and C. C. Rafn. About the year 1000 Christianity was established in Ice-

land. In the year 1057, Isleif, bishop of Skalholt, introduced the art of writing with the Latin alphabet; the Runic characters having been used till then only for inscriptions on stone, wood, or metal. Oral lessons however had kept up the historical traditions, and the feats of their ancestors were recorded in songs. Icelandic literature began to be cultivated immediately after the introduction of writing. Literary societies were formed for the purpose of mutual instruction and education. The historical compositions called Sagas have been since published, as well as many of their songs and other poetry. In 1120 the Icelanders framed their code of laws called Grágás, which has been published at Copenhagen by F. W. Schlegel. Snorro Sturluson, a native of Iceland, and an extraordinary personage, was one of the writers or compilers of the Edda, and he also wrote a history of Norway. Several monks, especially the Benedictines of the Thingeyra monastery, contributed largely to Icelandic literature. In 1264 the Icelanders, partly through intrigue and partly from fear, submitted to Haaco, king of Norway, on the condition however of their laws and privileges being maintained. In 1387 Iceland, together with Norway, became subject to Denmark. About 1529 the art of printing, and in 1550 the Lutheran Reformation was introduced into Iceland.

(Henderson, *Journal of a Residence in Iceland*; Sir G. Mackenzie, *Travels*; Hooker, *Journal of a Tour in Iceland*; Dillon, *Winter in Iceland*; Barrow, *Viri to Iceland*, &c.)

ICOLMKILL. [IONA.]

ICONIUM. [KONITZ.]

ICULISMA. [ANGOUËME.]

IDA. [CANDIA; TROY.]

IDLE. [YORKSHIRE.]

IDRIA. [KRAIN.]

IDUMÆA, usually called EDOM in the Old Testament, included, in the time of Christ, a considerable portion of the southern part of Palestine, and extended on the south-west as far as the Lake Serbonis (Pliny, 'Nat. Hist.' v. 14); but in the writings of the Old Testament it was used to designate the mountainous district in the north of Arabia which extended from the south of the Dead Sea to the Bay of Ailana in the Red Sea. The country of the Edomites, who were descendants of Edom, or Esau, the son of Isaac, was otherwise called Mount Seir. (Gen. xxxii. 3; Ek. xxxv. 15.) This name it derived from Seir, the patriarch of the Horims, its most ancient inhabitants. (Deut. ii. 12, 22; Gen. xiv. 6; xxxvi. 20.) The Edomites were governed by kings from the earliest times, and appear to have possessed considerable power when the Israelites invaded Canaan. They were defeated by Saul; and were made tributaries of the Jews during the reign of David. The conquest of Edom was of great importance to the Jews, since it enabled Solomon, by obtaining possession of the ports of Elath and Ezion Geber on the Red Sea, both of which were in the land of Edom (2 Chron. viii. 17), to participate in the advantages of the trade with India.

After the division of the Jewish kingdom during the reign of Rehoboam, the Edomites continued subject to Judah till the reign of Joram, when they revolted, and again established their independence. (2 Kings, viii. 20-22.) They were subdued again during the reigns of Amaziah and Uzziah; but in the reign of Ahaz the Syrians seized upon Elath, and drove the Jews out of Edom. (2 Kings, xvi. 6.) Edom, in common with the rest of Syria, appears to have been subdued by Nebuchadnezzar (Jer. xxvii. 2-7); but after the downfall of the Babylonish empire, the Edomites are again mentioned as an independent people, who had obtained possession of the southern part of Judæa as far north as Hebron. (1 Macc. v. 65.) They appear about this period to have been driven from their original settlements between the Dead Sea and the Bay of Ailana by the Nabathæi, the descendants of Nebaioth, the eldest son of Ishmael. The Nabathæi and their capital Petra were known to Greek and Roman geographers and historians. The Edomites were constantly at war with the Jews after the return of the latter from Babylon, till they were entirely subdued by John Hyrcanus, who compelled them to submit to circumcision and to observe the Mosaic law. (Josephus, 'Antiq.' xiii. 9, sec. 1.) From this time the Edomites were regarded as a part of the Jewish nation, and were governed by a prefect appointed by the Asmonæan princes of Judæa. (Josephus, 'Antiq.' xiv. 1, sec. 3.) One of these governors, Antipater, a native of Idumæa, was appointed by Julius Cæsar procurator of Judæa (Josephus, 'Antiq.' xiv. 8, sec. 5); and was succeeded by his son, the celebrated Herod, who afterwards became king of the whole country, and put an end to the dynasty of the Asmonæan princes.

The Idumæans marched to the assistance of Jerusalem when it was besieged by Titus, and entered the city; they did not however continue till it was taken, but returned to their own country laden with plunder. (Josephus, 'Bell. Jud.', iv. 4; vii. 8, sec. 1.) We have no further mention of the Idumæans in history. Origen, in his 'Commentary upon Job,' informs us that the name of Idumæa did not exist in his day; and that the inhabitants of the country were called Arabs, and spoke the Syriac language.

(Relandi, *Palestina*; Vincent, *Periplus of the Erythrean Sea*; Michaelis; Winer, &c.)

IESL. [ANCONA.]

IGLAU. [MORAVIA.]

IGUALDA. [CATALUÑA.]

IL PIZZO. [CALABRIA.]

IL VASTO. [ABBRUZZO.]

ILCHESTER. [SOMERSETSHIRE.]

ILDEFONSO, SAN. [CASTILLA-LA-VIEJA.]

ÎLE-DE-FRANCE, L', a province of France, forming one of the military governments into which France was formerly divided. It was bounded N. by Picardie, W. by Normandie, S. by Orléanais, and E. by Champagne. It was watered by the Seine and its tributaries, the Yonne, the Loing, the Marne, the Oise, and the Eure. It now forms the departments of Seine, Seine-et-Oise, and Oise, and part of those of Seine-et-Marne, Aisne, and Euro-et-Loir. Paris was its capital.

Le Parisis, or the Île-de-France proper, with large territories annexed to it extending southward to the Loire, was held in the decline of the Carolingian dynasty by a race of powerful nobles, who acted an important part in the history of France. In the year 861 Charles le Chauve bestowed upon his kinsman Robert l'Angevin, otherwise Robert le Fort, "the province between the Seine and the Loire," under the title of the Duchy and Marquisate of France. Robert died in battle against the Northmen, A.D. 866, and was succeeded by his son Eudes, count of Paris, which title he bore in his father's lifetime. He bravely defended Paris against the Northmen, who besieged it, A.D. 885, and compelled them to raise the siege. On the death of Charles le Gros, A.D. 888, Eudes was elected king of France. He was involved in hostilities with his competitor for the crown, Charles le Simple, and died A.D. 898.

On the death of Eudes, his brother Robert became duke of France. He rebelled against Charles le Simple, caused himself to be proclaimed king, and was consecrated at Reims, A.D. 922. Charles however, being supported by the counts of Toulouse and Auvergne, attacked Robert in the plain of Soissons. Robert fell in the battle, but his son Hugues continued the combat, and succeeded in putting Charles to flight. The battle was fought A.D. 923.

Hugues, surnamed le Blanc, otherwise Le Grand, and from his holding several abbeys in commendam, L'Abbé, succeeded his father in the duchy of France. He bestowed the crown on his brother-in-law, Raoul, duke of Burgogne. Upon the death of King Raoul, A.D. 936, Hugues procured the return of Louis IV., son of Charles le Simple, from England, where he had been conveyed by his mother. Louis was only sixteen years old; and Hugues at first virtually exercised the sovereign power, though without the title of regent. Louis having a year after emancipated himself from tutelage, Hugues formed a formidable alliance, which was joined by Otho I., emperor of Germany, against the king. But the rebel lords were after a time reconciled to Louis, A.D. 942, and peace was restored. Hugues subsequently obtained of the king the whole of the duchy of Bourgogne, of which he had previously held a part. Some years afterwards he became involved in new disputes with his sovereign, whom he got into his power, and retained, until compelled to release him by Otho of Germany, who came with an army to his rescue. The war between Hugues and Louis continued till A.D. 953, when the quarrel was made up. Louis died the year after, and Hugues assisted in raising his son Lothaire to the throne. Hugues however possessed the real power of the sovereignty till his death, A.D. 956.

Hugues, surnamed Capet, son of Hugues Le Blanc, was young at his father's death; but by the protection of Richard duke of Normandy, and Brunon archbishop of Cologne, he succeeded in obtaining from the king the investiture of his inheritance, comprehending the duchy of France, the counties of Paris and Orléans, and the abbeys which his ancestors had possessed. He became in effect ruler of the country, and exercised his power in a way to give general satisfaction. The emperor Otton or Otho II., having invaded France, was obliged to retreat, and Hugues attacked his rear-guard, and put it to flight on the banks of the Aisne. King Lothaire died A.D. 966, recommending his son and successor, Louis V., Le Fainéant, to the guardianship of Hugues. Louis died the year after at Compiègne; and his uncle Charles, brother of Lothaire, being unpopular, Hugues assembled his friends, and procured himself to be chosen king of France. Thus the Capetian dynasty replaced the Carolingian. The hereditary domains of Hugues were thenceforth united to the crown.

ÎLE-EN-DODON, L'. [GABONNE, HAUTE.]

ILFORD. [ESSEX.]

ILFRACOMBE, Devonshire, a market-town and sea-port in the parish of Ilfracombe, is situated on the shore of the Bristol Channel, in 51° 12' N. lat., 4° 7' W. long., distant 50 miles N.W. from Exeter, and 202 miles W. by S. from London. The population of the town in 1851 was 2919. The living is a vicarage, with the chapelry of Lee annexed, in the archdeaconry of Barnstaple and diocese of Exeter. The parish is under the management of a Local Board of Health.

The town consists chiefly of one main street extending along the sea-coast, and reaching to the harbour, which is formed by an inlet or cove of the Bristol Channel. The harbour affords anchorage to vessels of 230 tons, and is rendered additionally secure by a pier 850 feet in length. A battery and lighthouse are at the entrance of the harbour. The houses are tolerably well built; a number of good houses range along the harbour. The church, a commodious building, is partly of the 12th century. The Wesleyan Methodists and Independents have chapels; and there are National, British, and Infant schools.

The town is almost entirely dependent on summer visitors and wealthy residents. For their accommodation hot and cold salt-water baths have been erected, and by tunnels cut through the cliffs a communication has been made with a retired cove for sea-bathing. A broad public walk has been made round one of the hills, and on the verge of the sea, called Capstone Parade; it forms a singularly fine sea-walk. Some of the inhabitants are engaged in the herring-fishery. The market, which is generally well supplied with fish, is on Saturday. The coast scenery about Ilfracombe is bold and often exceedingly picturesque; the scenery inland is also very beautiful.

ILHA-DO-SAL. [CAPE VERD ISLANDS.]

ILISSUS. [ATTICA.]

ILIUM. [TROY.]

ILKESTON, Derbyshire, a small market-town in the parish of Ilkeston, is situated in the valley of the river Erewash, in 52° 58' N. lat., 1° 20' W. long., distant 9 miles N.E. by E. from Derby, and 126 miles N.W. by N. from London. The population of the parish in 1851 was 6122. The living is a vicarage in the archdeaconry of Derby and diocese of Lichfield. The market is only held occasionally, and the town is not of much importance. The church has a stone screen in the early English style. The principal manufactures are those of stockings and lace. In the neighbourhood are several coal-mines. Near the town is a mineral spring. The Erewash Canal and the Nutbrook Canal both pass through the parish.

ILKLEY. [YORKSHIRE.]

ILLE-ET-VILAINE, a department in the west of France, is bounded N. by the English Channel and the department of Manche, E. by the department of Mayenne, S. by that of Loire-Inférieure, and W. by the departments of Morbihan and Côtes-du-Nord. Its form approximates to a quadrangle, lying between 47° 37' and 48° 31' N. lat., 1° and 2° 18' W. long. Its length from north to south is 74 miles, from east to west 55 miles. The area of the department is 2597½ square miles. The inhabitants, by the Census of 1841, numbered 547,052; by that of 1851, 571,618, being 221,219 inhabitants to a square mile, or 46,635 above the average population per square mile for the whole of France. The department is formed out of a portion of the old province of Bretagne.

The department is crossed from west to east by the Armoric Hills, or Menes Mountains [CÔTES-DU-NORD; BRETAGNE], from which the surface slopes down towards the English Channel on one side, and the Bay of Biscay on the other. The Armoric Hills do not attain within this department to any considerable elevation. The surface presents a great variety of hill and dale, heaths, moors, forests, ponds, and marshes, which are rendered productive by drainage, or on the coast by banking out the sea. The soil, except in the marsh land, is shallow and light; the most fertile lands are in the neighbourhood of St.-Malo, Montfort, and Rennes, and in the marshes north of Dol. The coast, which extends between the embouchures of the Couesnon and the Rance, measures about 40 miles; it is washed by the fine Bay of Cancale, but access to it is much impeded by a great number of isolated rocks and islets. St.-Malo in the north and Redon in the south of the department are the most important ports.

The department takes its name from the Ille and the Vilaine, its principal rivers. The Ille rises near Combour, north of the Armoric range, through a gap in which it runs south and joins the Vilaine on the right bank at Rennes after a course of about 20 miles. Its waters supply the Ille-et-Rance Canal, which runs a considerable way along the Ille, and then, turning north-west, joins the Rance, a little above Dinan. [CÔTES-DU-NORD.] The Vilaine rises a little west of Ernée, in the department of Mayenne, and runs generally west past Vitré as far as Rennes, 5 miles above which it becomes navigable. Having received the Ille at Rennes, its course is south-south-west past Redon, whence to its mouth in the Bay of Biscay, below Roche-Bernard, it is a tide river and navigable for vessels of 250 tons. Its whole length is 116 miles, 78 miles of which are navigable. On the right it receives the Canlache, the Chèvre, the Ille before mentioned, the Meu, and the Oust [MORBIHAN]; on the left its feeders are the Seiche, the Semnon, the Cher (which enters it on the borders of Loire-Inférieure), and the Don and the Isac, which flow from Loire-Inférieure, and are both navigable for barges. The Couesnon rises east of Fougères, and runs first west, then north past Antrain, and enters the Bay of Cancale, below Pontorson, in the department of Manche. It is navigable at high water for barges from Antrain. The Rance is described under CÔTES-DU-NORD. The department is traversed by 11 imperial, 12 departmental, and 4 military roads; the railroad from Paris to Brest, now in course of construction, passes Vitré and Rennes.

The department contains 1,662,427 acres. Of this surface, 982,269 acres are arable; 181,256 are natural pasture; 32,621 are covered with orchards, nurseries, and gardens; 255,909 acres are heath and moorland; 147,016 acres are under woods and forests; 12,912 acres are covered with wet marshes, rivers, canals, &c.; and 341 acres are under vine-culture. The farms are small, the largest not exceeding 75 acres, and many consist of not more than 5 acres, small holders being generally linen-weavers as well as tillers of the soil. The food of the peasantry is composed of bread made of rye, oats, or barley, potatoes, milk, and butter, to which salt pork and dried sardines are occasionally added. The soil is made to produce all kinds of bread-

stuffs, in quantity more than enough for the wants of the population. In the rich soils, wheat of excellent quality is raised; some tobacco is grown near St.-Malo; rye, barley, oats, buckwheat, and mixed grain are produced in the middling and poorer soils. The cultivation of flax and hemp for the manufactures of the department is very extensive; the flax and hemp fibres in the dressed state, as also the seeds, are important objects of commerce. The apple and the pear are very extensively cultivated for making cider and perry, the chief drinks of the population; the cider is strong enough to keep for two years, and is considered the best made in France. The grass land along the river bottoms is rich; and, as the out-run on the heaths and moors is large, great numbers of cattle are reared, and excellent butter and cheese are made. There is a little meadow land; of artificial grasses only clover is grown. Horses in general of small breed, sheep, goats, poultry, and pigs of the large white breed, are numerous. Game, including wild boars, hares, rabbits, partridges, quails, woodcocks, &c., are abundant. The fisheries on the coast, which are actively plied, yield excellent oysters, soles, lobsters, turbot, skate, crabs, &c. The forests of the department contain fine timber: the prevailing kinds are oak and beech; next come chestnut, poplar, and birch. The cultivated land also presents the appearance of a forest, such is the number of apple-trees planted in the fields, and of timber-trees in the hedges that separate the fields, but, as these latter are regularly stripped of their branches to supply fire-wood, they are of little value as timber.

Several iron-mines are worked; roofing and clay-slate, white quartz for the glass factories, limestone, and granite are quarried; lead- and copper-ore are found. Mineral springs are numerous.

The most important manufactures are linen, sailcloth of the best quality, Russia duck, canvass, and shoe- and morocco-leather; felt and straw hats, sewing thread, thread stockings, ship-cordage and ropes, fishing nets, hooks and lines, pottery, cotton- and woollen-yarn, are also manufactured. There are, besides, several bleaching establishments, brandy distilleries, paper-mills, iron-forges and smelting furnaces, and flour-mills; in the towns on the coast ship-building is carried on to some extent. Salt is made in some of the marshes on the coast. The commerce is composed of the various articles named, and of groats, chestnuts, salt pork, hides, oak-staves, firewood, &c. About 300 fairs are held in the year; there are 990 wind- and water-mills, 7 iron-works, and 63 factories of different kinds.

The climate is damp but temperate; much rain falls in winter; the prevailing winds are the west, north-west, and south-west; hurricanes are less frequent and less destructive than in the more western departments of the Armoric peninsula.

The condition of the peasantry is similar, but rather superior, to that of the peasantry of FINISTÈRE. The department contains many Druidical and Celtic remains, consisting of monoliths (menhirs), altar tables (dolmen, kistvaen), cromlechs, and cairns.

The department is divided into 6 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Rennes	10	78	139,471
2. Fougères	6	57	85,151
3. Montfort	5	46	60,615
4. St.-Malo	9	60	123,585
5. Vitré	6	61	83,509
6. Redon	7	47	82,287
Total	43	349	574,618

1. Of the first arrondissement, and of the whole department, the capital is RENNES. Of the following places the population given in each case is that of the commune: this remark applies also to the other arrondissements. *Hédé*, a small place of about 1000 inhabitants, on the road from Rennes to Dinan, is remarkable for the remains of its ancient castle, which was taken by Henry II. in 1168. *Janzé*, S.S.E. of Rennes, has 4304 inhabitants, who manufacture sailcloth, and deal largely in excellent poultry. *Liffré*, N.E. of Rennes, has a population of 2402. *Mordelles*, S.W. of Rennes, on the left bank of the Meu, has mineral springs, and 2613 inhabitants.

2. In the second arrondissement the chief town is *Fougères*, which stands on a hill, at the intersection of five high roads, in the north-east of the department. It is one of the best built towns in the department, has wide straight streets, a tribunal of first instance, a college, and 8771 inhabitants, who manufacture sailcloth, canvas, tape, flannel, lace, hats, bricks, leather, paper, and glass. There is a good commerce in these articles, and in corn, groats, butter, honey, cattle, &c. The castle of *Fougères* is a picturesque object, but a feeble defence, as it is commanded by the higher part of the town. In the forest of *Fougères*, within half a mile of the town, there are many Druidical remains. *Astrain*, N.W. of *Fougères*, on the left bank of the Couesnon, which here becomes navigable, has a population of 1567 in the commune, and some manufactures of linen, coarse woollens, serge, and leather. *St.-Aubin-du-Cormier* stands on a steep hill, S.W. of *Fougères*, and has 1896 inhabitants. It owes its origin to a strong castle built by Pierre de Dreux, duke of Bretagne, in 1223, and is famous for the

victory gained here by the Count de la Tremouille, the commander-in-chief for Charles VIII., over François II., duke of Bretagne, the Prince of Orange, and the Duke of Orléans (afterwards Louis XII). *Louvigné-du-Désert*, 9 miles N. from Fougères, had formerly a large establishment belonging to the Templars, whose church is now become the parish church. It has a population of 8524, and several tan-yards.

3. In the third arrondissement the chief town, *Montfort-sur-Meu*, situated 10 miles W. from Rennes, on a hill above the confluence of the Meu and the Chailloux, has a tribunal of first instance, a college, and 1980 inhabitants. It is closed in by ramparts, flanked with towers, and encircled by a wide ditch. The town was formerly of much larger size. In the environs, which are very pretty, are the oak forests of Breceilien and Montfort, in the former of which are several Druidical remains; among others the reputed tomb of the enchanter Merlin, so celebrated in Breton fables. *St.-Méen*, 10 miles W. from Montfort, has an ecclesiastical school, and 2319 inhabitants. *Montauban*, formerly the chief town of a county belonging to the dukes of Rohan, is 7 miles N.N.W. from Montfort, and has a population of 2764. *Plelan-le-Grand*, 12 miles S. by W. from Montfort, has 3283 inhabitants, who manufacture great quantities of sewing-thread.

4. In the fourth arrondissement the chief town, *St.-Malo*, is built on the rocky isle of Aron, which communicates with the mainland by a causeway named *Le Sillon*, and defended from the violence of the waves by strong outworks. The town covers the whole island; it is surrounded by strong ramparts, which are flanked with towers and bastions, and form a fine promenade. The streets are narrow, but formed by high and in general well-built houses. There are four gate entrances, near one of which, called *La Grande Porte*, is a large reservoir, whence water is supplied to the fountains in the streets. The most remarkable building is the strong castle built by Anne, duchess of Bretagne, which forms part of the fortifications. The former cathedral is a very spacious church, built in the gothic style, and ornamented with several good marble statues. *St.-Malo* has tribunals of first instance and of commerce, a chamber of commerce and manufactures, a naval school of the first class, and 9383 inhabitants in the commune; but including the harbour and the suburb of *St.-Servan*, the population probably exceeds 21,000. The harbour lies south of the town; it is capacious and safe, but the entrance to it is rendered intricate by a great number of islets and rocks which stud this part of the coast, and many of which are fortified. It is a tide harbour, protected by a strong pier, and lined with a broad quay, which runs just under the walls of the town; it is dry at low water, but large ships can enter, as the tide rises very high here, 49 feet at spring. A wet-dock has been lately formed by throwing a strong granite wall across the head of the bay between the town and the suburb of *St.-Servan*; it contains an area of above 270 acres, and is entered by wide flood-gates, through which steamers and war frigates can pass. The roadstead of *St.-Malo* lies west of the town at the embouchure of the Rance; it is protected by seven forts, one of which, called *Conchée*, was constructed by Vauban. The manufactures of *St.-Malo* are hosiery, fishing-nets, ship-pulleys and cordage, soap, fishing-hooks, &c. Ship-building is carried on, and there is a large tobacco factory. The imports consist of colonial produce, spices, flax, hemp, &c.; there is also a considerable trade in corn, fruit, wine, brandy, salt, linen, cider, butter, honey, fish, salt provisions, &c. Vessels are fitted out for the foreign and coasting trade, and for the whale, cod, and mackerel fisheries. *St.-Malo* is much frequented for its excellent sea-bathing. *Cancal*, a small sea-port on the western side of the Bay of *Cancal*, with 5630 inhabitants, is 8 miles E. from *St.-Malo*. The principal part of the town stands on a height above the bay, of which it commands a fine view, and is well built. The other part, called *La-Houle*, is built on the shore, and is inhabited chiefly by fishermen, who take vast quantities of oysters and other fish in the bay for the supply of Paris and the towns in the interior. *Combourg*, the birth-place of Chateaubriand, 20 miles S.S.E. from *St.-Malo*, is situated on a small lake, and has 4847 inhabitants. There is an old château, flanked with towers, in good preservation in the town. *Dol*, remarkable for its ancient cathedral, which is one of the handsomest churches in Bretagne, is 15 miles S.E. from *St.-Malo*, and has 4018 inhabitants. It is surrounded by old walls and wide ditches, the remains of its ancient fortifications. The interior is irregularly built; the houses are constructed of dark granite with projecting gables; arcades, 7 or 8 feet wide, supported on granite pillars, run along the streets. The town has a good corn-market, which is held in a desecrated church; there is also some trade in cider, hemp, flax, tobacco, cattle, &c. The neighbourhood of *Dol* is fertile; all the land between it and the sea northward is drained marsh, protected from the sea by dykes. *Pleine-Fougères*, 25 miles from *St.-Malo*, has a population of 3107. *St.-Servan*, a wall-built town, and much frequented watering-place, situated on the south side of the harbour of *St.-Malo*, of which town it may be considered a suburb, has 10,257 inhabitants. The most remarkable structure is the isolated tower called *Solidor*, which is 60 feet high, and approached by a drawbridge. This tower is now used as a prison. Beer, ship-cordage and biscuits, wine, brandy, &c., are the chief articles of trade; ship-building is carried on. *Vitré*, on the *Ille-et-Rance Canal*, has 2050 inhabitants, who trade in corn, butter, poultry, &c.

5. In the fifth arrondissement the chief town, *Vitré*, situated on the

Cantache, 22 miles E. from Rennes, has a tribunal of first instance, an ecclesiastical school, and 8555 inhabitants. The town is large, but irregularly built; and its feudal fortifications, consisting of a castle and high ramparts, flanked with machicolated towers and surrounded by a deep ditch, give it a gloomy appearance. The church of Notre-Dame is the most remarkable structure in the town. Vitré has manufactures of thread-stockings, serge, flannel, hats, casks, brandy, leather, and sail-cloth, and trades in these articles, and in wine, linen, honey, wax, hides, cattle, and cantharides flies, which are found in the neighbourhood. The other towns are—*Argentré*, which is a few miles S. of Vitré, and has 1978 inhabitants: *La-Guerche*, a town of 4412 inhabitants, which stands in a rich corn and grazing country, 11 miles S. from Vitré; it gives name to a neighbouring forest, and has manufactures of fine linen, leather, and nut-oil, besides a good trade in butter, corn, flax, hemp, chestnuts, cattle, sheep, &c.: and *Rhetiers*, which is a few miles W. of La-Guerche, and has 2960 inhabitants.

6. Of the sixth arrondissement the chief town, *Redon*, stands at the foot of a hill on the Vilaine, which here forms a good tide harbour, with a rise of from 10 to 13 feet at high water. The town, which is situated in the most southern angle of the department, at the junction of the two branches of the canal from Nantes to Brest, and at the southern extremity of the river and canal navigation that terminates to northward in the harbour of St-Malo, enjoys great advantages for trade, in addition to its connection with the Bay of Biscay by a navigable tide-river. It is in general well built: the chief structures are the former abbey-buildings now used as a college, and the abbey-church, the semicircular apse of which is considered a masterpiece of its kind. Redon has a tribunal of first instance, a college, and 5216 inhabitants, who carry on a considerable trade in colonial produce, wine, brandy, salt, butter, chestnuts, timber, hemp, oak-staves, planks, masts, pitch and tar, slates quarried in the neighbourhood, sheet- and bar-iron, lead, resin, hides, linen, flax, canvass, &c. Vessels of 50 to 400 tons are built. A vote of 1,800,000 francs was taken in 1846 for the improvement of the harbour of Redon, to which the French attach great importance, as, in case of a war with England, their trading vessels could enter here without exposing themselves in the channel. The other towns are—*Bain*, which stands on the great road from Rennes to Nantes, and has a population of 3476 and some woollen manufactures: *Fougères*, 16 miles N.E. from Redon, which has 5254 inhabitants; it had formerly a strong castle, of which only one high massive tower remains, and from which the English were driven by Du Guesclin in 1356: *Guichen*, which is 25 miles N.N.E. from Redon, and has cold mineral springs, and 3534 inhabitants: *Mauve*, 15 miles N. from Redon, which has a population of 4000, and an ancient castle taken by Henri IV. in 1597: and *Pipriac*, 12 miles N. from Redon, which has 3116 inhabitants.

In Roman times the territory of this department was inhabited by the Redones, a Celtic tribe, whose name is still preserved in that of Redon. It was included in the district of Armorica. On the downfall of the empire it became part of Bretagne. The department forms the see of the Bishop of Rennes, is included in the jurisdiction of the Cour Imperiale and University Academy of Rennes, and belongs to the 16th Military Division, of which Rennes is head-quarters. For purposes of superior education there are besides the University of Rennes an imperial college and diocesan seminary in the same town, and colleges in Dol, Fougères, St-Servan, and Vitré. There is a school of painting, sculpture, and drawing, and a departmental museum in Rennes. The department returns 4 representatives to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers; Guide Classique du Voyageur en France.*)

ILLIERS. [EUPE-ET-LOIRE.]

ILLINOIS, one of the United States of North America, is bounded S.E. by the Ohio, which separates it from Kentucky for 130 miles; E. by the Wabash for 120 miles direct distance, and by a meridian line to Lake Michigan for 162 miles, by which river and line it is separated from Indiana; N.E. by Lake Michigan for 57 miles; N. by the parallel of 42° 30' N. lat. to the Mississippi, 157 miles, by which it is separated from Wisconsin; W. by the Mississippi, which separates it from Iowa for 200 miles, and from Missouri for 340 miles. It lies between 42° 30' and 37° N. lat., 87° 49' and 91° 28' W. long. The extreme length is 378 miles, the extreme breadth 212 miles; the circuit of the state is 1160 miles, of which 850 miles is formed by navigable rivers; and its area is 55,409 square miles, or nearly 3000 square miles less than England and Wales. The following table shows the population decennially since the first census of the state in 1810, with the proportion of free coloured persons and slaves. The total population in

1810 was	12,282,	including	613 free coloured persons,	and	168 slaves.
1820	55,211,	"	457	"	917
1830	157,445,	"	1637	"	747
1840	476,183,	"	3598	"	331
1850	851,470,	"	5436	"	None.

The federal representative population in 1850 being 851,470 entitles the state to send nine representatives to Congress. To the Senate, like each of the other United States, Illinois sends two members.

Surface, Hydrography, Communications.—Illinois is one of the most

level states in the Union. In the southern part of the state, by the Ohio, there is a range of low hills; the northern part is also somewhat broken, and there are some elevations by the Illinois, and lofty bluffs along the Mississippi; but with these exceptions Illinois is one great plain, having a general gentle slope to the south-west. The loftiest height is said to be under 1000 feet above the level of the sea, the lowest portion of the plain at the mouth of the Ohio River, is 340 feet above the sea. A large portion of the surface consists of prairie, much of it in its native state, but a great deal is reclaimed, and cultivation is rapidly encroaching on the remainder. The surface of the largest of the prairies, known as the Grand Prairie, and occupying the country between the Mississippi and the Wabash rivers is for the most part gently undulating and very fertile, with a good deal of timber about it; though considerable tracts of the southern part are flat and have an inferior soil. The character of the prairie is said to afford no insurmountable obstacle to its reclamation and settlement; no portion of it is more than eight miles from timber, and coal is found in abundance in most parts. The prairies are commonly known as the dry and the wet. The dry prairies are those which lie above the alluvial tracts, and, though less fertile, are preferred to them on account of their not being subject to inundations. The wet prairies are usually covered with coarse grass. The broad alluvial tracts bordering the several rivers, locally known as bottoms, are extremely rich and fertile, but owing to their moist state and liability to be flooded, are to a great extent uncultivated, though producing fine trees.

Illinois is well provided with rivers. Nearly three-fourths of its boundary is formed by navigable rivers, while its north-eastern angle is washed for 57 miles by Lake Michigan, thereby affording the state direct water communication with the whole lake country of the north. The rivers which belong to it in common with other states are the Mississippi, Ohio, and Wabash, which are described under MISSISSIPPI, KENTUCKY, and INDIANA. Of the rivers which belong wholly to the state the chief is the *Illinois*, which rises near Lake Michigan, and flows first west, and then south-south-west, into the Mississippi, which it joins 20 miles above the Missouri. About 200 miles above its mouth it expands into a fine lake called Peoria, 20 miles long and 2 miles wide. A morass at its source in wet seasons discharges a part of its waters into the river, and a part into the Chicago, a small stream which flows into Lake Michigan. This large river takes the name of Illinois only from the confluence of the *Plaine*, *Des Plaines*, or *Aux Plaines* River, from the north-east and the *Kankakee* from the east, both considerable streams, and navigable for boats. Thirty miles below their confluence *Fox* River, sometimes, but erroneously, considered the main branch of the Illinois, falls into the Illinois from the north; it rises in the Huron territory, and has a course of 200 miles south-south-west, more than half of which is in this state. The course of the Illinois is about 500 miles. It is navigable by large steamboats at certain seasons up to *Ottawa*, just below the *Great Rapids*, near the junction of the *Fox* River; at other times steamboat navigation is stopped by the *Little Rapids* at *La Salle*, where a canal commences which connects the Illinois with Lake Michigan. The Illinois flows with a gentle current, generally in a wide deep bed. The other principal tributaries of the Illinois are the *Vermilion* River from the south-east, the *Mackinaw* from the north-east, *Spoon* River from the north-west, the *Sangamon*, or *Sanganio*, from the east, and the *Big* and *Little Blue* rivers from the west; besides numerous lesser streams. *Sangamon*, by much the largest of these tributaries, has a very winding course to the west of more than 250 miles, of which 140 miles are navigable, and it falls into the Illinois about 130 miles above its mouth. *Rock* River rises in Wisconsin, and entering the state of Illinois on its north boundary, crosses it in a south-west course of about 300 miles to the Mississippi: it is navigable in its lower course; its upper course is impeded by rapids. The *Kaskasia* rises on the eastern side of the state, and, like the Illinois and *Rock* rivers, has a generally south-western course to its junction with the Mississippi, about 80 miles above the junction of the Ohio. The river has been rendered much more serviceable for purposes of navigation by the removal of various obstructions under the direction of the Board of Public Works; it is now navigable in high-water to *Vandalia*, 150 miles from its mouth, and in some seasons to *Shelbyville*, 30 miles higher: its entire course is about 300 miles. It has numerous small tributaries. The *Big Muddy*, farther south, is also a considerable stream. The affluents of the Ohio and the Wabash are generally much smaller streams than those which fall into the Mississippi, but some of them are navigable, and all are important as furnishing water-power for mechanical purposes.

The state possesses one very important canal, the *Illinois and Michigan* Canal, 110 miles long, constructed by the state at a cost of upwards of 8,000,000 dollars. It commences at *Chicago* on *Lake Michigan*, and is carried in a south-western direction near the right bank of the Illinois to *La Salle*, where the Illinois becomes navigable, thus opening to the lake ports and navigation the wide river country of the south and west.

Illinois appears likely to be eventually amply supplied with railways. In all, the lines completed or in progress amount to 2100 miles. Already some 600 or 700 miles are in operation, and above

1000 miles more are said to be in progress of construction; while the lines of country for 600 more miles have been surveyed. The principal lines in operation are those in connection with the commercial capital of the state, Chicago, in which city seven main-trunk lines meet. The Chicago and Rock Island railway runs from Chicago on Lake Michigan, in a south-south-west direction, to Rock Island city, at the confluence of Rock River with the Mississippi; its length is 180 miles. The Galena and Chicago runs from Chicago to Galena and Freeport at the north-western extremity of the state, 120 miles, with branches to Dixon 68 miles, and to Beloit, in Wisconsin, 20 miles. The Chicago and Aurora, 86 miles long from Chicago to Mendota, is the only other line from Chicago which is completed; but the Chicago and Cincinnati, to connect those places, 27 miles long; the Chicago and Fort Wayne, and the Chicago and Milwaukee, 92 miles; the Chicago and Mississippi, running to Alton, 130 miles; and the Chicago St. Charles and Mississippi, 135 miles, are in progress; and 100 miles of the last are open. The Great Western central line has under 100 miles in operation. The most important of the lines in progress is the Illinois Central, which is to be 700 miles long, and with the other lines will connect all the leading towns with each other, and with the chief trading places in the neighbouring states and most parts of the Union, and likewise of Canada. All the lines in progress are expected to be completed by 1857.

Geology, Mineralogy, &c.—The rocks of Illinois belong to the Palæozoic order. In the extreme northern and western portion of the state is a narrow band of Lower Silurian rocks, the southern extremity of the Lower Silurian basin of Wisconsin. They consist of sandstone, in which occur numerous specimens of the *Lingula antiqua*, and of blue limestones in which are the rich lead-mines of Galena. South of the above, and extending east and west, is a broad belt of Upper Silurian rocks, chiefly light gray and magnesian limestones. Between this belt of Lower Silurian strata and Lake Michigan, and also on the south of the Silurian rocks, is a narrow band of fossiliferous Devonian rocks. South of these again, also extending east and west across the state, and along the whole western and southern border, lying along the Mississippi and Ohio rivers, is a narrow strip of Lower Carboniferous strata, consisting of bituminous slate, and fine-grained sandstone. Above these, and occupying the entire centre and eastern part of the state is a vast bed of Upper Carboniferous strata, closely resembling the coal-bearing rocks of England, but here forming part of a basin of these strata of a grandeur and extent almost unparalleled.

Illinois is exceedingly rich in minerals. Silver is obtained in the north-western part of the state in connection with galena. Lead is very widely diffused over the northern, and especially the north-western district; the lead-mines about Galena are among the most productive known. Copper is also obtained largely in those parts. Iron-ore is very widely distributed. Coal is however the most extensive and valuable mineral of Illinois. It is bituminous in quality, and the beds are of great thickness. The great coal region is that vast space mentioned above, as occupied by the Lower Carboniferous strata, extending quite across the state from Missouri to Indiana, and from Iowa to Kentucky. Excellent building stone of various descriptions is quarried over almost every part of the state. Granite boulders of large size occur in many places. Salt springs exist in several of the southern and eastern counties, and there are sulphur and chalybeate springs in various parts.

Climate, Soil, and Agriculture.—The climate is very much the same as that of Missouri, except that it is more humid. There is a considerable difference in the temperature between the northern and southern parts of the state. At New Harmony, which is in 38° 11', and opposite the southern part of the state, on the east bank of the Wabash, the thermometer has been observed as low as 5° below zero of Fahrenheit. Everywhere however the winters are severe and the summers hot and long, and the temperature subject to frequent sudden changes. In the southern parts of the state the summer heat is very oppressive. South-westerly winds blow during three-fourths of the year. North and north-westerly winds prevail in winter.

Illinois possesses a vast extent of excellent arable land. The soil however varied is generally highly fertile. Along the river-valleys, or bottoms, it consists of an extraordinarily rich alluvial deposit. One of these tracts, the American Bottom, on the Mississippi, extending above the mouth of the Kaskaskia for 90 miles, is especially noted for its fertility. Its soil, which is the richest river alluvium, continues unchanged for 25 feet below the surface, and some portions of it which are cultivated about the old French towns, have produced Indian corn without intermission and without manure for nearly a century and a half. A sixth of this alluvial land is however unfit for cultivation, owing to its liability to inundations. The prairies though less productive are still very fertile, and where timber is to be obtained are preferred for farms on account of their superior salubrity. The prairies are consequently steadily and rapidly becoming covered with thriving groves of young trees, the forerunners of busy farms. The barrens, or oak openings, have frequently a thin soil. In the northern parts there are stony tracts, but everywhere else it is said that "the plough may pass over millions of acres without meeting so much as a pebble to impede

The following are the principal results of the inquiries made respecting the agricultural statistics of Illinois at the last census:—The number of farms under cultivation in the state on the 1st of June 1850 was 76,208. The extent of improved land in farms was 5,039,545 acres, of unimproved 6,997,867 acres, together valued at 96,133,290 dollars. The farming implements and machinery were valued at 6,405,561 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 9,414,575 bushels; rye, 83,364 bushels; maize, 57,646,984 bushels; oats, 10,087,241 bushels; buckwheat, 184,504 bushels; barley, 110,795 bushels; peas and beans, 82,814 bushels; potatoes, 2,514,861 bushels; sweet potatoes, 157,433 bushels; tobacco, 841,394 lbs.; hops, 3551 lbs.; hay, 601,952 tons; clover and other grass seeds, 17,807 bushels; flax, 160,063 lbs.; maple sugar, 248,904 lbs. The value of orchard products was 446,049 dollars; of market-garden products, 127,494 dollars. Of wine only 2997 gallons were made. A good deal of hemp is grown and prepared, but the 'Census Report' states (p. 1015), that with regard to it the "returns were so confused, and all information from other sources so vague and indefinite, that it was deemed advisable to strike the items of hemp from the agricultural tables of the state." It may be as well to state here that it must not be supposed that these agricultural returns are as exact as their specific character would perhaps suggest, but there can be little doubt that they do, in the words of the 'Report,' "give a very fair idea," undoubtedly a far clearer and more correct idea than can be gathered from any other source, "of the state of the country in 1850."

With regard to live-stock, the returns show that the number of horses in the state in 1850 was 267,653; asses and mules, 10,573; milch cows, 294,671; working oxen, 76,156; other cattle, 541,209; sheep, 894,043; swine, 1,915,907. The value of live stock was 24,209,258 dollars; of animals slaughtered, 4,972,286 dollars. The products of animals were—wool, 2,150,113 lbs.; butter, 12,526,543 lbs.; cheese, 1,278,225 lbs.; bees'-wax, and honey, 869,444 lbs.; silk cocoons, 47 lbs.

Illinois is in general well supplied with timber. The most common trees are various kinds of oaks, sycamores, which in the alluvial soil along the rivers grow to an immense size, sugar-maple, walnuts, several kinds of ash, elm, cotton-wood, honey-locust, hickory, buck-eye, pecan, linden, wild cherry, sassafras, elder, and persimmon; in the southern and eastern parts yellow poplar and birch, and near the Ohio yellow pine and cedar. Hazel, red-bud, pawpaw, sumac, vine, dog-wood, and other under-growths are abundant. There are also various valuable medicinal plants.

The gray, black, and prairie wolf are still met with; the prairie wolf in considerable numbers. Panthers, wild-cats, foxes, racoons, opossums, and gophers, with musk-rats, otters, and occasionally beavers are also found, but they are being steadily exterminated. Partridges and prairie fowl abound; ducks, geese, swans, and various other aquatic birds visit the waters in the spring season. Fish in the greatest possible variety swarm in the rivers and lakes.

Manufactures and Commerce.—At present the manufactures of Illinois are chiefly connected with agriculture. Agricultural implements are extensively made; there are numerous wheelwright's shops; saw, grist, oil, flour, and other mills. The only important manufactures not immediately connected with agriculture are the iron-works, woollen-factories, and tanneries. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards in 1850 was 3099. Of these two were pig-iron manufactures, employing 150 hands, and a capital of 65,000 dollars, consuming annually 5500 tons of ore and 170,000 bushels of coke and charcoal, and producing 2700 tons of pig-iron; and 29 establishments engaged in the manufacture of cast-iron, employing 332 hands, and a capital of 260,400 dollars: there was no wrought-iron manufactured in the state. The woollen manufacture employs 178 hands, including 54 females, and a capital of 154,500 dollars; tanneries 275 hands (240 males), with a capital of 188,373 dollars; flour-mills, 834 persons; saw-mills, 937; distilleries, 176; pork and beef packing, 245; lead-mining and smelting, 213 persons. The 'home-made manufactures' for the year were valued at 1,155,902 dollars. There are the usual classes of professional men; the number of the principal classes were—clergymen, 1023; lawyers, 817; physicians, 1402; and surgeons, 8.

The direct foreign commerce of Illinois is chiefly with Great Britain. The exports, wholly of domestic produce, for the year ending June 30th 1852 amounted to 51,325 dollars; the imports to 4832 dollars. The commerce of the state is chiefly centred in Chicago, in our notice of which lower down will be found some further particulars respecting the trade of Illinois; Alton on the Mississippi, and Galena, are the other principal commercial towns. The internal trade is very considerable, and it is rapidly increasing with the increase of facilities of communication.

Divisions, Towns, &c.—Illinois is divided into 99 counties. Springfield is the political capital of the state, but the most important town is Chicago. The towns for the most part have as yet but small populations; the following are all which seem to require notice here: the population is that of 1850:—

Springfield, the capital of the state, is situated on the border of a broad prairie, about 4 miles from the left bank of the Sangamon River, in 39° 48' N. lat., 89° 33' W. long., 801 miles W.N.W. from

Washington: population, 4533. The town was laid out in 1822 on a regular plan, with a central public square, and wide streets crossing at right angles. In the centre of the principal square is the capital, a showy stone-building of three stories, with porticoes. The other public edifices are the court-house, market-house, jail, United States land-office, eight churches, academies, &c. There are some manufactures and an iron-foundry. The town is the centre of a very fertile district, the products of which are brought to its market. The Great Western Central, the Chicago and Mississippi, and the Massac and Sangamon railways meet here. Two daily and one weekly newspaper are published in the town.

Chicago, a city, port of entry, and capital of Cook county, is situated at the mouth of the Chicago River, on Lake Michigan, 42° 0' N. lat., 87° 35' W. long., 183 miles N.N.E. from Springfield: population 29,963 in 1850, in 1840 it was only 4470. The city is well and substantially built. It extends along the shore of the lake for above a mile, and for two miles back along the river which is separated into two branches, each having a depth of 12 to 15 feet. The site is low and level, but the town is said not to be unhealthy. The bar at the mouth of the river has been reduced, and piers have been carried out into the lake in order to prevent the accumulation of sand and drift. The largest lake craft and steamers can now pass over the bar, and within there is commodious anchorage for an almost unlimited amount of shipping. The commerce of the town has increased within the last few years in full proportion to the great increase of means of internal communication, and its fine position with respect to the navigation of the lakes. In 1839 the total value of property was assessed at 236,842 dollars, in 1850 it was assessed at 8,562,717 dollars. The imports in 1840 were 562,106 dollars, the exports 223,635 dollars. In 1848 the imports were 8,338,639 dollars, the exports 10,709,333 dollars. The arrivals of shipping in 1850 were:—Steamers, 662; propellers, 183; schooners, 1182; brigs, 230; barges, 13: making a total of 2270 vessels, of an aggregate burdan of 958,600 tons. The principal exports in 1850 were:—Wheat, 437,660 bushels; maize, 3,221,317 bushels; oats, 767,197 bushels; hemp, 697,783 lbs.; coal, 2,091,552 lbs.; iron, 3,454,060 lbs.; lead, 1,376,879 lbs.; lumber, 67,957,287 feet; laths, 14,921,420 pieces; wool, 1,088,553 lbs.; besides considerable quantities of cheese, butter, flour, sugar, beef, pork, lard, and potash. The principal imports in the same year were:—Wheat, 358,077 bushels; maize, 2,647,465 bushels; bacon, 434,716 lbs.; hams, 1,086,933 lbs.; pork, 2,390,248 lbs.; lard, 2,069,625 lbs.; hemp, 1,035,648 lbs.; hides, 848,876; lumber, 125,523,122 feet; timber, 562,976 feet; laths, 27,583,475 pieces; shingles, 60,338,250 bushels; lead, 1,402,135 lbs.; wool, 731,956 lbs.; tobacco, 324,923 lbs. The public buildings are the usual county buildings, numerous churches and schools, banks, &c. There are several large hotels in the city. Besides the Illinois and Michigan Canal, the city is the terminus of several important railways, and a great many plank-roads facilitate communication with the interior. Five daily newspapers, each having also a weekly issue, six weekly, a fortnightly, and three monthly periodicals are published here.

Alton, on the left bank of the Mississippi, 3 miles above the confluence of the Missouri, is the chief port town of Illinois on the Mississippi, and the largest town on that river above St. Louis: population, about 12,000. Alton is a convenient port, and is now being connected with several railways; its commerce is greatly increasing. There are several churches, Shurtliff college and other buildings in the town. Bituminous coal is abundant in the vicinity. *Belvidere*, on the north branch of the Kishwaukee River, and on the Galena and Chicago railway, 78 miles W. from Chicago, population about 2000, is a flourishing and busy new town. There are several grist- and saw-mills. *Carlinville*, the capital of Macaupin county, 2 miles N. from Macaupin creek, and 41 miles S. by W. from Springfield, is one of the most flourishing places in the interior. The Sangamon and Alton railway has a principal station here. *Carrollton*, the capital of Greene county, on the border of Spring prairie, about 6 miles N. from Macaupin creek, and 56 miles S.W. from Springfield, is another rapidly increasing interior town, and the centre of a fertile district. *Carthage*, the capital of Hancock county, lies between Bear and Long creeks, and is a busy and prosperous place, being the mart of a fertile neighbourhood, and of a rich coal district. The village has acquired a wide notoriety as the scene of the murder of the Mormon prophet and leader, Joe Smith, and his companions. *Chester*, on the Mississippi, immediately below the confluence of the Kaskasia River, population about 1300; is a place of growing commercial importance, being the entrepôt for the produce of a considerable tract of back country. *Danville*, on the right bank of the Big Vermilion River, just below the confluence of the North and Salt Forks, 128 miles E. by N. from Springfield, population about 1200, is a good sized and flourishing place, and the centre of a fertile and populous district. Two weekly newspapers are published here. *Freeport*, on the Pecatonica River, 168 miles N. from Springfield, is another of the rising towns of Illinois, and from its position is likely to become an important commercial place. The surrounding country is rich in minerals, and very productive agriculturally. The Galena branch of the Central Illinois, and Galena and Chicago Union railways meet here. Two newspapers are published weekly. *Galena*, on the Feve River a little above its confluence with the Mississippi, and near the

north-western extremity of the state, population about 6500, is the centre of the lead mining district, and the chief commercial town of this part of Illinois. It is the capital of Joe Davies' county, and contains the usual county buildings, court-house, jail, several churches and schools, and some large copper smelting works, grist- and saw-mills, &c., and has a large lumber market. The chief exports in 1851 were—lead 33,082,190 lbs.; flour 39,339 barrels; barley 42,731 bushels; pork 3185 barrels; bacon 812,658 lbs.; lard 125,000 lbs.; butter 87,618 lbs.; eggs 22,880 doz.; hides and skins 9326; horses 800; cattle 1500, &c.; and in the same year it received 5,085,684 feet of lumber, and a very large quantity of shingles, timber, and wood of other descriptions. The largest river steamers ascend to Galena, and it has good railway accommodation. Two daily newspapers, having also weekly issues, are published here. *Jacksonville*, on the Mauvais-terre creek, 30 miles W. by S. from Springfield, population 2745, is a rapidly rising new town, situated on a rich prairie district. It contains a court-house, jail, churches, and schools. Illinois college, and the state deaf and dumb institution are situated here. There are extensive flour-mills, cotton-works, tanneries, and machine manufactories. The Sangamon and Morgan railway passes the town. A newspaper having tri-weekly and weekly issues is published here. *Joliet* on the Plane River, 40 miles S.W. from Chicago, population 2659, contains a court-house, jail, churches and schools, large hotels and warehouses. The river affords fine water-power, which is made available for numerous mills and factories. The Illinois and Michigan Canal, and Chicago and Rock Island railway pass the town. Two weekly newspapers are published here. *Kaskasia*, the original capital of Illinois, stands on the right bank of the Kaskasia River, 10 miles above its confluence with the Mississippi, 127 miles S. by W. from Springfield the present capital: population, about 1000. Kaskasia is one of the oldest towns in the state, having been founded by the French in 1683; it stands in the midst of very picturesque scenery, contains the usual county buildings, a Roman Catholic church, and a United States land office. *Mount Carmel* occupies a favourable site for commercial purposes, on the right bank of the Wabash, below the rapids, 140 miles S.E. from Springfield: population, 1500. It contains a court-house, jail, churches and schools, and several flour-mills, and machine-shops. *Naperville*, on the Du Page creek, 160 miles N.E. from Springfield, is a rising new town, the capital of Du Page county, having various county buildings, churches, schools, &c., and two weekly newspapers. *Ottawa*, at the junction of the Fox River with the Illinois, 120 miles N.N.E. from Springfield, is the capital of La Salle county, and a place of great and increasing commercial importance. By the Illinois and Michigan Canal the lake steamers reach the town, and the Chicago and Rock Island railway affords communication with the western districts; while the Illinois River yields immense water-power which is being turned to full advantage. The soil of the surrounding country is rich; there is a good deal of timber; and limestone and freestone abound. Two newspapers are published weekly. *Peoria*, on the right bank of the Illinois, at the foot of Peoria Lake, is the capital of Peoria county, and the shipping port for the surrounding grain district: population, 5562. It contains the usual county buildings, churches and schools, an incorporated academy, several steam-mills, factories, &c. Two weekly newspapers, and a semi-monthly magazine are published here. *Quincy*, stands on a high bluff on the left bank of the Mississippi, 88 miles W. from Springfield, population 6911; it is the capital of Adams county, and the mart for a well cultivated and populous neighbourhood. Besides the usual county buildings, churches, and schools, it contains a United States land office, numerous warehouses, stores, hotels, workshops, &c. Several steamboats arrive and depart daily during the season. Large quantities of barrelled pork and bacon are exported. One daily and three weekly newspapers, with two monthly periodicals are maintained. *Rock Island City*, at the junction of the Rock River with the Mississippi, and the terminus of the Chicago and Rock Island railway, by which it is 180 miles W.S.W. from Chicago, is a new town which has been laid out on an extensive plan, and though not at present very populous is expected to become one of the most considerable commercial towns on the upper Mississippi. The site is well adapted for trading purposes, and the surrounding country is not only a rich agricultural district, and well supplied with timber, but affords also abundance of coal and limestone. *Rockford*, the capital of Winnebago county, is situated at the rapids on Rock River, 92 miles N.W. by N. from Chicago by the Galena and Chicago railway: population, 2098. Steamboats ascend to the town. The rapids afford immense water-power, and there are several mills. A newspaper is published weekly. *Shawneetown*, on the Ohio, 164 miles S.E. from Springfield, population 1764, is one of the largest trading places in southern Illinois. Iron-ore and coal are obtained along the banks of the Ohio. There are very extensive salt-works at Saline creek, 12 miles from the town. Shawneetown possesses a paved levee of considerable length. An important branch of the trade of the place is the slaughtering and packing of hogs: one establishment has facilities for hanging up 1000 hogs a day. Tobacco is raised in the vicinity in considerable quantities: 300 hogheads were shipped from here in 1852. *Vandalia*, from 1818 to 1839 the capital of Illinois, stands on elevated ground, on the right bank of the Kaskasia, 66 miles S.E. from Springfield: population, about 1100. The town was laid out on a large scale in

1818 as the capital of the state, with a great central square in which the state buildings were placed, and streets 80 feet wide intersecting at right angles. After the removal of the state legislature, judiciary, &c., the place languished, but it is recovering, and as it is now being made a centre for the junction of several great lines of railway, and consequently one of the chief thoroughfares of trade in Illinois, its natural advantages appear likely to be more thoroughly developed, and it will probably become an important commercial town.

Waukegan, the port town and capital of Lake county, is a new town well placed on an eminence above lake Michigan. The town is of recent formation, but it already contains several handsome and substantial buildings, piers, &c., a good harbour, above 4000 inhabitants, and carries on a very considerable lake trade. The country inland is here of the best description of prairie, with abundance of good timber.

Government, Judicature, &c.—The first constitution of the state was drawn up in 1818: that under which the government is now carried on was adopted in convention in August, 1847, and accepted by the people in March 1848. By it the right of voting for all elective offices appertains to every white male citizen 21 years of age who has resided in the state for one year. Among other provisions of the constitution are the following:—Slavery is prohibited. No coloured person, free or slave, is permitted to come into the state. Lotteries are disallowed. Duelling is a disqualification for office. No state bank can be created or revived: acts creating banks must be submitted to the people, and receive a majority of votes in their favour in order to become law. Stockholders are individually liable to the amount of their shares. Corporations for other than banking purposes may be established under general laws. No alteration or amendment can be made in the constitution, unless it is passed by a vote of two-thirds of the whole number of members elected to both houses, published and referred to the next legislature, and, if passed again by a majority, then submitted to the people, whose approval by a majority makes it law. Only one article of the constitution can be amended in one session. The legislative body, styled the general assembly, consists of a Senate of 25 members, who must be 30 years old, and have resided in the state for five years; and of a House of Representatives of 75 members, who must be 25 years old, and have resided in the state three years. These members may be increased when the population of the state exceeds 1,000,000, but the number of representatives must never exceed 100. The senators are elected for four years; half the number to be elected every two years; the representatives are elected biennially. In forming senatorial or representative elective districts, regard is only to be had to the number of white inhabitants. The governor who has a qualified veto on the acts of the general assembly, is elected every four years by a plurality of votes. He must be 35 years old, and have resided in the state the 10 years preceding his election. His salary is 1500 dollars; he must reside at the seat of government, and he is not eligible for re-election at a consecutive term.

The public debt of the state on the 1st of January 1853 amounted to 16,724,174 dollars, in which is included a sum of 7,300,000 dollars borrowed for the construction of the Illinois and Michigan Canal. The amount of property in the state subject to taxation on January 1st 1851 was:—Real estate 98,748,533 dollars; personal property 39,069,546 dollars, total 137,818,079 dollars. The rate of taxation was 60½ cents on 100 dollars. The total receipts of the treasury for the two years ending November 30th 1852 (chiefly from taxes) was 503,561 dollars, the expenditure for the same period was 385,767 dollars. The state militia is composed of 170,359 men, of whom 4618 are commissioned officers.

The judicature consists of a supreme court, circuit courts, and county courts. The supreme court consists of three divisions, and has cognisance of all appellate cases, cases relating to the revenue, mandamus, habeas corpus, and some impeachments. The judges, who must be 35 years old and have resided in the state for 5 years, are elected by the people for 9 years; one of the judges must be elected every 3 years: the salary of each is 1200 dollars. There are 15 circuit courts, each presided over by a judge who is elected for 4 years, must be 30 years of age, and receives a salary of 1000 dollars: these courts have cognisance of all ordinary civil and criminal cases. In each county a court is held for the transaction of county and probate business, with limited civil and criminal jurisdiction: the judges are elected by the counties for 4 years.

The state has made considerable provision for the education of the children of white citizens. The total sum devoted to educational purposes on December 31st 1852 was 951,504 dollars; the whole of which has been borrowed or appropriated by the state, and applied to the payment of the current expenses of the government. The state pays 6 per cent. interest. The number of colleges in the state in 1851 was 6, having 35 teachers and 442 pupils; academies and other upper schools 81, having 156 teachers and 4179 pupils; public schools 4054, having 4252 teachers and 125,790 pupils. According to the returns by families there were in the same year in the state 181,969 white and 323 free coloured children attending school. The number of adults in the state unable to read and write was 40,054 whites and 1239 free coloured; of whom 35,336 were natives of the United States. The principal colleges are—the Illinois, at Jacksonville, founded in 1830, which has 6 tutors, 48 students, and a library of 3660 volumes;

the Knox, at Galesburg, founded in 1837, which has 7 tutors, 56 students, and a library of 3300 volumes; the Shurtliff (Baptist), at Upper Alton, founded in 1835, which has 6 tutors, 40 students, and a library of 1900 volumes; and the M'Kendree (Methodist), at Lebanon, founded in 1835, which has 10 tutors, 79 students, and a library of 7000 volumes. Among religious sects the Methodists are the most numerous. In 1850 the Methodists had 405 churches, affording accommodation for 178,452 persons; the Baptists 282 churches, with accommodation for 94,130 persons; Presbyterians 206 churches, with accommodation for 83,129 persons; 'Christians' 69 churches, with accommodation for 30,864 persons; Congregationalists 46 churches, with accommodation for 15,626 persons; Lutherans 42 churches, with accommodation for 16,640 persons; Episcopalians 27 churches, with accommodation for 14,000 persons; Roman Catholics 59 churches, with accommodation for 29,100 persons. There are besides churches for Moravians, Swedenborgians, Dutch Reformed, Mennonites, Tunkers, Quakers, Unionists, Unitarians, Universalists, and various minor sects. One hundred and seven newspapers and periodicals, having an aggregate circulation of 88,623 (5,102,276 copies annually) are published in the state.

This state is within the limits of the cession which Virginia made to the United States in 1787; but the first settlements made in it were by the Canadian French before 1763. It was governed, with Indiana, as a territory of the United States from 1800 to 1809. In 1809 they were made separate territorial governments, and in 1818 Illinois was admitted into the Union as a state.

(*Statistical Gazetteer of the United States, 1853; American Almanac, 1854; Seventh Census of the United States, Official Report, 1853; Marcou, Geological Map of the United States, with an Explanatory Text 1853.*)

ILLOK. [CROATIA.]

ILLYRIA, Kingdom of. Ancient Illyria comprehended all the provinces on the east coast of the Adriatic, with the adjacent islands as far as Epirus, and was inhabited by a people called by the general name of the Illyric Nations. Illyria also extended into the interior as far as the Ister (Danube) and the Alps which lie between Italy and Germany. The Macedonic nations formed the eastern boundary. Within these vague but extensive limits, which comprehend a considerable portion of the Austrian and part of the Turkish dominions, there were other nations, and particularly Gauls, mingled with the Illyrians. (Strabo, 312, &c.) The numerous excellent ports along this coast gave the natives great advantages for prosecuting a piratical warfare. The Illyrians defeated Amyntas II. of Macedonia B.C. 383, and his eldest son, Alexander II., was obliged to purchase peace of them, and give his brother Philip as a hostage. When Philip came to the throne he defeated the Illyrians, B.C. 359, and for a time broke their power. That the Illyrians were formidable neighbours to the Macedonians appears from the fact of their long-continued wars and the several great defeats which the Macedonians sustained from them. Piracy was the chief pursuit of the maritime Illyrians, which brought them into collision with the Romans, by whom they were subdued. On the division of the empire Illyria remained to the Western empire, but on its decline (476) fell to the Eastern empire. In the 6th century colonies of Slavonians from Russia and Poland settled in the country, and soon made themselves independent of the Byzantine government: thus arose the little kingdoms of Croatia and Dalmatia. The Venetians and Hungarians took some small portions (1090): in 1170 the kingdom of Rascia was created, out of which 200 years later Bosnia was formed. Dalmatia submitted to Venice, but was conquered in 1270 by the Hungarians; but both they and the Venetians soon lost almost the whole country to the Turks, the Venetians retaining only a small part of Dalmatia and the Hungarians Slavonia and Croatia. Thus the name of Illyria disappeared from the map of Europe till it was revived by Napoleon, who, after the conclusion of peace at Vienna in 1809, gave to several tracts of territory ceded by Austria, including Dalmatia, the name of the Illyrian Provinces. Those countries being recovered by Austria in 1813 and 1814, several of them were formed into the Kingdom of Illyria, the extent of which was reduced in 1822 by the separation of the circle of Carlsbad and of the Hungarian Littoral, which were annexed to Hungary. In 1849 a new territorial arrangement was made of the Austrian dominions, and the kingdom of Illyria ceased to be the title of one of the divisions of the empire.

The kingdom of Illyria, as constituted previous to 1849, lay between 44° 43' and 46° 25' N. lat., 13° 14' and 16° E. long., and was bounded N. by Austria and Styria, N.E. by Styria, S.E. by Croatia, S. by the Adriatic, and W. by Italy and Tyrol. The area was about 10,915 square miles: the population was 1,252,831 in 1842. The territory included in the kingdom of Illyria now forms the crownlands of CARNITHIA, CARNIOLA or KRAIN, and KÜSTENLAND, under which heads it will be found described.

ILMEN, LAKE. [RUSSIA.]

ILMINSTER, Somersetshire, a market-town in the parish of Ilminster, is situated near the river Isle or Ille, in 50° 55' N. lat., 2° 56' W. long., distant 44 miles S.W. by S. from Bath, and 136 miles S.S.W. from London. The population of the parish of Ilminster in 1851 was 3299. The living is a vicarage in the archdeaconry of Taunton and diocese of Bath and Wells.

Ilminster was a market-town at the time of the Domesday Survey. The town consists principally of two streets forming a cross; the longer street extends nearly a mile from east to west. The houses are neat and well built. The church, a large cruciform building, with a handsome pinnacled tower rising from the intersection, stands in the centre of the town. There are chapels for Wesleyan Methodists, Independents, and Unitarians; and National and Endowed schools. A Free Grammar school, founded in 1550, has an endowment of 600*l.* a year, and 4 exhibitions, value 15*l.* a year; in 1851 it had 51 pupils. The woollen-cloth, silk, and lace manufactures are carried on, and there are some tan-yards and a considerable malt-trade. The market is on Wednesday; there is one fair yearly.

ILSLEY, EAST, Berkshire, a market-town in the parish of East Ilsley, is situated in 51° 32' N. lat., 1° 17' W. long., distant 16 miles N.W. by W. from Reading, and 56 miles W. from London. The population of the parish in 1851 was 750. The living is a rectory in the archdeaconry of Berks and diocese of Oxford.

East Ilsley stands on the Berkshire Downs, in the midst of a country admirably adapted for sheep pasture. The town is celebrated for its sheep markets and great sheep fair, which are among the largest in England. The sheep markets commence on the Wednesday fortnight before Easter, and are held every alternate Wednesday till July. Fairs are held on the Wednesday in Easter week and the Wednesday in Whitsun week, the Wednesday after September 19th, the Wednesday after October 17th, the Wednesday after November 12th, for sheep, and the first Wednesday in July for wool. A great fair for sheep (at which 50,000 sheep and lambs have been penned for sale) is held on August 26th; and a statute fair on October 13th. The ordinary weekly market is held on Wednesday. The church, partly of Norman date, was repaired and enlarged in 1845. In the town are a Wesleyan chapel and a National school.

IMAUS. [HIMALAYA MOUNTAINS.]

IMBROS, an island of the *Ægean* Sea near the south-west coast of the Thracian Chersonesus, 18 miles south-east of the island of Samothrace, and about 22 miles north-east of Lemnos. It is now called Embro, and also Imru. It is of oval form, and its circumference is about 35 miles. Its surface is hilly and well wooded, and it abounds in game. The valleys produce abundantly corn, wine, oil, and cotton. The island is watered by a stream anciently called Ilius, and by many springs. The population consists of about 4000 Greeks, who inhabit four villages, the principal of which has a castle, and is called Imbro, being built on the site of the ancient town of that name, of which there are still some remains. This island was in remote times the seat of the worship of the Cabiri, like the neighbouring islands of Samothrace and Thasos. It was taken by the Persians about B.C. 503, under Otanes, general of Darius Hystaspes; and at this time it was still inhabited by the Pelasgians, its earliest known inhabitants. It was subsequently colonised by the Athenians. It was afterwards possessed in succession by the Macedonians, by Attalus, king of Pergamos, and lastly by the Romans. The island now belongs to Turkey.



Coin of Imbros.

Actual Size. Copper. Weight, 86 grains.

IMIRETIA. [GEORGIA.]

IMOLA, an episcopal town of the Papal States, in the province of Ravenna, is built in a fine plain on the banks of the Santerno (the ancient *Vatrenus*), over which there is a handsome bridge of recent construction. Imola is upon or near the site of the ancient Forum Corneli, but the present town was founded by the Longobards. Forum Corneli it is said was founded by Sulla, and surnamed from him; it was a place of some importance at the death of *Cæsar*, as in the civil war Octavianus made it his winter quarters. Martial resided for some time in Forum Corneli, which continued to flourish under the empire, and till about the 7th century. Its citadel was called Imolas, whence the modern name of the town. Imola with its suburbs contains 10,500 inhabitants. It has a fine cathedral and several other churches, a theatre, a handsome hospital, a college with a small public library, in which is a celebrated Hebrew manuscript of the Bible dating from the 13th century. The country around produces good wine: cream of tartar is manufactured in the town. Imola is on the high road from Bologna to Rimini, at the point where another road branches off to Ravenna. The bishopric of Imola was founded A.D. 422 by Pope Celestin I. Pius VII. and Pius IX. were bishops of Imola before their exaltation to the papal chair.

INAGUA. [BAHAMAS.]

INCHMARNOCK, Bute-shire, Scotland, a small island about a mile in length, lying off the west coast of Bute Island. In ancient times this islet was a seat of the Culdees. About one-fourth of the surface

is arable land, the remainder consisting of moor and pasture. Its mineral and agricultural products are similar to those of BUTE ISLAND. The area and population are returned with the royal burgh of ROTHESAY. On the island are the ruins of a chapel.

INDIA, BRITISH. [HINDUSTAN.]

INDIAN TERRITORY, United States of North America, an extensive tract of country set apart by the Congress and federal government for the permanent residence of the various tribes of native Indians removed from the settled states and territories of the Union. It lies generally between 33° 30' and 39° N. lat., 94° and 100° W. long., but the limits are not very strictly defined. It is bounded S. by Texas; E. by Arkansas and Missouri; and N. by the newly created territory of Kansas. The area, as given in the 'Report of the Census' of 1850, is 187,171 square miles, but this is considerably more than in previous statements of the area of what is sometimes called the Indian Territory proper, and perhaps includes a portion of the country since appropriated to Kansas Territory. The Indian inhabitants are estimated at from 100,000 to 120,000, four-fifths of whom have been transported from countries east of the Mississippi.

In the south-eastern part of the territory there is a range of hills of moderate elevation; the remainder is a plain, or at most has a gently undulating surface. A considerable portion of the country is prairie ground, but along the rivers there is a good deal of timber. The country is well supplied with water, having several good sized rivers running through it or along its borders on their way to the Missouri and the Mississippi. The Arkansas flows through the midst in a south-eastern direction, and receives in its passage numerous tributaries, some of considerable size. The chief of these tributaries is the Canadian River, which also has numerous affluents or 'forks.' The Red River waters the southern, and the Kansas the northern portion of the state: both of these, as well as the Arkansas, are navigable within the territory at certain seasons by steam-boats. The country possesses capabilities for the prosperous maintenance of a large population. The middle, and by far the larger part of the country, appears to belong to the Lower Carboniferous series of rocks. On the east are Upper Carboniferous strata, or coal-measures, a part of the great coal-basin of Missouri and Illinois. The western and north-western districts belong to the Cretaceous group of rocks. On the south is a narrow belt of Lower Silurian rocks, consisting along the Red River of blue limestone, with eruptive rocks. Coal is not the only mineral obtained. Both lead and iron are found; and there are saline springs, from which a large quantity of salt might be manufactured. The climate is generally healthy. The northern parts are subject to keen westerly winds from the Rocky Mountains, and the winters are rather cold; but in the southern parts the winters are mild, and all the plants are cultivable which are raised in other parts of the United States of the same latitude. The soil on the eastern side of the territory is generally fertile; the northern parts are well adapted for grazing cattle. Maize, wheat, and other grains produce good crops in almost every place where they have been tried.

As already said this large tract of country has been appropriated for the permanent residence of the Indian tribes transported from the settled parts of the United States. It need hardly be said that they have not turned to full account the capabilities of the country. But they have shown that they are capable of steady industrial efforts, and they have made very considerable advances in civilisation. Under the guidance of missionaries, who have settled amongst them, and with the sanction and assistance of the Commissioner of Indian Affairs, some of the larger tribes have established regular governments, legislatures, judicial officers, churches, schools, newspapers, &c.; have introduced the manufacture of agricultural implements, cloth, and most articles of ordinary farm and domestic use; cultivate the land with a considerable amount of skill; rear horses and cattle; build houses; and export to neighbouring states maize, cotton, hides, &c. By the treaty of removal and settlement, the federal government furnishes them with blacksmiths, wheelwrights, and some other mechanics, and at their first settlement gave them a stock of cattle, &c. Many of the tribes possess slaves.

The principal Indian tribes settled in the territory are the Cherokees, who numbered according to the Commissioner of Indian Affairs, about 17,600 in 1853, but whose numbers are usually estimated much higher; the Creeks, who numbered 25,000; the Choctaws, 16,000; the Osages, 4941; the Chickasaws, 4709; the Pottawatomies and Chippewas, 4680; the Pawnees, 4500; the Seminoles, 3000; the Sacs and Foxes, 2373; the Shawnees and Senecas, 1400; Delawares, 1130, &c. The Cherokees occupy a considerable tract lying on the north of the Arkansas River, and adjoining the state of Arkansas, and are the most civilised of all the Indian tribes. [CHEROKEES.] The Choctaws occupy the most southern part of the territory between the Red and Canadian rivers. The Chickasaws occupy a part of the same country, and are governed by the same laws. The country of the Choctaws is the most hilly and broken in the Indian territory, and is well watered by the above mentioned rivers and their tributaries. The Choctaws are extensively engaged in agriculture, raise large quantities of cotton and maize, and have good stocks of horses, cattle, and sheep. On the streams are numerous grist- and saw-mills, and cotton-gins. The houses and farms are well built, and the grounds fenced; the mechanical occupations are chiefly carried on by mechanics provided by the United States

government. The Choctaws have a written constitution and laws. The country is divided into four districts (one of which is occupied by the Chickasaws), each of which elects its own chief every fourth year. A general council of 40 members is elected annually, who meet in the council house, and pass all laws, &c., subject to a qualified veto by the chiefs. Trial by jury is established: with appeals to the higher courts. At the head of military affairs is a general elected by the people at large; and there are 32 captains in each district. Numerous missionaries are settled among both the tribes. The Creeks, with whom are united the Seminoles, occupy the country between the tracts of the Cherokees and Choctaws, watered by the Canadian River and the forks of the Arkansas. The country is less fertile than the districts occupied by those tribes, and the Creeks are on the whole a good deal less advanced in civilisation. But they have similar government, organisation, and judicature; they dwell together in towns, and to a certain extent cultivate their land in common; numerous missionaries are settled amongst them, under whose advice they have built several churches, and established good schools; and altogether the prospect of the future progress of the tribe is spoken of as highly promising. A proposition is said to have been lately made by the executive of the federal government through the Commissioner of Indian Affairs, to the Cherokees, Choctaws, and Creeks, offering to form a state out of the territory occupied by them, and thus admit them into the Union as citizens; but the Cherokees it is said were unwilling to be placed on the same level with the other tribes not so far advanced in civilisation, and the proposal fell to the ground.

Of the lesser tribes it may be enough to mention that the Shawnees and Senecas are settled in the northern part of the territory bordering on the Kansas River. They are a frugal industrious people, carefully cultivating their farms, and raising considerable crops of maize, cotton, vegetables, &c., and breeding horses, cattle, and swine. The Osages, Pottawatomies, and Chippewas occupy a tract north of the Cherokees; they are much less advanced in the arts of civilised life, and retain most of their old wandering habits. Their country is not very fertile, and they suffer much from the cold of winter, and from occasional droughts in summer.

(*Statistical Gazetteer of the United States*; Haskel and Smith, *Gazetteer of the United States*; Schoolcraft, *The Red Man of America*; *American Indians*; Brownell, *Indian Races of North America*; *Report of the Seventh Census of the United States*.)

INDIANA, one of the United States of North America, extends from the Ohio River on the south to Lake Michigan on the north, between 37° 51' and 40° 46' N. lat., 85° 49' and 88° 2' W. long. It is bounded E. by the state of Ohio; S. by the river Ohio, which divides it from Kentucky; W. by Illinois, the Wabash River forming the boundary from its confluence with the Ohio up to 39° 25'; N.W. by Lake Michigan; and N. by the state of Michigan. Its extreme length from north to south is 276 miles, its extreme breadth 175 miles; the average length is 242 miles, the average breadth 153 miles. The area is 33,809 square miles, or about 2500 square miles more than that of Scotland. The following table shows the state of the population, with the relative numbers of whites and coloured persons, at the decennial Censuses during the present century. The total population in

1800 was	4,875, including	163 free coloured persons,	and 135 slaves.
1810 "	24,520, "	393 "	237 "
1820 "	147,178, "	1330 "	190 "
1830 "	343,031, "	3629 "	8 "
1840 "	685,866, "	7165 "	8 "
1850 "	988,416, "	11,262 "	None.

The population in 1850 being all free, the state is entitled according to the ratio of representation, to send eleven representatives to Congress. To the Senate, like each of the other United States, Indiana sends two members.

Surface, Hydrography, Communications.—This state, like Illinois, has a general slope to the south-west. Like that state also it is, with few exceptions, one great plain. There is indeed a tract of hilly country north of the great bend of the Wabash, and the state is skirted on the south by those eminences called 'Ohio Hills,' which sometimes touch the Ohio and sometimes retire from it for two or three miles; they are generally very rugged in character; occasionally rise 300 feet above the river; and inclose what are termed the bottom-lands, which are chiefly covered with a rich alluvial soil, and thickly set with forests. The timbered and prairie lands are more intermixed in this state than is usual; and both prairies and timber lands are on a grand scale. The alluvial river bottoms are all wide. Of these wide valleys, the chief are the Ohio, White River, and Wabash valleys. The Ohio Valley, comprising an area of about 5000 square miles, is for the most part a limestone region, very rugged, and about one-third of it having a soil too poor or hilly for profitable culture. The White River Valley, extending from the Wabash through the centre of the state to the Ohio, with an area of 9000 square miles, is almost uniformly level and very heavily timbered, except in the western parts, where there are ranges of low rugged hills and some prairies and barrens. The soil throughout this valley is extremely rich, and water-power is abundant. The Wabash Valley is much larger than the others, comprising an area of upwards of 12,000 square miles. The eastern portion resembles the White River Valley, with which

it is connected. The other parts are hardly so fertile. Water-power is plentiful, especially in the middle part of the valley. The northern part of the country, watered by the St. Joseph and the Kankakee rivers, resembles the Wabash Valley in its general character, but in parts is much more swampy; and bordering on the latter it has extensive sand-hills, which are clothed with stunted pines and burr-oaks.

The state is amply watered by numerous fine rivers. Few of these however besides the Ohio and the Wabash are available for navigation; but most afford water-power for mechanical purposes. The Ohio and the Wabash are the two great rivers of Indiana. The Ohio is described under MISSISSIPPI RIVER. It forms the southern boundary of the state for a distance, by the windings of the river, of 330 miles, and is navigable throughout. It receives the water of nearly all the rivers of the state. The Wabash rises in Ohio and flows thence into this state, having a course first to the north and north-west and then to the south-west; it then makes a great bend to the south, and flowing in that direction about 90 miles it becomes the boundary of the state. Its whole course through this state, and along its western boundary is about 600 miles, for more than half of which distance it is navigable; but the navigation is interrupted by falls or rapids. All the other principal rivers of the state are tributaries of the Wabash. The White River, the most important of its tributaries, enters the Wabash about 110 miles above its mouth, and is formed of two main branches, of which the northern, called West Fork, has a south-west course of about 300 miles, and the southern, or East Fork, has also a general south-west course of 200 miles. Both of them receive several large tributaries. Above the great bend the Wabash receives the Tippecanoe and the Eel rivers from the north-east, then the Missisnewa from the south-east, and Little River from the north-east. White-water rises in Ohio, and entering this state on its eastern boundary after a course of 80 miles, returns to Ohio and falls into the Great Miami, which unites with the Ohio at the boundary of the two states. Many streams fall into the Ohio, but none of much magnitude. The same remark applies to the Calumic and Deep rivers, and some others which flow into Lake Michigan. The two branches of the Maumees, the St. Joseph's and St. Mary's, both enter this state from Ohio before their confluence, and, what is remarkable, in a course almost directly opposite to that which the united stream takes after the junction, when it turns eastward and re-enters Ohio, and passing in a north-easterly direction through the north-west corner of that state, falls into Lake Erie. Both the Kankakee, the principal arm of the Illinois, and its main branch the Pickimink rise in this state. The Kankakee rises near South Bend and runs sluggishly through the north-western counties for 100 miles, receiving on its way the Yellow River, 50 miles long; it is bordered throughout by extensive marshes. The Pickimink rises south of the Kankakee, runs nearly parallel to it for about 50 miles, and joins it in Illinois.

Besides Lake Michigan, its north-western boundary, the state possesses several lakes, but they are mostly small, and lie to the north of the Wabash River. Beaver Lake is six miles long, and three miles wide. Mexanuckee Lake, in Marshall county, though much less than Beaver Lake, has a far more picturesque appearance: it is about three miles long by a mile and a half wide. The other lakes seldom exceed a few acres in extent: they have mostly sandy bottoms and very clear water, and all of them abound in fish.

The state has two fine canals. The Wabash and Erie Canal extends from Evansville on the Ohio to Toledo on Lake Erie, 467 miles, of which 379 are in Indiana: it affords ready water communication with New York and Canada. The White River Canal extends from Lawrenceburg on the Ohio, to Hagerstown on the National Road, in Wayne county, 75 miles.

The ordinary roads are generally good, and there are many good plank-roads. The railways are numerous and well planned: considerably more than a thousand miles are in operation in the state, and almost as much more in course of construction. The lines mostly centre in Indianapolis, and place the capital and principal business towns of the state in communication with each other and those of the other states of the Union. The principal line is the State Central, which radiates in all directions from Indianapolis, and unites at the boundaries of the state with the lines of other states. Besides the lines which diverge from Indianapolis there are cross-lines between the other large towns in the state to connect the several branches or to join the railways of neighbouring states. We may enumerate the leading lines, including the arms of the State Central:—From Indianapolis there are lines—to Bellefontaine (Ohio), 118 miles; to Lawrenceburg, 90 miles; to Madison, 86 miles; to Evansville, 50 miles; to Terre Haute, 73 miles; to Peru, 73 miles; to Decatur—; to Shelbyville, 16 miles; to Steubenville, 149 miles; one in course of construction along the Wabash Valley; and some others projected or begun. Besides these from Indianapolis there are the Jeffersonville and Edinburg, 77 miles; New Albany and Salem, 287 miles; Shelbyville and Rushtown, 20 miles; Shelbyville and Knightstown, 27 miles; Lawrenceburg and Upper Mississippi, 90 miles; Martinsville and Franklin, 25 miles.

Geology, Mineralogy, &c.—The geology of the state is amply described in the Reports by Dr. Dale Owen of the Survey of Indiana made under instructions from the United States government. The most

striking feature in the geology of Indiana is the large space occupied by the Carboniferous strata. We will however notice the lower formations first. All the strata are Palaeozoic except some diluvial deposits in the northern part of the state, and a few patches of new red-sandstone which overlie the coal-measures. Silurian rocks occupy but a comparatively small area. Along the Ohio, at the south-eastern angle of the state, and extending for some distance northward, occur blue limestone rocks of the Lower Silurian order, forming a portion of the Silurian bed which belongs chiefly to Ohio and Kentucky. On the west and north they are encircled by strata of cliff limestone, in this part of the Union the characteristic rocks of the Upper Silurian system. Devonian rocks, connected with the beds which extend with few interruptions from Iowa through Illinois, Indiana, and Ohio to New York and Pennsylvania, occupy some of the northern and eastern counties. The upper cliff limestones belong to this series. The Carboniferous strata occupy nearly all the rest of the state. The Lower Carboniferous rocks consist of black bituminous and aluminous slates, which stretch in a narrow band north from New Albany in Floyd county to Decatur, and probably beneath the diluvium much farther north; of fine grained sandstone, forming the Knobs, or low isolated hills of the inner country; and of the oolitic limestones of Crawford, Orange, Lawrence, Putnam and other counties. These rocks occupy the country between 85° 30' and 87° W. long., as well as a belt quite across the northern part of the state. The remainder of the state west of 87° W. long., and up to 37° N. lat., is occupied by the Upper Carboniferous strata, or rocks of the coal-measures, being the eastern side of the great coal basin of Illinois. The freestones of this formation, according to Dr. Dale Owen, are soft and fissile, owing to the existence of mica disseminated in layers through their substance, as well as to the liability to decomposition of the ferruginous cement which unites their particles. The clay slates of this formation contain large quantities of iron-ore. In some places new red-sandstone rocks are said by Dr. Owen to overlie the coal-measures. The same authority states that a diluvium consisting of deposits of clay, sand, gravel, and boulders, overlies, and in many places covers up, the other formations to a greater or less depth, particularly in the northern parts of the state.

Neither of the precious metals occurs in Indiana. "The only metals," says Dr. Owen, "which need be looked for are iron, lead, antimony, manganese, zinc, cobalt, and possibly some varieties of copper and arsenic ore." Argillaceous iron-ore occurs largely in the clay-slates of the coal-measures; hydrated brown oxide of iron has been extensively found near the falls of Eel River, where large smelting-works have been established, and elsewhere also; bog-iron abounds in many places. Several detached pieces of native copper have been found in the state; but Dr. Dale Owen thinks that from the nature of the ore, its occurring in washed gravels, and only in isolated places, it does not originate in the state. Coal appears likely always to be the most valuable mineral product of Indiana, and from its abundance in the western counties, the whole of which are occupied by the coal-measures, Dr. Dale anticipates that they will some day become the seats of important manufactures. All the coal found in Indiana is bituminous. Salt is obtained in several places where the rocks are of the inferior members of the coal-measures. Sulphate of magnesia (Epsom salts) occurs in various parts. Good building-stone abounds. The oolitic limestones, which occupy a large space, make good building materials; as do also the encaustic limestones in the southern part of the state. The fossiliferous limestones of eastern Indiana are durable rocks, and some of them afford beautiful marbles. The fissile freestones of the coal-measures are too easily acted upon by the atmosphere to form a good building-stone, but there are excellent close-grained sandstones in other formations. Grindstones and whetstones of very superior quality are obtained and exported, to all parts of the United States. Some of the clay-slates of the carboniferous group make capital fire-bricks; and some of the clays of the coal-measures are well adapted for the manufacture of stone-ware and gray pottery. In the limestone rocks are numerous caverns. One of great extent near the Ohio is particularly noted: in it Epsom salts are found in lumps of from one to two pounds weight; a bushel of its earth yields from four to twenty-five pounds of the salt: nitre and gypsum are found in the same cave.

Climate, Soil, Productions, &c.—The climate resembles generally that of Illinois, but is somewhat more equable. In the northern parts the winters are severe; in the southern they are more genial. Except in the neighbourhood of the wet prairies and swamps the climate is everywhere healthy.

"The fertility of the soil of Indiana," says Dr. Owen, "is universally admitted, yet few are aware that it arises mainly from its geological position. It is well known to geologists that that soil is the most productive which has been derived from the destruction of the greatest variety of different rocks. . . . Now Indiana is situated near the middle of the great valley of north-western America, and far distant from the primitive ranges of mountains; and her soil is accordingly formed from the destruction of a vast variety of rocks, both crystalline and sedimentary, which have been minutely divided and intimately blended together by the action of air and water. It has all the elements therefore of extraordinary fertility. . . . The soil in Crawford, Lawrence, Orange, Monroe, Owen, and Putnam

[southern and midland] counties, being formed chiefly from the oolitic limestones, has a calcareous character, and is admirably adapted for the growth of grasses. Clay will be found to predominate in the soil of the counties of Floyd, Clark, Scott, Jennings, and parts of Bartholomew, Decatur, Shelby, Johnson, Marion, and Hancock [counties lying generally in the south-east], because the soil of those counties is underlaid by clay-slate. Hence we find the beech-tree, which delights in a clayey soil, there growing luxuriantly. The soil of Jefferson, Switzerland, Dearborn, Ripley, Franklin, Fayette, Union, and parts of Decatur and Rush [eastern counties], being formed upon alternating strata of clay and limestone, must partake chiefly of these two earths. This soil is also well adapted to the growth of grasses. The soil of the north-western counties appears to be a siliceo-calcareous sand, resting upon a clay bottom; this I conceive to be the reason why it is so much more productive than its external appearance promises." The alluvial tracts along the river courses are remarkably fertile.

Indiana is very rich in indigenous timber; all the trees natural to the soil and climate of the whole central region of the United States flourish in it; and many of the forest-trees, especially the oak, walnut, sycamore, and poplar, attain a noble size. Oak of various kinds, and beech, are the most prevalent; but the sugar-maple, ash, buckeye, hickory, walnut, elm, poplar, sycamore, coffee-tree, cherry, linden, honey-locust, and hackberry are as widely diffused though less abundant. The chestnut only occurs on the upper course of White River; the black locust is plentiful along the Ohio, but is not found in the interior; the pine occurs on the Knobs along the Ohio, and on the sand-hills bordering Lake Michigan; the tamarack is found only in the swamps of the Kankakee; the cotton-wood occurs chiefly in the valleys of the southern rivers; the catalpa, pecan, and cypress along the lower course of the White River. The dogwood, spear, thorn, and hazel are the principal of the smaller trees. In the forests, and on the borders of the prairies and barrens, are numerous indigenous fruit-trees, including the pawpaw, plum, cherry, mulberry, crab, &c.; and wild grapes, cranberries, gooseberries, blackberries, and strawberries abound.

The number of farms, the nature and proportion of the products cultivated, &c., will be sufficiently indicated by the following statement of the principal results of the inquiries made respecting the agricultural statistics at the last census. The number of farms under cultivation in Indiana on the 1st of June 1850 was 93,896; the extent of improved land in farms was 5,046,543 acres; of unimproved, 7,746,879 acres. The cash value of farms was returned at 136,385,173 dollars; of farming implements and machinery, 6,704,444 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 6,214,458 bushels; maize, 52,964,363 bushels; rye, 78,792 bushels; oats, 5,655,014 bushels; barley, 45,483 bushels; buckwheat, 149,470 bushels; potatoes, 2,083,337 bushels; sweet potatoes, 201,711 bushels; peas and beans, 35,773 bushels; hops, 92,799 lbs.; hay, 403,280 tons; clover seed, 18,320 bushels; other grass seeds, 11,951 bushels; flax, 584,469 lbs.; flax-seed, 86,888 bushels; tobacco, 1,044,620 lbs. Of maple sugar 2,921,192 lbs., and 180,325 gallons of molasses, were made: the sugar-cane is not grown. Of wine 14,065 gallons were made; the wine, a kind of claret, made at the Swiss settlement of Vevay, is considered to be the best made in the United States. A very large quantity of hemp is grown and prepared; but of Indiana, as of Illinois, the 'Census Report' states the "returns were so confused, and all other sources of information so vague and indefinite, that it was deemed advisable to strike the item of hemp from the agricultural tables of the state." Scarcely any cotton is grown. The value of orchard products was 324,940 dollars; of market-garden products, 72,864 dollars.

The number of horses in the state in 1850 was 314,299; asses and mules, 6599; milch cows, 284,544; working oxen, 40,221; other cattle, 339,891; sheep, 1,122,493; swine, 2,263,776. The value of live stock was 22,478,555 dollars; of animals slaughtered, 6,567,935 dollars. The estimated value of poultry was 357,594 dollars. The products of animals were:—Butter, 12,831,635 lbs.; cheese, 624,564 lbs.; wool, 2,610,287 lbs.; silk cocoons, 387 lbs.; bees-wax and honey, 935,329 lbs.

Manufactures, Commerce, &c.—The western counties of Indiana are probably destined at some future day to become important manufacturing districts; but at present the manufacturing capabilities of the state are very imperfectly developed, though considerable progress has been and is constantly being made. The chief manufacturing towns are Madison, Cannelton, New Albany, and Indianapolis. At the census of 1850 there were returned as employed in commerce, trade, manufactures, mechanic arts, and mining, 45,318 free males over 15 years of age; the number employed in agriculture being 163,229, and in labour not agricultural 29,354. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards in 1850 was 4326, of which 2 were cotton factories, 33 woollen factories, 19 iron-works, and 858 tanneries: the aggregate capital invested in manufactures was returned at 7,235,220 dollars. The cotton factories employed on an average 38 males and 57 females, and a capital of 43,000 dollars. The woollen factories employed 189 males and 57 females, and a capital of 171,545 dollars. The iron-works consisted of 14 for castings, employing 148 hands and

capital of 82,900 dollars; 2 for pig-iron, employing 88 hands and a capital of 72,000 dollars; and 2 for wrought-iron, employing 24 hands and a capital of 17,000 dollars. The tanneries employed 838 hands and a capital of 514,897 dollars. Besides these there are numerous flour, grist, oil, saw, and other mills; with coopers, wheelwrights, and other trades and handicrafts. The home-made manufactures of the year were valued at 1,681,089 dollars.

Indiana has no direct foreign commerce. It has however a very great trade with the other states, and a large domestic trade, for which its fine system of canals and railways, and its navigable rivers, afford remarkable facilities.

Divisions, Towns, &c.—Indiana is divided into 91 counties. Indianapolis is the political capital of the state; Madison and New Albany are however equally important towns. Of these, with such other places as call for particular notice, we append a brief account (the population is that of 1850):—

Indianapolis, the capital, stands nearly in the centre of the state, on the left bank of the White River, in 39° 55' N. lat., 86° 5' W. long., 573 miles W. by N. from Washington: population, 8091. On the admission of Indiana into the Union as a state, commissioners were appointed to select a site for the capital. This spot, then the midst of a dense forest, was chosen, and in 1821 the city was laid out. The main street, Washington Avenue, through which the National Road passes, is 120 feet wide; the secondary streets are 90 and 80 feet wide; they intersect at right angles. The state house is an imitation Greek building 180 feet long by 80 feet wide; the governor's house is a spacious edifice standing on a natural mound near the centre of the city; the other public buildings, many of them handsome and substantial structures, are the state offices, United States land office, spacious market-houses, several good churches, schools, colleges, benevolent institutions, hotels, bridges, &c. It is said that no other city of its size in the Union has equal public accommodation. The place has some manufactures and a good deal of trade, and from being the centre of the extensive railway system, mentioned above, has considerable goods traffic, and is a busy travelling station. Eight weekly newspapers (one or two with daily issues also) are published here.

Cannelton, on the Ohio, 124 miles S. by W. from Indianapolis, is a small but rising manufacturing town. It takes its name from the quality of coal obtained here; the manufactures are chiefly of cotton, and earthenware; fire clay, and building materials abound. *Columbus*, the capital of Bartholomew county, on the east fork of White River, 40 miles S. by E. from Indianapolis, population 1008, is another of the rising manufacturing towns of the state, and from its convenient situation and facilities of transport appears likely soon to become an important place. Two newspapers are published here weekly. *Connersville*, the capital of Fayette county, on the right bank of the White Water River, population 2200, is a place of considerable trade. The White Water Canal and the junction railway afford great facilities for communication with all parts of the country. The court-house is one of the finest public buildings in the state; there are several churches and public schools, and substantial stores and warehouses. Two newspapers are published weekly. *Crawfordsville*, on the left bank of Sugar Creek, an affluent of the Wabash, 46 miles W. by N. from Indianapolis, population 1513, is a busy manufacturing and commercial town, and the seat of Wabash College; two newspapers are published here weekly. *Evansville*, population 3235, stands on high ground, on the right bank of the Ohio, at the southern terminus of the Wabash and Erie Canal, and the Evansville and Illinois railway, and is the chief commercial town and travelling station on the Ohio between Louisville and the mouth of the river, a distance of 400 miles. In 1850 before the completion of the railway and canal the number of steamboat arrivals and departures was 5398; and the imports and exports were valued at 7,000,000 dollars: and since then the trade of the port has greatly increased. It will probably become the chief depôt of the coal-trade of the state. Besides the usual county buildings there are several churches and schools, a United States marine hospital, market-house, and several hotels, warehouses, and stores. Two daily newspapers, having also weekly issues, one tri-weekly, and one weekly newspaper are published here. *Fort Wayne*, the capital of Allen county, stands on high ground at the point where the St. Joseph and Mary rivers unite and form the Miami, about 105 miles N.E. by N. from Indianapolis: population, 4282. Being excellently situated for river, canal, railway, and plank-road communication, Fort Wayne has become within the last 10 years one of the most flourishing commercial towns in the state. Besides the county buildings, churches and schools, it contains a branch state bank, a United States land office, and extensive warehouses. Two newspapers are published here weekly. *Jeffersonville*, at the head of the falls of the Ohio opposite Louisville, 105 miles S. by E. from Indianapolis: population, 2122. The town contains besides churches and schools, a United States land office, several large stores and warehouses, and a good landing place. Steamboats are built here, and there is a considerable business carried on. *Lafayette City*, the capital of Tippecanoe county, stands in a very picturesque situation, on the left bank of the Wabash, 60 miles N.W. from Indianapolis: population, 6129. The city stands at the head of steamboat navigation, and is the centre of a large canal, railway, and plank-road traffic. Several considerable factories, and flour- and

paper-mills are in the city and its vicinity; and the surrounding country is extremely fertile. In the city are churches of all the leading sects; several public schools; a branch of the state bank and two other banks; and numerous stores, warehouses, and hotels. Two daily newspapers, having also weekly issues, and one weekly newspaper, are published here. *La Porte*, stands on the edge of a prairie, 130 miles N. by W. from Indianapolis, population 1821; it is the seat of the Indiana Medical College, and has a large trade in grain and live-stock. *Lawrenceburg*, on the Ohio, 2 miles below the confluence of the Great Miami, and 79 miles S.E. from Indianapolis: population, 3487. Partly as the shipping outlet of a singularly fertile valley, and partly owing to the great facilities for traffic which it possesses as the termini of the White Water Canal, and of the Lawrenceburg and Upper Mississippi railway, the city has become an important commercial centre. It carries on a considerable shipping trade, has several large mills, a very extensive distillery, and various manufacturing establishments; and supports two weekly newspapers. *Logansport*, the capital of Cass county, is situated at the head of steamboat navigation, at the confluence of the Eel River with the Wabash, 68 miles N. by W. from Indianapolis: population, about 3000. The falls of the Wabash, which are just above the town, afford vast water-power, by which several large mills are worked. The town is the mart for a wide and very fertile region, with which it is connected by river, canal, and plank-roads. Two newspapers are published here weekly. *Madison*, the capital of Jefferson county, on the Ohio, at the terminus of the Madison and Indianapolis railway, 56 miles S. by E. from the latter city; population, 8012. The city occupies a pleasant site; is regularly laid out with broad straight streets; contains the usual county buildings; several churches and schools; numerous trading establishments, cotton-factories, iron-works, flour- and other mills; and supports two newspapers. *New Albany*, a city, and the capital of Floyd county, stands on the Ohio, about 100 miles S. by E. from Indianapolis, and 4 miles W. by N. from Louisville: population, 8181, or with the suburbs, 9895. The city, now the largest in the state, is pleasantly situated, has wide streets running parallel to the river, with others crossing them at right angles; and is well provided with railway accommodation. The chief trade of the place is that of building and repairing the river steamboats; sloops and schooners are also built; and there are large iron- and machine-works, steam flour-, and saw-mills, &c. The city contains the county buildings, numerous churches, schools, a lyceum, &c.; and supports two daily and weekly newspapers. *New Harmony*, on the left bank of the Wabash, 143 miles S.W. by S. from Indianapolis, claims notice as the site of the establishment of two well-known socialist communities. The followers of the German socialist George Rapp, who on first emigrating from Suabia had established themselves in Butler county, Pennsylvania, removed here in 1814. For their colony they purchased 17,000 acres of land, which they cleared and laid out on a regular plan. They built good houses, churches, farm buildings, &c., and cultivated their land in a superior manner. Here they remained, having all things in common, until 1824, when not liking the climate they sold their settlement to Robert Owen of Lanark, and removed to Beaver county, Pennsylvania, where their new establishment, Economy, still exists. Owen and his followers formed a large community at New Harmony, but after awhile discord broke out, and the establishment proving a complete failure was broken up. *Rising Sun*, the capital of Ohio county, stands on high ground on the Ohio River, 87 miles S.E. from Indianapolis: population, 1654. It is a rapidly increasing commercial town, and the centre of a fertile district; contains the county buildings, six churches, several schools, cotton and woollen factories, tanneries, &c.; and supports two weekly newspapers. *Rushville*, the capital and centre of Rush county, on the left bank of Big Flat Creek, and on the line of the Rushville and Shelbyville railway, 38 miles E.S.E. from Indianapolis, population 2108, is a busy commercial town, containing the usual county buildings, several churches and schools, numerous mills, &c.; and supports two newspapers. *Shelbyville*, the capital of Shelby county, on the left bank of the Blue River, 26 miles S.E. from Indianapolis, population 995, though until the last two or three years a place of little note, is rapidly rising into importance in consequence of its having been made the point of junction of several lines of railway. *South Bend*, the capital of St. Joseph county, on the south bend of the St. Joseph River, at the northern extremity of the state, 192 miles N. from Indianapolis, population 1652, is one of the new towns of this state (it was founded in 1831) which are so rapidly growing into flourishing places, and of which the number of inhabitants conveys but a very insufficient idea of their activity and amount of business. The public buildings consist of a court-house, jail, market-place, 4 churches, schools, and a branch of the state bank, railway station, &c. There are a woollen factory, several saw-, flour-, and oil-mills; agricultural implement, edge-tool, and machine works, and a large peg, lathe, and veneer-mill. *Terre Haute*, the capital of Vigo county, and one of the most important towns in the state, received its name from the high ground forming the left bank of the Wabash on which it is built: population, 4051. The town contains a fine court-house, town-hall, 13 churches, several schools, a state bank, and numerous well-built stores, warehouses, and hotels. A very large business, wholesale as well as retail, is carried on. The

manufactories consist of 2 iron-foundries; 8 carriage and waggon factories; 13 cooperages; 2 soap-works; several steam-, oil-, flour-, and saw-mills; breweries and distilleries; and 4 large slaughter houses and packing establishments, in which 59,000 hogs were killed, salted, and packed in barrels in 1850. In the neighbourhood are rich beds of iron and coal. Terre Haute is on the Wabash and Erie Canal, and several of the most important railways of the state connect here. Six weekly newspapers are published in the town. Vincennes, the capital of Knox county, stands on the left bank of the Wabash, about 100 miles S.W. from Indianapolis: population, 2070. The town, which is the oldest in the state, having been founded by the French in 1702 as a trading port, and formed into a town with its present name in 1749, is regularly laid out, the principal streets lying parallel with the river, and others crossing them at right angles. The public edifices, which are of a somewhat superior character, are the county buildings, a fine town-hall, a market-house, United States land office, several churches, of which the Roman Catholic cathedral, a spacious and well-built structure, is the most noteworthy, and several schools, among others a Roman Catholic theological seminary, and 2 orphan schools. The Wabash is navigable up to Vincennes by steamboats, and the town has good railway accommodation. Washington, the capital of Davies county, on the left bank of the West Fork of the White River, 90 miles S.W. from Indianapolis, population 2578, is a place of local importance, containing, besides the county buildings, five churches, and several schools.

Government, Judicature, &c.—The present constitution of the state was passed in convention in February 1851, and having been ratified by the people a few months later, came into operation in November 1851. By it the right of voting appertains to every white male citizen of the United States who shall have resided in the state for six months; and every white male of foreign birth, 21 years old, who has resided in the United States one year, and in the state six months next preceding an election, and who shall have duly declared his intention to become a citizen of the United States. No coloured person can vote. All elections by the people are by ballot. The general assembly consists of a Senate of 50 members, who are elected for four years, half being elected every two years; and of a House of Representatives of 100 members, who are elected annually. The representatives are apportioned according to a census of white males taken every six years. The governor, who has a qualified veto on the acts of the legislature, is elected for three years, and has a salary of 1500 dollars. The total revenue of the state for the year ending November 1st 1852, was 1,283,604 dollars; the expenditure for the same year was 1,061,605 dollars. The public debt of the state, October 31st 1852, was, according to the financial statement of the state government—foreign debt, 6,712,880 dollars; domestic debt, 2175 dollars; total, 6,715,055 dollars: but Indiana though not a repudiating, was a defaulting state, and this amount does not include the entire sum borrowed and not repaid. In 1847 the state owed 11,048,000 dollars principal of her foreign debt, and 3,326,640 dollars interest, in all 14,374,640 dollars. In that year the legislature made proposals to the bond holders that they should complete the Wabash and Erie Canal and take the state's interest in it for half the sum due; and that the other half should be converted into new stock. It is only upon the new stock, made under this arrangement, that the state considers itself bound to pay either debt or interest. The redemption, principal and interest, of the half thrown upon the canal depends upon the receipts of the canal. Of the old bonds about 982,000 dollars remained unsurrendered and outstanding at the end of 1852. The assessed value of personal and real estate in Indiana in 1850 was 162,870,399 dollars; but the estimated or true value was placed at 202,650,264 dollars. No return of the state militia has been made to the federal government since 1832; it then consisted of 53,913 men, of whom 2861 were commissioned officers: it now probably comprises nearly treble that number.

The constitution prohibits slavery; and it further enacts that no coloured person shall come into, or settle in, the state; that all contracts made with such persons shall be void, and that all persons employing them shall be punished by a fine of from 10 to 500 dollars, and that the proceeds of such fines shall be appropriated for the colonisation of those negroes and mulattoes and their descendants who were in the state at the adoption of the constitution, and who are willing to emigrate.

The judicature consists of a supreme court, circuit courts, and courts of common pleas. The supreme court has appellate and certain original jurisdiction: it is presided over by four judges who have salaries of 1200 dollars each. There are eleven circuit courts, with civil and criminal jurisdiction, each presided over by a judge, with a salary of 1000 dollars, who is elected by the people of the circuit for six years. The district courts of common pleas are 44 in number; each is presided over by a judge who is elected for four years by the people of the district, and has a salary of from 300 to 800 dollars according to the number of inhabitants in the district; these courts have probate jurisdiction; and, under restrictions, civil jurisdiction where the amount in dispute does not exceed 100 dollars, and criminal jurisdiction in cases of misdemeanors and felonies not punishable with death.

Indiana has made liberal provision for the purposes of education.

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The total sum available for school purposes amounted in 1852 to 2,278,588 dollars; but the funds set aside, but not yet available will, with certain fines and forfeitures appropriated to the same end, it is estimated, amount to 5,000,000 dollars in 1857, when the chief amount will fall in. In 1850 there were 11 colleges in the state, having 61 teachers and 1069 pupils. The number of 'public schools' was 4822, having 4860 teachers, and 161,500 pupils. The total number of children in the state attending schools in that year, as returned by families was 220,034, of whom 923 were free coloured children. The number of adults in the state unable to read and write was 72,710, of whom 69,445 were natives and 3265 foreigners. The number of free coloured persons unable to read and write was 2170. The principal colleges are the Indiana State University, at Bloomington, founded in 1816, which has 5 professors, 32 students, and a library of 4200 volumes; Hanover College, at Hanover, founded in 1832, which has 6 tutors, 100 students, and a library of 5000 volumes; Wabash College, at Crawfordsville, founded in 1834, which has 7 tutors, 43 students, and a library of 6400 volumes; and Indiana Ashbury (Methodist) University, Greencastle, founded in 1837, which has 8 tutors, 120 pupils, and a library of 4000 volumes. There are state asylums at Indianapolis for the deaf and dumb, with 152 inmates in 1852; the blind with 51 inmates; and the insane with 159 inmates.

Of the members of religious sects in the state the Methodists are by far the most numerous, and after them the Baptists. In 1850 the Methodists had 778 churches, with accommodation for 266,372 persons; the Baptists had 428 churches, with accommodation for 138,783 persons; the Presbyterians had 282 churches with accommodation for 105,582 persons; the 'Christians' had 187 churches, with accommodation for 65,341 persons; the Quakers had 89 churches, with accommodation for 44,915 persons; the Roman Catholics had 63 churches, with accommodation for 25,115 persons; the Lutherans had 63 churches, with accommodation for 19,050 persons; the Episcopalians are returned as having only 23 churches, with accommodation for 7300 persons; and the Congregationalists as having only 2 churches, with accommodation for 1400 persons, while Moravians are much larger than the former, and Tunkers, Universalists, and several other sects exceed the latter. Indiana constitutes a diocese of the Protestant Episcopal Church, and also the Roman Catholic diocese of Vincennes. One hundred and seven periodicals, of which 2 are religious, 21 literary and miscellaneous, and 84 political, are published in the state: of these 95 are weekly publications; and the total annual circulation amounts to 4,316,823 copies.

Indiana formed a part of the cession of Virginia to the United States in 1787; and was included in the territory north-west of the Ohio until 1801, when it was with Illinois erected into a distinct territory. In 1809 it was placed under a separate territorial government; and in 1818 it was admitted into the Union as an independent state.

(Fisher, *Statistical Gazetteer of the United States*, 1853; Lippincott, *New Gazetteer of the United States*, 1854; Haskell and Smith, *Complete Gazetteer of the United States: Seventh Census of the United States, Official Report*, 1853; D. Dale Owen, *Geological Survey of the State of Indiana*; Marcou, *Geological Map of the United States, with Explanatory Text*; *American Almanac*, 1854, &c.)

INDRE. [HINDUSTAN.]

INDRE, a department in the interior of France, is bounded N. by the department of Loir-et-Cher, E. by that of Cher, S. by those of Creuse and Haute-Vienne, and W. by those of Vienne and Indre-et-Loire. It lies between 46° 21' and 47° 16' N. lat., 0° 53' and 2° 12' E. long., and measures 64 miles in its greatest length, with a mean breadth of 54 miles. The area is 2829 square miles. The population in 1846 was 268,977, in 1851 it amounted to 271,988; which gives 103.41 to the square mile, being 71.17 below the average per square mile for all France. The department is formed out of the western portion of the old province of Berri, and is named from its chief river the Indre.

Surface, Soil, &c.—The department is in general level; the only hills of any considerable size are the granitic swells on the southern border, and the gentle slopes that diversify the valleys of the Creuse and the Indre. The surface presents three marked and distinct divisions. The first called *Bois-Chaud* comprises seven-tenths of the whole department, including the arrondissements of La-Châtre, a great portion of those of Châteauroux and Le-Blanc, and a third of that of Issoudun; it is divided where arable into a great number of small farms, and presents a very varied appearance, from the number of its hedges, ditches, and woods. The second division, distinguished by the name of *Champagne*, is a flat treeless country, without hedge or inclosure of any kind, divided into large farms, and comprising two-thirds of the arrondissement of Issoudun and a part of that of Châteauroux. The third division, called *La-Brenne*, comprises parts of the arrondissements of Châteauroux and Le-Blanc, and presents a flat surface, covered in parts with shallow ponds, which rest on a bottom of compact clay, and which by their pestilential exhalations are very injurious to health. The land varies greatly in quality from light moss or barren sand to stiff clay, and from the vegetable mould half covered with flints to the rich homogeneous soil called 'terre de Beauce,' which is considered the most productive, and covers 194,790 acres. The flinty soils, amounting to 111,626 acres, are best adapted

for vine culture. All the land capable of cultivation is tilled, but agriculture is in a backward state. A line drawn from north-east to south-west through Châteauroux divides the chalk formation of the Paris basin from the new red-sandstone which occupies all the south-eastern division, except along the southern border, where the primitive rocks appear.

Rivers, Communications, &c.—The *Indre* rises just within the department of Creuse, and entering that of Indre flows north-west past Sainte-Sévère, La-Châtre, Châteauroux, and Châtillon, below which it enters the department of Indre-et-Loire; here passing Loches, where it becomes navigable, it continues in the same direction as far as Montbazou, and then turning west passes Azay-le-Rideau, below which it enters the Loire midway between the embouchures of the Cher and the Vienne. Its whole length is 124 miles, of which 44 miles are navigable; its mean width is 98 feet, and its ordinary depth from 5 to 6 feet. It is subject to floods, which rise from 10 to 11 feet at most, and spreading beyond the banks sometimes do great damage, but add greatly to the fertility of the soil. The number of mills along the banks of this river is very great. The south and south-west of the department is drained by the *Creuse* and its feeder the *Anglin*, which is itself increased by the *Abloux*. [CREUSE.] The west of the department is drained by the *Claise*, a feeder of the *Creuse*, which flows through the marshy district of Brenne; and the east and north are drained by feeders of the Cher, namely, the *Aron*, which receives the *Théols*, and the *Fouzon*, fed by the *Nahon*.

The department is crossed by a railroad which branches off from the Orléans-Bourges line at Vierzon, and runs through Issoudun and Châteauroux to Argenton on the Creuse. It is traversed also by 6 imperial, 16 departmental, and 31 parish roads.

Produce, &c.—The department contains 1,688,021 acres, of which 992,215 acres are under tillage; 210,796 consist of natural pasture; 44,752 acres are under vine culture; 166,609 are covered with woods and forests; 185,368 acres consist of sands, heaths, and barren moors; 18,274 acres are occupied as orchards, nurseries, gardens, and plantations of different sorts; and 31,055 acres are covered with ponds, rivers, canals, &c. The common breadstuffs are produced in quantity more than enough for the consumption; buck-wheat, hemp, flax, chestnuts, and fruits are also grown. The annual produce of wine is 6,600,000 gallons, about one-half of which is exported. Although the pasture land is of no great extent, yet considerable numbers of horned cattle are kept; hay is saved for their winter food, and in summer the scantiness of the pasture is eked out with the leaves of trees, especially with those of the elm. Sheep are a source of great profit to the farmer on account of the fineness of their wool; the quality of the wool of the Champagne district especially is very superior. The sheep are very carefully tended; ewes, lamb-hogs, and wethers are kept in separate flocks, each under its own shepherd; they are never folded: when the winter is severe they get a mixture of hay and straw three times a day. Great numbers of geese and turkeys are reared, and also of mules, pigs, and horses. The climate is mild and healthy except in the Brenne district, where the atmosphere is almost always charged with pestilential fogs.

Minerals, Manufactures, &c.—Several iron-mines are worked; marble, millstone, limestone, mica, flint, lithographic stones, granite, quartz, spar, marl, potters'-clay, variegated marbles, &c., are found.

The cloth manufactures of Châteauroux and some other places in the department are important; linen, hosiery, scythes, paper, porcelain, and earthenware are manufactured. There are also numerous establishments for the manufacture of woollen-yarn, leather, beer, parchment, &c. The number of iron forges and foundries is 17; of wind- and water-mills, 573; and of factories of different kinds, 217. The most important iron-works are those of Clavières. The commerce of the department is composed of the various agricultural and industrial products named. Fairs are held principally for the sale of sheep.

Divisions and Towns.—The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Châteauroux . . .	6	63	102,949
2. Le-Blanc . . .	6	66	61,077
3. Issoudun . . .	4	49	50,568
4. La-Châtre . . .	5	69	47,344
Total . . .	21	247	271,938

1. Of the first arrondissement and of the whole department the capital is CHATEAUX. Of the other towns we briefly notice the following, the population in each case being that of the commune:—*Argenton-sur-Creuse*, 19 miles by railway S.S.W. from Châteauroux, is built on both banks of the Creuse, and consists of an upper town which grew up round an ancient castle now in ruins, and of a lower town joined to the former by a stone bridge. The most remarkable structures now remaining in the upper town, which is entered by four gates, are the Gate of Auditory, now used as a prison, and the deserted church of St. Benoît, now used as the corn-market, on the roof

of which are still seen the arms of Louis de Bourbon, count of Vendôme. Linen, broadcloth, tiles, bricks, woollen-yarn, paper, leather, &c., are manufactured in the town, which has 4346 inhabitants. *Boury-Dieu*, or *Déols*, formerly a large town and the capital of Lower Berri, now a village of 2344 inhabitants, stands about a mile N. of Châteauroux. It was celebrated for its Benedictine abbey, the suppression of which by Pope Gregory XV. in 1623 caused the decay of the town. Of the vast buildings of the abbey only a single tower is now standing; the magnificent ruins which remained till 1830 were then sold and removed as materials for building. *Buzançais*, prettily situated 13 miles W. from Châteauroux, on a hill on the right bank of the river Indre, which is here crossed by five bridges, is an ill-built town with 4480 inhabitants, who manufacture coarse woollens and woollen-yarn. There are several flour-mills in the town, and in the environs there are large iron-works. *Châtillon-sur-Indre*, formerly an important fortress on the frontiers of Berri, is built on a height crowned by the ruins of an ancient castle, near the left bank of the Indre, 26 miles N.W. from Châteauroux, and has 3575 inhabitants. The church is a large and handsome structure, which dates from the 10th century, and contains some remarkable sculptures. In the principal street there is an ancient house, on the front of which are figures of Momus and a player on the pipe. From the market-place there is a fine view of the valley of the Indre. *Lévrault*, the ancient *Gabatium*, stands on the Nahon, 12 miles N. from Châteauroux, and has 3166 inhabitants, who manufacture cloth and leather, and deal in corn, wine, wool, and cattle. The parish church of Lévrault, though small, is considered the finest ecclesiastical edifice in all Lower Berry. It consists of a nave and aisles terminating in three distinct apses. The nave is separated from the aisles by lofty ogival arches, surmounted by an open gallery and clerestory with semicircular windows. In the principal façade is a portal doorway, the archivolts of which are ornamented with statuettes of angels and saints; and the lower part of the tympanum terminates in a broad band covered with bas-reliefs representing the Resurrection of the Dead. Several Roman remains and Celtic coins have been found in and near this town, some of the fortifications of which still remain. *Valençay*, farther north on the left bank of the Nahon, has a population of 3229, and manufactures of hosiery, cloth, cutlery, and fine woollen-yarn. The great ornament of Valençay is the magnificent chateau, or rather palace, built in the reign of François I. by the family of Étampes; it is surrounded by a large park in which there are beautiful gardens and waterworks. This chateau was the prison of Ferdinand VII., king of Spain, from 1808 to 1814; it was the property of Talleyrand, who for some time made it his residence.

2. In the second arrondissement the chief town, *Le-Blanc*, is beautifully situated in 46° 37' 47" N. lat., 1° 3' 41" E. long., on the Creuse, here crossed by a handsome bridge, above which the river expands so as to form a lake, and below it breaks into cascades, generating force to drive the machinery of several factories. The town is not well built, but it is improving, and has considerable cloth-factories, vinegar-works, potteries, a linen-yarn mill with 3600 spindles, a large brewery, and several iron-forges and smelting-furnaces. It is the seat of a tribunal of first instance, and has a savings bank, and 6330 inhabitants in the commune, who trade in wine, fish, timber, staves, and the articles named before. *Béâtre*, S. by E. of Le-Blanc, on the right bank of the Anglin, has 2175 inhabitants, and some remains of an ancient castle. *Mesdres-en-Brenne* (under 2000 inhabitants), stands N. by E. of Le-Blanc, on the right bank of the Claise, in a district not long ago an unapproachable marsh, but now drained, planted, and well cultivated. There is a remarkable church here, which was dedicated in 1339 to Sainte Marie-Madeleine, and contains many mementoes of the family of Anjou. *St-Gaultier*, E. of Le-Blanc, on the Creuse, which is here crossed by a suspension-bridge, has an ecclesiastical college, and a population of 1793.

3. In the third arrondissement the chief town, *Issoudun*, is situated partly on the slope, and partly at the foot of a hill above the river Théols, which is here crossed by three bridges, leading to as many suburbs, in 46° 56' 54" N. lat., 2° 0' 49" E. long., at a distance of 17 miles by railway N.E. from Châteauroux, and has 13,215 inhabitants in the commune. The older part of the town, called *Le-Château*, has very good houses, but the streets are dirty, narrow, and tortuous; the rest of the town is better built, having been constructed since the terrible conflagration of 1651, which broke out at a time when the city was assaulted by the army of the Fronde, and by which above 1000 houses were destroyed. The principal buildings are the residences of the prefect and the mayor; opposite the latter, in a picturesque garden, stands an ancient tower of great strength, called *La-Tour-Blanche*, the walls of which are 14 feet thick, and rise to the height of 95 feet. Other remarkable objects are—the former town-gate and tower, now used as a prison; the hospital, in the chapel of which are some curious sculptured monuments; the former Ursuline convent, now a barrack; the former Carmelite convent, now a private residence, the theatre, and the several public walks. The town has tribunals of first instance and of commerce; a consultative chamber of manufactures, and a college. Woollen-cloth and yarn, calico, hosiery, parchment, leather, and beer are the principal industrial products; there are some bleaching establishments also, and a good business is done in the articles enumerated, and in corn, wine, wool,

cattle, wood, timber, iron of superior quality, &c. *Vatan*, which stands 18 miles N.W. from Issoudun, has an ancient church dedicated to St.-Laurian, and rebuilt in 1005: population, 2978. *Reuilly*, 9 miles N. by railway from Issoudun, stands near the Théols and has 2241 inhabitants. In the town there is a remarkable structure in the Renaissance style, which is called *La-Grande-Maison*; and in the environs is the splendid residence of Ferté-Reuilly, built by Mansard in 1659 for Jacques de la Fond. An ancient gothic church stands half a mile south of the town, on the hill of Vergy, the summit of which was formerly crowned by a strong fortress.

4. In the fourth arrondissement the chief town is *La-Châtre*, which stands in the most fertile and picturesque part of Berri, on a hill that skirts the Indre on one side and overlooks on the other a deep narrow valley laid out in gardens and orchards. It is situated in 46° 34' 53" N. lat., 1° 59' 4" E. long., 19 miles S.E. from Châteauroux, and has a tribunal of first instance, a college, and 4889 inhabitants. The streets are well but not regularly built, yet the town makes an agreeable impression from the charming scenery which is presented to view from almost every point. The most remarkable structures are the church and two ancient wooden houses. Woollen-cloth and leather are manufactured; there is also a considerable trade in wool, goat-skins, feathers, cattle, and chestnuts (of which large quantities are grown in the neighbourhood). *Aigurande*, S. of La-Châtre, has a population of 2005. *Neuvy-St.-Sépulchre*, said to occupy the site of the ancient *Noviodunum*, is 8 miles W. from La-Châtre, and has a population of 2003. *Sainte-Sévère*, formerly a strong fortress, now a village of about 1000 inhabitants, stands near the Indre, 6 miles S.S.E. from La-Châtre. Of its formidable defences, which were with great difficulty mastered by Duguesclin, only a single tower remains.

The department forms, together with that of Cher, the see of the Archbishop of Bourges; it is comprised in the jurisdiction of the High Court and University Academy of Bourges, and belongs to the 19th Military Division, of which Bourges is head-quarters. It returns four members to the Legislative Body of the French Empire.

(*Dictionnaire de la France; Statistique de la France; Richard, Guide Classique du Voyageur en France; Official Papers; Annuaire pour l'An 1853.*)

INDRE-ET-LOIRE, a department in the interior of France, is bounded N. and N.E. by the departments of Sarthe and Loir-et-Cher, E. and S.E. by those of Loir-et-Cher and Indre, S. by those of Indre and Vienne, and W. by those of Vienne and Maine-et-Loire. It lies between 46° 43' and 47° 42' N. lat., 0° 5' and 1° 18' E. long.; its greatest length from north to south is 68 miles, from east to west 55 miles. The area is 2860.6 square miles; the population in 1846 was 312,400, in 1851 it amounted to 315,641, which gives 183.71 to the square mile, being 40.87 below the average per square mile for all France.

Rivers and Roads.—The department, which is formed out of the old province of Touraine, is named from the rivers *INDRE* and *LOIRE*, which unite their waters within its limits. The other rivers which ultimately or directly enter the Loire on the left bank are the *CHER*, which throws off several arms to the Loire, forming islands before its main stream enters that river: the *Claise*, which crosses the southern angle of the department [*INDRE*]: the *CREUSE*, which forms part of the south-western boundary: and the *VIENNE*, which enters this department at the point where it is joined by the Creuse, and, flowing in a north-western course past Chinon, enters the Loire at the extreme western angle of the department. On the right bank the feeders of the Loire in this department are the *Brenne* and the *Doit*. The *Doit* rises in a pond west of Savigné; flowing south past Bourgueil, it then turns west, and, under the name of *Aulon*, runs for the distance of 40 miles parallel to the Loire, which it enters in the centre of the department of Maine-et-Loire at St.-Aubin-des-Ponts-de-Cé, south of Angers. Except the Brenne, the Doit, and the Claise, all the rivers mentioned are navigable. The department is traversed by 6 imperial and 28 departmental roads; and by the railways that connect Paris by way of Orleans with Nantes and Bordeaux; the Nantes line running down the valley of the Loire through Tours, whence the railway to Bordeaux branches off nearly in a southern direction, crossing the Creuse on the southern border at a little distance from the Sainte-Maure station.

Surface and Soil.—The Loire and its principal feeders are subject to inundations, which frequently do incalculable damage to property on their banks. The most disastrous overflow of this kind on record occurred in October 1846, when in one night the Loire rose 20 feet, and continued to rise for two days, sweeping away bridges and viaducts, destroying many lives, and property to the amount of about 2,000,000 sterling. On ordinary occasions such disasters are prevented by the enormous dykes that line both banks of this great river from the neighbourhood of Blois to the mouth of the Aulon before mentioned, a distance of 93 miles. The dykes are 22 feet wide on the top, and so high as to intercept the view of the low grounds from passengers by the steamers that ply on the river; the parts most exposed to the flood are faced with uncemented masonry. The high road runs along the summit of the dyke on the right bank, and presents one of the finest drives in the world, curtained with poplars and diversified by the views of villas, towns, populous villages, and those curious dwellings hollowed out in the sides of the

rocky hills that now and then approach the right shore. The Loire below Tours incloses several large islands.

To the north of the Loire the surface of the department is hilly, and presents some extensive forests and several vast barren and arid wastes. The cultivation here is rude in the extreme, and the population scanty. Along the banks of the Loire however a very different aspect presents itself; well-cultivated fields, luxuriant pastures and meadows, vineyards and orchards, attesting equally the fertility of the deep alluvial soil and the industry of the inhabitants. Between the Indre and the Vienne there is a remarkable table-land, which contains an immense deposit of fossil shells. The great forests south of the Loire are those of Amboise, Loches, and Chinon. On the slopes surrounding the forest of Amboise are the vineyards that yield the rich Cher wines. In general the surface in this portion of the department presents strong deep wheat soils, rich pastures, vineyards, and orchards. There are however some barren wastes here as well as north of the Loire, but they are comparatively of small extent. The inundations of the rivers add greatly to the fertility of the soil.

Produce, Agricultural and Mineral.—The department contains 1,510,783 acres, of which 827,610 acres are arable land; 329,806 acres consist of grass land; 86,499 acres are under vine culture; 222,402 acres are covered with woods and forests; 155,630 acres consist of heath and moorland; 13,423 acres are under orchards, nurseries, plantations, &c.; 45,075 acres under various cultivation; 20,424 acres are covered with rivers and waters; and 50,631 acres are occupied by roads, streets, buildings, &c. The valleys of the Loire and the other principal rivers in this department contain some of the most fertile and best cultivated land in France. All kinds of bread-stuffs are produced in quantity more than enough for the consumption. One of the most important products is wine, of which 13,816,000 gallons are made in ordinary years. Among the other products are hemp, walnuts for making oil, plums, beans, leguminous plants, liquorice, anise and coriander, citrons, melons, almonds, apples, pears, truffles, &c. Bees and silkworms are carefully tended; game and fish are abundant.

Geologically speaking the department belongs to the chalk formation of the Paris basin; the chalk is covered over a large area with deep alluvial deposits. Iron-mines are worked; stone, especially a tuffaceous sandstone, of which most of the houses are built, is quarried out of the hills near the Loire, and excavations thus formed are occupied as dwelling-places by the poorer inhabitants. Millstone-grit, marl, potters'-clay, pipe-clay, and brick-earth are found. Copper ore is met with, but no mines are worked.

Industrial Products.—The chief industrial products are bar iron, powder, and files; woollen-cloth, of which manufacture Tours is the centre; silk, leather, paper, and pottery are also made, but the manufacture of these articles is not so important as formerly. The exports consist mostly of agricultural products, the imports of colonial produce, glass, cotton stuffs, fine linen and woollen-cloth, furniture, haberdashery, &c. About 90 fairs for the sale of cattle and agricultural produce are held. In the department are 726 wind- and water-mills, 46 iron-forges and smelting-furnaces, and 199 factories of different sorts. Druidical or Celtic remains are numerous in this part of France.

Divisions and Towns.—The department is divided into three arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Tours	11	126	160,875
2. Chinon	7	87	90,137
3. Loches	6	68	64,629
Total	24	281	315,641

1. In the first arrondissement the chief town, *Tours*, which is also the capital of the department, stands on the left bank of the Loire, in a plain that lies between that river and the Cher, in 47° 23' 46" N. lat., 0° 41' 24" E. long., 65 miles by railway S.W. from Orléans, and has 30,189 inhabitants in the commune. Tours, as well as Touraine (of which it was the capital), takes its name from the Turones, a Celtic tribe, of whose capital *Casarodunum*, or *Casarmagus*, it occupies the site. The entrance to the city from the Paris road is striking; a magnificent stone bridge of 15 arches, 475 yards in length and 16 yards wide, leads across the Loire into a spacious square, inclosed by the wide river on the northern side, and by the fine buildings of the town-hall and the museum on the south, while the east and west sides are formed by two terraces planted with trees. Passing through the square, a straight wide street (*Rue Royale*) is entered, consisting of houses built in good taste and on a uniform plan; this street, which is furnished with foot pavements, runs right across the town in its widest part, and terminates in the avenue of Grammont, at the end of which a bridge crosses the Cher into the Poitiers road. The other streets are, with few exceptions, ill-built, narrow, and crooked. There are several suburbs, but these can scarcely be distinguished from the town itself, as it has no ramparts except on the side next the Cher, and these are laid out so as to form

the fine promenade called Le-Mail. The wide quays along the Loire, which is joined to the Cher by a canal, are a great ornament to the town; they extend on each side of the bridge, are planted with trees, and backed by large buildings. The cathedral, originally founded by St. Martin A.D. 347, destroyed by fire in 561, rebuilt on a grander scale by Gregory of Tours, destroyed by fire a second time in the reign of Louis VII., and again rebuilt, but so slowly that the works were not completed till 1550, is dedicated to St. Gratien, first bishop of Tours. The west front presents an ornamented portal entrance, surmounted by a magnificent rose window; it is flanked by two square towers 263 feet in height and terminating in small domes. The cavalry barracks are built on the site of the English Henry II.'s castle, of which only a single tower now remains. Two lofty towers in the Rue St. Martin (one containing a clock, and hence called Tour d'Horloge, and the other called La Tour de Charlemagne, from the belief that Charlemagne's queen was buried beneath it) are the only remains of the great cathedral of St. Martin-de-Tours. Among the other remarkable objects in the town are the churches of St. Clément and De-la-Riche; the fountain of Beaune, which stands in the market-place and consists of an octagonal basin filled with water, gushing in four jets from a central pyramid adorned with sculptures and arabesques; the archiepiscopal palace; the court-house; the college buildings; the general hospital; and the residence of the prefect, which also contains a public library of 40,000 volumes and several valuable manuscripts. Tours has a tribunal of first instance, a tribunal and chamber of commerce, one communal and two ecclesiastical colleges, a botanic garden, and several literary and scientific societies. A statue of Descartes was erected in Tours in 1852. The chief manufactures are woollen-cloth, silk stuffs, ribands, serge, carpets, small wares, wax candles, woollen-yarn, leather, &c.; the commerce is composed of these articles and of corn, wine, brandy, plums and dried fruit, hemp, wool, &c. Tours had, in the middle ages, one of the most important mints in France, in which were coined the 'livres tournoises,' often named in history, and each worth a franc. In one of the suburbs of Tours, called Riche (2000 inhabitants), stood the castle of Plessis-les-Tours, in which Louis XI. died; the keep is the only part of the edifice now standing.

Among the other towns of the arrondissement we notice the following: the population in each case is that of the commune.—*Amboise* stands 15 miles by railway E. from Tours, on the left bank of the Loire, which is here crossed by a fine bridge erected in 1822: population, 4600. The town stands in a wine district, which from its richness has been called 'the Garden of France.' It has some manufactures of steel and files. There is an ancient castle in Amboise which was formerly the residence of several of the kings of France. King Louis Philippe, whose property it was, made great improvements in it, and restored the chapel, which stands in the gardens, and is one of the finest specimens of the florid gothic style of architecture in France. It was in Amboise the civil wars on account of religion broke out in the 16th century; and here also the epithet 'Huguenots' was first applied to the Calvinists in 1560. The castle of Amboise was the residence of Abd-el-Kader during the greater part of his captivity in France. *Blerb*, a busy little town of 3417 inhabitants, stands on the left bank of the Cher, which is here crossed by a bridge built by Henry II. of England. *Château-la-Vallière*, in the north-west of the department, has iron-forges and 1370 inhabitants. *Château-Renault* stands on the slope and at the foot of a hill in a pretty country on the Brenne, and has 2887 inhabitants, who manufacture cloth, flannel, leather, and tiles: the town is named from an old castle built in the year 981, and still standing. *Montbazou* is a small place on the right bank of the Indre, with a population of only 1181, but important for the great powder-mills and saltpetre-works near it. *Vouvray*, which is situated 5 miles E. from Tours, on the Loire, in a district famous for its white wine, has 2448 inhabitants.

2. In the second arrondissement the chief town, *Chinon*, stands in 47° 10' 7" N. lat., 0° 14' 27" E. long., on the Vienne, at the foot of a hill, the summit of which is covered with the ruins of the ancient fortress of Chinon, in which Henry II. died, and Joan of Arc had her first interview with Charles VII. It is 28 miles S.W. from Tours, and has a tribunal of first instance, a college, savings bank; and 6675 inhabitants, who manufacture serge, drugget, haircloth, earthenware, saltpetre, &c., and trade in cattle, corn, wine, brandy, plums, nut-oil, honey, wax, &c. Chinon is an improving town; the old ramparts are now replaced by quays. *Asay-le-Rideau*, prettily situated on the Indre, about 5 miles above its junction with the Loire, is remarkable for a fine structure called Château d'Asay, built on an island in the Indre: the commune has 2105 inhabitants. *Bourgueil*, situated in a very fertile district on the right bank of the Doire, at a distance of 10 miles N. from Chinon, has a college and 3498 inhabitants. *Cinq-Mars*, on the left bank of the Loire, 18 miles by railway W. from Tours, is a small place of only 1728 inhabitants. It deserves notice on account of its ancient square tower, which is built of bricks, perfectly solid, 90 feet high, 13 feet wide on each face, and surmounted at the angles by four pinnacles, each 11 feet high; a central pinnacle was thrown down by a storm in 1571. The purpose and date of its erection are unknown. *Langeais*, 18 miles N.N.E. from Chinon, and about the same distance by railway from Tours, stands on the right bank of the Loire, and has 3138 inhabitants, who trade in agricultural

produce and manufacture linen, tiles, and bricks. The castle in which Charles VIII. espoused Anne of Brittany is still in tolerable preservation, but has been converted into a stable. *Sainte-Maure* stands on the right bank of the Mause (a small feeder of the Vienne), 18 miles E. from Chinon, 23 miles S. from Tours by the Bordeaux railroad, and has 2602 inhabitants, who manufacture linen, printed calicoes, and haircloth. The church of Sainte-Maure is one of the finest in Touraine; it dates from the 12th century, and beneath it there is a crypt still more ancient. *Richelieu*, a well-built town, consisting of several wide straight streets that terminate in a handsome square in the centre of the town, stands 12 miles S. from Chinon on the Mable, and has 2832 inhabitants, who manufacture beet-root sugar and brandy, and have a considerable trade in wine, fruits, and other agricultural produce. Cardinal Richelieu erected a residence here in 1637, and the town was then built on a regular plan; the cardinal's palace is now a heap of ruins.

3. In the third arrondissement the chief town, *Loches*, stands on the left bank of the Indre, at a little distance from *Beaulieu*, a suburb of 2000 inhabitants, to which it is joined by several bridges thrown across the arms of the river. The town is 25 miles S. by E. from Tours, in 47° 7' 31" N. lat., 0° 59' 53" E. long. It is built round the base of a hill, the summit of which is crowned by the remains of its ancient castle. The situation of Loches in the rich and beautiful valley of the Indre, and the historical associations connected with it, renders it one of the most interesting towns in Touraine. A great part of the castle, in which several of the kings of France resided, and which also served as a state prison for illustrious political offenders, is now in ruins, with the exception of the keep, which is used as a prison, and a more modern portion, in which the sub-prefect resides. Between the keep and the residence of the sub-prefect is the church of St.-Ours, which has a stone roof surmounted by two lofty pyramidal spires; the tomb of Agnès Sorel, mistress of Charles VII., is in this church. At a short distance from the town, and near the forest of Loches, which supplies mast timber to the French navy, are the ruins of the Carthusian convent of Liget, founded by Henry II. in expiation of the murder of Thomas à-Becket. The town of Loches presents narrow streets and ancient houses; it has a tribunal of first instance, a college, and 5040 inhabitants, who manufacture linen, coarse cloth, woollen-yarn, and paper. *La-Haye-Descartes*, the birth-place of Descartes, is prettily situated on the right bank of the Creuse, and has 1459 inhabitants. *Liguil*, W. of Loches, stands on the Estrigneuil, a feeder of the Creuse, and has 1929 inhabitants, who grow great quantities of plums. *Le-Grand-Pressigny*, on the right bank of the Claise, with a population of 1876; and *Preuilly*, further south on the same bank of the Claise, which has iron-forges and 2264 inhabitants, give name to cantons.

The department forms the see of the Archbishop of Tours, is included in the jurisdiction of the High Court of Orléans, and belongs to the 18th Military Division, of which Tours is head-quarter. It has 3 representatives in the Legislative Body of France.

(*Dictionnaire de la France*; Richard, *Guide Classique du Voyageur en France*; *Statistique de la France*; *Official Papers*; *Annuaire pour l'An 1853*.)

INDUS. [HINDUSTAN.]

INGOLSTADT. [ESSEX.]

INGOLSTADT, a fortified town of Bavaria, is situated in 48° 45' 50" N. lat., 11° 25' 31" E. long., on the left bank of the Danube, 44 miles nearly due N. from Munich, and has about 9000 inhabitants. It was formerly the most important fortress in Bavaria, and sustained several sieges: in the year 1800 it withstood the French under Moreau for three months, but was at last taken and the fortifications were demolished. The fortifications have been recently rebuilt on an improved plan, and include ramparts strengthened by several massive round towers and a tête-du-pont. The town is well built, with long broad streets, situated in a fertile country on the Danube, over which there is a stone bridge. It is a dull place, too large for its population, and has very little trade. It has nine churches and two nunneries. The principal buildings are the upper parish church of St. Mary, which contains several monuments and is surmounted by two massive towers; the former Jesuits' college; and the former university buildings. The University of Ingolstadt was founded in 1472, and transferred to Landshut in 1800, and some years afterwards to Munich.

INISHOWEN, Donegal, Ireland, a Poor-Law Union which comprises nearly the whole of the peninsula of Inishowen. [DONEGAL.] It is divided into 21 electoral districts comprising an area of 159,408 acres, and a population in 1851 of 39,084.

INNISTOGUE. [KILKENNY.]

INN. [AUSTRIA; TYROL.]

INNISHANNON. [CORK.]

INNSBRÜCK, or *Innsbruck*, the capital of the Tyrol, is situated on the Inn, near the point where that river is joined by the Sill, in 47° 16' N. lat., 11° 23' E. long., 245 miles W. by S. from Vienna, and has 13,000 inhabitants. The town is built in a most beautiful situation, in the middle of the valley of the Inn, which is hemmed in on both sides by mountains varying from 6000 to 8000 feet high. It takes its name of Innsbruck (Inn's Bridge) from the wooden bridge which spans the river, and on and near which the Tyrolese, under

Hofer, after a fierce action, succeeded in repulsing the French during the war of independence. The town is in general well built; many of the houses are in the Italian style, the basement story consisting of arcades, which are occupied as shops. The street of Neustadt is the finest; here are the Landhaus or Tyrolese parliament house, the post-office, and, at its southern extremity, a triumphal arch erected by the empress Maria Theresa. Among the public buildings, the most interesting is the Franciscan church, which contains the tomb of Maximilian I., the most splendid monument of the kind in Europe, and the Silver Lady-Chapel. The 28 bronze statues that form part of the plan of Maximilian's tomb, and represent some of the worthies of Europe, including the most distinguished personages of the house of Austria, were cast by Tyrolese artists; the bas-reliefs on the tomb, and in the lady-chapel, which are masterpieces of art, are the work of Collin de Mechin. On the left of the entrance to this church is the grave of Hofer, which is surmounted by a statue of the hero in Tyrolese white marble. The other remarkable buildings are—the palace built for Maria Theresa in 1770, in the court-yard of which is an equestrian statue of Leopold V.; the university, in which is the Museum Ferdinandeum, rich in Tyrolese minerals, fossils, and works of art; the Capuchin church, in which is the penitential cell of Maximilian II.; the richly decorated church of St. James (Jacob's Kirche); the old palace of the counts of Tyrol; and the Fürstenburg, in which is the famous Goldene Dach, a sort of oriel window, covered with a roof of gilt copper, which projects in front of the building. The University of Innsbruck has faculties of law, medicine, and philosophy; the number of professors in 1850 was 24, of students 887. There is also an academy or gymnasium in the town, which had 17 professors, and 488 pupils in 1850. The public cemetery contains some fine monuments. The Schiesstadt, where the Tyrolese practise rifle-shooting, is in a very pretty situation on the left bank of the Inn, on a slope of the Berg-Isel, and is well worth visiting. The market-place of Innsbruck presents a very interesting appearance, from the great variety of picturesque costumes worn by the inhabitants of the different valleys, who frequent it. Eilwägen (travelling-vans) run daily to Salzburg, Vienna, and München, and two or three times a week to Italy, by the roads over the Brenner and the Stelvio. Electro-telegraphic wires are laid down to Vienna.

The chief manufactures of the town are silks, gloves, calico, ribands, glass, and wood and horn carved work; there is also an important transit trade. The neighbourhood abounds with beautiful scenery and charming promenades. Innsbruck is the seat of the supreme court of justice for the whole of the Tyrol.

INTERAMNA. [ABRUZZO.]

INTERLAKEN, or INTERLACHEN. [BERN.]

INTRODACQUA. [ABRUZZO.]

INVERARY, Argyleshire, Scotland, a royal burgh and port, and the chief town of the county, in the parish of Inverary, is situated at the head of Loch Fyne, in 56° 15' N. lat., 5° 4' W. long., 60 miles N.W. from Glasgow. The population in 1851 was 1164. It is governed by a provost, two bailies, and 18 councillors, and conjointly with Ayr, Campbeltown, Irvine, and Oban returns one member to the Imperial Parliament. Inverary was made a royal burgh by Charles I. The town consists chiefly of a main street built along the shore of Loch Fyne. Near the church is an obelisk erected to the memory of 17 gentlemen of the name of Campbell, executed here without trial, in 1685, for their opposition to the measures of James II. The present town only dates from the middle of the last century. The houses are well built; the town is lighted with gas. There is a small and convenient pier. The inhabitants are principally engaged in the herring-fishery. The herring are either cured, or sent to Glasgow by the daily steam-vessel to the Clyde. In addition to the parish church, which has services both in English and in Gaelic, there are places of worship for the Free Church and United Presbyterians. There is a burgh school.

Inverary Castle, the principal seat of the Duke of Argyll, is a quadrangular building, with a tower at each corner, and a high glazed pavilion rising from the centre of the roof.

INVERBERVIE. [BERVIE.]

INVERESK. [EDINBURGHSHIRE.]

INVERKEITHING. [FIFESHIRE.]

INVERNESS, Inverness-shire, Scotland, a royal and parliamentary burgh, sea-port, and market-town, the capital of the county, and the principal town of the Highlands, is situated at the southern extremity of the Moray Frith, on both sides of the River Ness, about half a mile above its fall into the Frith, and near the northern entrance of the Caledonian Canal, 155 miles N.W. by N. from Edinburgh, in 57° 28' N. lat., 4° 12' W. long. The population of the municipal burgh in 1851 was 9969, that of the parliamentary burgh was 12,793. The town is governed by a provost, bailies, and 21 councillors. It unites with Forres, Fortrose, and Nairn in returning one member to the Imperial Parliament.

The town is large and well built; the houses are lofty, and many of them elegant. The streets are paved, lighted with gas, and well supplied with water. The approach to the town is by a handsome bridge over the river Ness. The public buildings include the places of worship; the court-house and tolbooth; and the academy, a

fine building, which comprises a large public hall, with spacious apartments for classes, a library, and philosophical apparatus. This institution, which is called the Royal Academy, was incorporated in 1792; it is now in possession of upwards of 40,000*l.*, left by Captain Mackintosh and others for educational purposes, the interest accruing being applicable to these purposes. The number of scholars in 1853 was 160. The course of instruction includes ancient and modern languages, mathematics, and natural philosophy. The Raining school was founded in 1747 by Mr. John Raining of Norwich. Dr. Bell, the author of the 'Madras System,' left the magistrates of Inverness 10,000*l.* for the purposes of education. There are 12 places of worship within the burgh, of which 3 belong to the Establishment, 3 to the Free Church, 2 to United Presbyterians, and 1 each to Episcopalians, Independents, Wesleyan Methodists, and Roman Catholics. In the town are a public news-room, a mechanics institution, a savings bank, and several charitable and friendly societies. There are three harbours, of which the lowest, nearest the Frith, is capable of accomodating vessels of 250 tons burden.

The number and tonnage of vessels registered at the port of Inverness on December 31st 1853 were as follows:—Under 50 tons, 169, tonnage 4195; above 50 tons, 79, tonnage 6586: with 2 steam-vessels of 535 tons aggregate burden. The vessels entered coastwise during 1853 were:—Sailing-vessels, inwards, 972, tonnage 58,126; outwards 906, tonnage 44,898; steam-vessels, inwards, 180, tonnage 42,677; outwards, 177, tonnage 42,217. In the colonial and foreign trade there entered 12 vessels of 1901 tons, and cleared 27 vessels of 2221 tons. Tanning, a hemp manufactory, a woollen manufactory, and salmon fishing, afford occupation to the inhabitants. An extensive fair is held in July for sheep and wool. Wheat and oats, wood, wool, and hemp cloth are exported; timber, tar, coal, and hemp are imported. The town has steam communication indirectly with the east coast of Scotland, and with Glasgow and the south directly by the canal. Not far from the town is a curious wooded hill, on the top of which is a vitrified fort. Other remains of early times, as cairns and tumuli, and of a later period in the shape of ruined fortalices exist in the neighbourhood.

The burgh dates from the time of William the Lion. It was the scene of a parliament held by James I. It was visited and its castle besieged by Queen Mary. The town was held by Cromwell: in 1745 it was occupied successively by Charles Edward and the Duke of Cumberland. Culloden Moor, the scene of the battle of Culloden, is within five miles of the town of Inverness.

INVERNESS-SHIRE, a maritime county in the west of Scotland, bounded N. by Ross-shire, E. by the counties of Nairn, Elgin, Banff, and Aberdeen; S. by Perthshire and Argyleshire; and W. by the Atlantic Ocean. It comprehends a considerable number of the Hebrides, including the Isles of Skye, Harris, Benbecula, North and South Uist, Barra, Eigg, &c. The mainland portion lies between 56° 40' and 57° 36' N. lat., 3° 50' and 5° 50' W. long. Inverness-shire is one of the largest of the Scottish counties; it extends from north-east to south-west 85 miles, and from north-west to south-east 55 miles. Its area is 2,723,501 acres, of which upwards of 500,000 acres are in cultivation. The population in 1851 was 96,500. The county returns one member to the Imperial Parliament.

Surface, Hydrography, and Communications.—The mainland of Inverness-shire, which is extremely mountainous, is intersected by numerous lakes and rivers, and is divided into two nearly equal parts by the deep valley of Glenmore, which runs in a direction from Fort William on the south-west to the town of Inverness on the north-east. This district forms a large part of the Highlands of Scotland, and a general description of its geographical features will be found in the article GREAT BRITAIN. The greater part of the surface is covered with heath, but a good deal of the heathy ground is arable. Much of it has been brought into cultivation during the present century. The fertile and arable portions of the soil are generally in the glens and valleys, watered by the numerous streams of the county.

The fir woods in Glenmore and those of Strathspey in the adjoining county of Elgin are very extensive. Glen Morrison, which opens into Glenmore, and the parish of Kilmalie, contain a great many extensive plantations. The trees which grow naturally are the oak, fir, birch, ash, mountain ash, holly, elm, hazel, and Scotch poplar. Those which are planted are the larch, spruce, silver fir, beech, plane, and fruit-trees. In these forests red- and roe-deer, the alpine and common hare, and other game are abundant.

The Glenmore, or Great Glen of Albion, as it is sometimes called, is traversed by the CALEDONIAN CANAL. The western coast of the mainland is indented by three small arms of the sea, Lochs Hourn, Nevis, and Mirror, which are opposite the island of Skye, and by Loch Moidart. Loch Shiel, which has an outlet by a small river into Loch Moidart, Loch Eil at Fort William, Loch Leven, which falls into the Linnhe Loch, and Loch Ericht, which is partly in Perthshire, are all on the southern boundary of the county. Loch Laggan and Loch Treig in the south of the county form from their overflow the river Spean, which falls into Loch Lochie. Several small lochs and streams in the western district form numerous contributions to the rivers Spey and Findhorn [ELGINSHIRE], which traverse a considerable portion of the mountainous country north of the Grampians. The northern portion of the mainland is watered by the river Glass, and

stuffs, in quantity more than enough for the wants of the population. In the rich soils, wheat of excellent quality is raised; some tobacco is grown near St.-Malo; rye, barley, oats, buckwheat, and mixed grain are produced in the middling and poorer soils. The cultivation of flax and hemp for the manufactures of the department is very extensive; the flax and hemp fibres in the dressed state, as also the seeds, are important objects of commerce. The apple and the pear are very extensively cultivated for making cider and perry, the chief drinks of the population; the cider is strong enough to keep for two years, and is considered the best made in France. The grass land along the river bottoms is rich; and, as the out-run on the heaths and moors is large, great numbers of cattle are reared, and excellent butter and cheese are made. There is a little meadow land; of artificial grasses only clover is grown. Horses in general of small breed, sheep, goats, poultry, and pigs of the large white breed, are numerous. Game, including wild boars, hares, rabbits, partridges, quails, woodcocks, &c., are abundant. The fisheries on the coast, which are actively plied, yield excellent oysters, soles, lobsters, turbot, skate, crabs, &c. The forests of the department contain fine timber: the prevailing kinds are oak and beech; next come chestnut, poplar, and birch. The cultivated land also presents the appearance of a forest, such is the number of apple-trees planted in the fields, and of timber-trees in the hedges that separate the fields, but, as these latter are regularly stripped of their branches to supply fire-wood, they are of little value as timber.

Several iron-mines are worked; roofing and clay-slate, white quartz for the glass factories, limestone, and granite are quarried; lead- and copper-ore are found. Mineral springs are numerous.

The most important manufactures are linen, sailcloth of the best quality, Russia duck, canvass, and shoe- and morocco-leather; felt and straw hats, sewing thread, thread stockings, ship-cordage and ropes, fishing nets, hooks and lines, pottery, cotton- and woollen-yarn, are also manufactured. There are, besides, several bleaching establishments, brandy distilleries, paper-mills, iron-forges and smelting furnaces, and flour-mills; in the towns on the coast ship-building is carried on to some extent. Salt is made in some of the marshes on the coast. The commerce is composed of the various articles named, and of groats, chestnuts, salt pork, hides, oak-staves, firewood, &c. About 300 fairs are held in the year; there are 990 wind- and water-mills, 7 iron-works, and 63 factories of different kinds.

The climate is damp but temperate; much rain falls in winter; the prevailing winds are the west, north-west, and south-west; hurricanes are less frequent and less destructive than in the more western departments of the Armoric peninsula.

The condition of the peasantry is similar, but rather superior, to that of the peasantry of FINISTÈRE. The department contains many Druidical and Celtic remains, consisting of monoliths (menhirs), altar tables (dolmen, kistvaen), cromlechs, and cairns.

The department is divided into 6 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Rennes . . .	10	78	139,471
2. Fougères . . .	6	57	85,151
3. Montfort . . .	5	46	60,615
4. St.-Malo . . .	9	60	123,585
5. Vitré . . .	6	61	83,509
6. Redon . . .	7	47	82,287
Total . . .	43	349	574,618

1. Of the first arrondissement, and of the whole department, the capital is RENNES. Of the following places the population given in each case is that of the commune: this remark applies also to the other arrondissements. *Hédé*, a small place of about 1000 inhabitants, on the road from Rennes to Dinan, is remarkable for the remains of its ancient castle, which was taken by Henry II. in 1168. *Jansé*, S.S.E. of Rennes, has 4304 inhabitants, who manufacture sailcloth, and deal largely in excellent poultry. *Liffré*, N.E. of Rennes, has a population of 2402. *Mordelles*, S.W. of Rennes, on the left bank of the Meu, has mineral springs, and 2613 inhabitants.

2. In the second arrondissement the chief town is *Fougères*, which stands on a hill, at the intersection of five high roads, in the north-east of the department. It is one of the best built towns in the department, has wide straight streets, a tribunal of first instance, a college, and 8771 inhabitants, who manufacture sailcloth, canvas, tape, flannel, lace, hats, bricks, leather, paper, and glass. There is a good commerce in these articles, and in corn, groats, butter, honey, cattle, &c. The castle of Fougères is a picturesque object, but a feeble defence, as it is commanded by the higher part of the town. In the forest of Fougères, within half a mile of the town, there are many Druidical remains. *Aurain*, N.W. of Fougères, on the left bank of the Couesnon, which here becomes navigable, has a population of 1587 in the commune, and some manufactures of linen, coarse woollens, serge, and leather. *St.-Aubin-du-Cormier* stands on a steep hill, S.W. of Fougères, and has 1896 inhabitants. It owes its origin to a strong castle built by Pierre de Dreux, duke of Bretagne, in 1223, and is famous for the

victory gained here by the Count de la Tremouille, the commander-in-chief for Charles VIII., over François II., duke of Bretagne, the Prince of Orange, and the Duke of Orléans (afterwards Louis XII). *Louvigné-du-Désert*, 9 miles N. from Fougères, had formerly a large establishment belonging to the Templars, whose church is now become the parish church. It has a population of 3524, and several tan-yards.

3. In the third arrondissement the chief town, *Montfort-sur-Meu*, situated 10 miles W. from Rennes, on a hill above the confluence of the Meu and the Chailloux, has a tribunal of first instance, a college, and 1980 inhabitants. It is closed in by ramparts, flanked with towers, and encircled by a wide ditch. The town was formerly of much larger size. In the environs, which are very pretty, are the oak forests of Brescillon and Montfort, in the former of which are several Druidical remains; among others the reputed tomb of the enchanter Merlin, so celebrated in Breton fables. *St.-Méen*, 10 miles W. from Montfort, has an ecclesiastical school, and 2319 inhabitants. *Montauban*, formerly the chief town of a county belonging to the dukes of Rohan, is 7 miles N.N.W. from Montfort, and has a population of 2764. *Péllan-le-Grand*, 12 miles S. by W. from Montfort, has 3283 inhabitants, who manufacture great quantities of sewing-thread.

4. In the fourth arrondissement the chief town, *St.-Malo*, is built on the rocky isle of Aron, which communicates with the mainland by a causeway named *Le Sillon*, and defended from the violence of the waves by strong outworks. The town covers the whole island; it is surrounded by strong ramparts, which are flanked with towers and bastions, and form a fine promenade. The streets are narrow, but formed by high and in general well-built houses. There are four gate entrances, near one of which, called *La Grande Porte*, is a large reservoir, whence water is supplied to the fountains in the streets. The most remarkable building is the strong castle built by Anne, duchess of Bretagne, which forms part of the fortifications. The former cathedral is a very spacious church, built in the gothic style, and ornamented with several good marble statues. *St.-Malo* has tribunals of first instance and of commerce, a chamber of commerce and manufactures, a naval school of the first class, and 9383 inhabitants in the commune; but including the harbour and the suburb of *St.-Servan*, the population probably exceeds 21,000. The harbour lies south of the town; it is capacious and safe, but the entrance to it is rendered intricate by a great number of islets and rocks which stud this part of the coast, and many of which are fortified. It is a tide harbour, protected by a strong pier, and lined with a broad quay, which runs just under the walls of the town; it is dry at low water, but large ships can enter, as the tide rises very high here, 49 feet at spring. A wet-dock has been lately formed by throwing a strong granite wall across the head of the bay between the town and the suburb of *St.-Servan*; it contains an area of above 270 acres, and is entered by wide flood-gates, through which steamers and war frigates can pass. The roadstead of *St.-Malo* lies west of the town at the embouchure of the Rance; it is protected by seven forts, one of which, called *Conchée*, was constructed by Vauban. The manufactures of *St.-Malo* are hosiery, fishing-nets, ship-pulleys and cordage, soap, fishing-hooks, &c. Ship-building is carried on, and there is a large tobacco factory. The imports consist of colonial produce, spices, flax, hemp, &c.; there is also a considerable trade in corn, fruit, wine, brandy, salt, linen, cider, butter, honey, fish, salt provisions, &c. Vessels are fitted out for the foreign and coasting trade, and for the whale, cod, and mackerel fisheries. *St.-Malo* is much frequented for its excellent sea-bathing. *Cancalle*, a small sea-port on the western side of the Bay of Cancalle, with 5630 inhabitants, is 8 miles E. from *St.-Malo*. The principal part of the town stands on a height above the bay, of which it commands a fine view, and is well built. The other part, called *La-Houle*, is built on the shore, and is inhabited chiefly by fishermen, who take vast quantities of oysters and other fish in the bay for the supply of Paris and the towns in the interior. *Combourg*, the birth-place of Chateaubriand, 20 miles S.S.E. from *St.-Malo*, is situated on a small lake, and has 4847 inhabitants. There is an old chateau, flanked with towers, in good preservation in the town. *Dol*, remarkable for its ancient cathedral, which is one of the handsomest churches in Bretagne, is 15 miles S.E. from *St.-Malo*, and has 4018 inhabitants. It is surrounded by old walls and wide ditches, the remains of its ancient fortifications. The interior is irregularly built; the houses are constructed of dark granite with projecting gables; arcades, 7 or 8 feet wide, supported on granite pillars, run along the streets. The town has a good corn-market, which is held in a desecrated church; there is also some trade in cider, hemp, flax, tobacco, cattle, &c. The neighbourhood of *Dol* is fertile; all the land between it and the sea northward is drained marsh, protected from the sea by dykes. *Pleine-Fougères*, 25 miles from *St.-Malo*, has a population of 3107. *St.-Servan*, a well-built town, and much frequented watering-place, situated on the south side of the harbour of *St.-Malo*, of which town it may be considered a suburb, has 10,267 inhabitants. The most remarkable structure is the isolated tower called *Solidor*, which is 60 feet high, and approached by a drawbridge. This tower is now used as a prison. Beer, ship-cordage and biscuits, wine, brandy, &c., are the chief articles of trade; ship-building is carried on. *Tinténiac*, on the *Ille-et-Rance Canal*, has 2050 inhabitants, who trade in corn, butter, poultry, &c.

5. In the fifth arrondissement the chief town, *Vitré*, situated on the

Cantache, 22 miles E. from Rennes, has a tribunal of first instance, an ecclesiastical school, and 8555 inhabitants. The town is large, but irregularly built; and its feudal fortifications, consisting of a castle and high ramparts, flanked with machicolated towers and surrounded by a deep ditch, give it a gloomy appearance. The church of **Notre-Dame** is the most remarkable structure in the town. **Vitré** has manufactures of thread-stockings, serge, flannel, hats, casks, brandy, leather, and sail-cloth, and trades in these articles, and in wine, linen, honey, wax, hides, cattle, and cantharides flies, which are found in the neighbourhood. The other towns are—**Argentré**, which is a few miles S. of Vitré, and has 1978 inhabitants: **La-Guerche**, a town of 4412 inhabitants, which stands in a rich corn and grazing country, 11 miles S. from Vitré; it gives name to a neighbouring forest, and has manufactures of fine linen, leather, and nut-oil, besides a good trade in butter, corn, flax, hemp, chestnuts, cattle, sheep, &c.: and **Rhaiers**, which is a few miles W. of La-Guerche, and has 2960 inhabitants.

6. Of the sixth arrondissement the chief town, **Redon**, stands at the foot of a hill on the Vilaine, which here forms a good tide harbour, with a rise of from 10 to 13 feet at high water. The town, which is situated in the most southern angle of the department, at the junction of the two branches of the canal from Nantes to Brest, and at the southern extremity of the river and canal navigation that terminates to northward in the harbour of St.-Malo, enjoys great advantages for trade, in addition to its connection with the Bay of Biscay by a navigable tide-river. It is in general well built: the chief structures are the former abbey-buildings now used as a college, and the abbey-church, the semicircular apse of which is considered a masterpiece of its kind. **Redon** has a tribunal of first instance, a college, and 5216 inhabitants, who carry on a considerable trade in colonial produce, wine, brandy, salt, butter, chestnuts, timber, hemp, oak-staves, planks, masts, pitch and tar, slates quarried in the neighbourhood, sheet- and bar-iron, lead, resin, hides, linen, flax, canvass, &c. Vessels of 50 to 400 tons are built. A vote of 1,800,000 francs was taken in 1846 for the improvement of the harbour of Redon, to which the French attach great importance, as, in case of a war with England, their trading vessels could enter here without exposing themselves in the channel. The other towns are—**Bain**, which stands on the great road from Rennes to Nantes, and has a population of 3476 and some woollen manufactures: **Fougères**, 16 miles N.E. from Redon, which has 5254 inhabitants; it had formerly a strong castle, of which only one high massive tower remains, and from which the English were driven by Du Guesclin in 1356: **Guisen**, which is 25 miles N.N.E. from Redon, and has cold mineral springs, and 3534 inhabitants: **Mauve**, 15 miles N. from Redon, which has a population of 4000, and an ancient castle taken by Henri IV. in 1597: and **Pipriac**, 12 miles N. from Redon, which has 3116 inhabitants.

In Roman times the territory of this department was inhabited by the Redones, a Celtic tribe, whose name is still preserved in that of Redon. It was included in the district of Armorica. On the downfall of the empire it became part of Bretagne. The department forms the see of the Bishop of Rennes, is included in the jurisdiction of the Cour Imperiale and University Academy of Rennes, and belongs to the 16th Military Division, of which Rennes is head-quarters. For purposes of superior education there are besides the University of Rennes an imperial college and diocesan seminary in the same town, and colleges in Dol, Fougères, St.-Servan, and Vitré. There is a school of painting, sculpture, and drawing, and a departmental museum in Rennes. The department returns 4 representatives to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers; Guide Classique du Voyageur en France.*)

ILLIERS. [EURE-ET-LOIRE.]

ILLINOIS, one of the United States of North America, is bounded S.E. by the Ohio, which separates it from Kentucky for 180 miles; E. by the Wabash for 120 miles direct distance, and by a meridian line to Lake Michigan for 162 miles, by which river and line it is separated from Indiana; N.E. by Lake Michigan for 57 miles; N. by the parallel of 42° 30' N. lat. to the Mississippi, 157 miles, by which it is separated from Wisconsin; W. by the Mississippi, which separates it from Iowa for 200 miles, and from Missouri for 340 miles. It lies between 42° 30' and 37° N. lat., 87° 49' and 91° 23' W. long. The extreme length is 378 miles, the extreme breadth 212 miles; the circuit of the state is 1160 miles, of which 850 miles is formed by navigable rivers; and its area is 55,409 square miles, or nearly 3000 square miles less than England and Wales. The following table shows the population decennially since the first census of the state in 1810, with the proportion of free coloured persons and slaves. The total population in

1810 was	12,282, including	613 free coloured persons, and	168 slaves.
1820 "	55,211, "	457 "	917 "
1830 "	157,445, "	1637 "	747 "
1840 "	476,183, "	3598 "	331 "
1850 "	851,470, "	5436 "	None.

The federal representative population in 1850 being 851,470 entitles the state to send nine representatives to Congress. To the Senate, like each of the other United States, Illinois sends two members.

Surface, Hydrography, Communications.—Illinois is one of the most GEOG. DIV. VOL. III.

level states in the Union. In the southern part of the state, by the Ohio, there is a range of low hills; the northern part is also somewhat broken, and there are some elevations by the Illinois, and lofty bluffs along the Mississippi; but with these exceptions Illinois is one great plain, having a general gentle slope to the south-west. The loftiest height is said to be under 1000 feet above the level of the sea, the lowest portion of the plain at the mouth of the Ohio River, is 340 feet above the sea. A large portion of the surface consists of prairie, much of it in its native state, but a great deal is reclaimed, and cultivation is rapidly encroaching on the remainder. The surface of the largest of the prairies, known as the Grand Prairie, and occupying the country between the Mississippi and the Wabash rivers is for the most part gently undulating and very fertile, with a good deal of timber about it; though considerable tracts of the southern part are flat and have an inferior soil. The character of the prairie is said to afford no insurmountable obstacle to its reclamation and settlement; no portion of it is more than eight miles from timber, and coal is found in abundance in most parts. The prairies are commonly known as the dry and the wet. The dry prairies are those which lie above the alluvial tracts, and, though less fertile, are preferred to them on account of their not being subject to inundations. The wet prairies are usually covered with coarse grass. The broad alluvial tracts bordering the several rivers, locally known as bottoms, are extremely rich and fertile, but owing to their moist state and liability to be flooded, are to a great extent uncultivated, though producing fine trees.

Illinois is well provided with rivers. Nearly three-fourths of its boundary is formed by navigable rivers, while its north-eastern angle is washed for 57 miles by Lake Michigan, thereby affording the state direct water communication with the whole lake country of the north. The rivers which belong to it in common with other states are the Mississippi, Ohio, and Wabash, which are described under MISSISSIPPI, KENTUCKY, and INDIANA. Of the rivers which belong wholly to the state the chief is the *Illinois*, which rises near Lake Michigan, and flows first west, and then south-south-west, into the Mississippi, which it joins 20 miles above the Missouri. About 200 miles above its mouth it expands into a fine lake called Peoria, 20 miles long and 2 miles wide. A morass at its source in wet seasons discharges a part of its waters into the river, and a part into the Chicazo, a small stream which flows into Lake Michigan. This large river takes the name of Illinois only from the confluence of the *Plane*, *Des Plaines*, or *Aux Plaines* River, from the north-east and the *Kankakee* from the east, both considerable streams, and navigable for boats. Thirty miles below their confluence *Fox* River, sometimes, but erroneously, considered the main branch of the Illinois, falls into the Illinois from the north; it rises in the Huron territory, and has a course of 200 miles south-south-west, more than half of which is in this state. The course of the Illinois is about 500 miles. It is navigable by large steamboats at certain seasons up to *Ottawa*, just below the *Great Rapids*, near the junction of the *Fox* River; at other times steamboat navigation is stopped by the *Little Rapids* at *La Salle*, where a canal commences which connects the Illinois with Lake Michigan. The Illinois flows with a gentle current, generally in a wide deep bed. The other principal tributaries of the Illinois are the *Vermilion* River from the south-east, the *Mackinaw* from the north-east, *Spoon* River from the north-west, the *Sangamon*, or *Sanganio*, from the east, and the *Big* and *Little Blue* rivers from the west; besides numerous lesser streams. *Sangamon*, by much the largest of these tributaries, has a very winding course to the west of more than 250 miles, of which 140 miles are navigable, and it falls into the Illinois about 130 miles above its mouth. *Rock* River rises in Wisconsin, and entering the state of Illinois on its north boundary, crosses it in a south-west course of about 300 miles to the Mississippi: it is navigable in its lower course; its upper course is impeded by rapids. The *Kaskaskia* rises on the eastern side of the state, and, like the Illinois and *Rock* rivers, has a generally south-western course to its junction with the Mississippi, about 80 miles above the junction of the Ohio. The river has been rendered much more serviceable for purposes of navigation by the removal of various obstructions under the direction of the Board of Public Works; it is now navigable in high-water to *Vandalia*, 150 miles from its mouth, and in some seasons to *Shelbyville*, 30 miles higher: its entire course is about 300 miles. It has numerous small tributaries. The *Big Muddy*, farther south, is also a considerable stream. The affluents of the Ohio and the Wabash are generally much smaller streams than those which fall into the Mississippi, but some of them are navigable, and all are important as furnishing water-power for mechanical purposes.

The state possesses one very important canal, the *Illinois and Michigan* Canal, 110 miles long, constructed by the state at a cost of upwards of 8,000,000 dollars. It commences at *Chicago* on Lake Michigan, and is carried in a south-western direction near the right bank of the Illinois to *La Salle*, where the Illinois becomes navigable, thus opening to the lake ports and navigation the wide river country of the south and west.

Illinois appears likely to be eventually amply supplied with rail-ways. In all, the lines completed or in progress amount to 2100 miles. Already some 600 or 700 miles are in operation, and above

1000 miles more are said to be in progress of construction; while the lines of country for 600 more miles have been surveyed. The principal lines in operation are those in connection with the commercial capital of the state, Chicago, in which city seven main-trunk lines meet. The Chicago and Rock Island railway runs from Chicago on Lake Michigan, in a south-west direction, to Rock Island city, at the confluence of Rock River with the Mississippi; its length is 180 miles. The Galena and Chicago runs from Chicago to Galena and Freeport at the north-western extremity of the state, 120 miles, with branches to Dixon 68 miles, and to Beloit, in Wisconsin, 20 miles. The Chicago and Aurora, 86 miles long from Chicago to Mendota, is the only other line from Chicago which is completed; but the Chicago and Cincinnati, to connect those places, 27 miles long; the Chicago and Fort Wayne, and the Chicago and Milwaukee, 92 miles; the Chicago and Mississippi, running to Alton, 130 miles; and the Chicago St. Charles and Mississippi, 135 miles, are in progress; and 100 miles of the last are open. The Great Western central line has under 100 miles in operation. The most important of the lines in progress is the Illinois Central, which is to be 700 miles long, and with the other lines will connect all the leading towns with each other, and with the chief trading places in the neighbouring states and most parts of the Union, and likewise of Canada. All the lines in progress are expected to be completed by 1857.

Geology, Mineralogy, &c.—The rocks of Illinois belong to the Palaeozoic order. In the extreme northern and western portion of the state is a narrow band of Lower Silurian rocks, the southern extremity of the Lower Silurian basin of Wisconsin. They consist of sandstone, in which occur numerous specimens of the *Lingula antiqua*, and of blue limestones in which are the rich lead-mines of Galena. South of the above, and extending east and west, is a broad belt of Upper Silurian rocks, chiefly light gray and magnesian limestones. Between this belt of Lower Silurian strata and Lake Michigan, and also on the south of the Silurian rocks, is a narrow band of fossiliferous Devonian rocks. South of these again, also extending east and west across the state, and along the whole western and southern border, lying along the Mississippi and Ohio rivers, is a narrow strip of Lower Carboniferous strata, consisting of bituminous slate, and fine-grained sandstone. Above these, and occupying the entire centre and eastern part of the state is a vast bed of Upper Carboniferous strata, closely resembling the coal-bearing rocks of England, but here forming part of a basin of these strata of a grandeur and extent almost unparalleled.

Illinois is exceedingly rich in minerals. Silver is obtained in the north-western part of the state in connection with galena. Lead is very widely diffused over the northern, and especially the north-western district; the lead-mines about Galena are among the most productive known. Copper is also obtained largely in those parts. Iron-ore is very widely distributed. Coal is however the most extensive and valuable mineral of Illinois. It is bituminous in quality, and the beds are of great thickness. The great coal region is that vast space mentioned above, as occupied by the Lower Carboniferous strata, extending quite across the state from Missouri to Indiana, and from Iowa to Kentucky. Excellent building stone of various descriptions is quarried over almost every part of the state. Granite boulders of large size occur in many places. Salt springs exist in several of the southern and eastern counties, and there are sulphur and chalybeate springs in various parts.

Climate, Soil, and Agriculture.—The climate is very much the same as that of Missouri, except that it is more humid. There is a considerable difference in the temperature between the northern and southern parts of the state. At New Harmony, which is in 38° 11', and opposite the southern part of the state, on the east bank of the Wabash, the thermometer has been observed as low as 5° below zero of Fahrenheit. Everywhere however the winters are severe and the summers hot and long, and the temperature subject to frequent sudden changes. In the southern parts of the state the summer heat is very oppressive. South-westerly winds blow during three-fourths of the year. North and north-westerly winds prevail in winter.

Illinois possesses a vast extent of excellent arable land. The soil however varied is generally highly fertile. Along the river-valleys, or bottoms, it consists of an extraordinarily rich alluvial deposit. One of these tracts, the American Bottom, on the Mississippi, extending above the mouth of the Kaskaskia for 90 miles, is especially noted for its fertility. Its soil, which is the richest river alluvium, continues unchanged for 25 feet below the surface, and some portions of it which are cultivated about the old French towns, have produced Indian corn without intermission and without manure for nearly a century and a half. A sixth of this alluvial land is however unfit for cultivation, owing to its liability to inundations. The prairies though less productive are still very fertile, and where timber is to be obtained are preferred for farms on account of their superior salubrity. The prairies are consequently steadily and rapidly becoming covered with thriving groves of young trees, the forerunners of busy farms. The barrens, or oak openings, have frequently a thin soil. In the northern parts there are stony tracts, but everywhere else it is said that "the plough may pass over millions of acres without meeting so much as a pebble to impede

The following are the principal results of the inquiries made respecting the agricultural statistics of Illinois at the last census:—The number of farms under cultivation in the state on the 1st of June 1850 was 76,208. The extent of improved land in farms was 5,039,545 acres, of unimproved 6,997,867 acres, together valued at 96,133,290 dollars. The farming implements and machinery were valued at 6,405,561 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 9,414,575 bushels; rye, 83,364 bushels; maize, 57,846,984 bushels; oats, 10,087,241 bushels; buckwheat, 184,504 bushels; barley, 110,795 bushels; peas and beans, 82,814 bushels; potatoes, 2,514,861 bushels; sweet potatoes, 157,433 bushels; tobacco, 841,394 lbs.; hops, 3551 lbs.; hay, 601,952 tons; clover and other grass seeds, 17,807 bushels; flax, 160,063 lbs.; maple sugar, 248,904 lbs. The value of orchard products was 446,049 dollars; of market-garden products, 127,494 dollars. Of wine only 2997 gallons were made. A good deal of hemp is grown and prepared, but the 'Census Report' states (p. 1015), that with regard to it the "returns were so confused, and all information from other sources so vague and indefinite, that it was deemed advisable to strike the items of hemp from the agricultural tables of the state." It may be as well to state here that it must not be supposed that these agricultural returns are as exact as their specific character would perhaps suggest, but there can be little doubt that they do, in the words of the 'Report,' "give a very fair idea," undoubtedly a far clearer and more correct idea than can be gathered from any other source, "of the state of the country in 1850."

With regard to live-stock, the returns show that the number of horses in the state in 1850 was 267,653; asses and mules, 10,573; milch cows, 294,671; working oxen, 76,156; other cattle, 541,209; sheep, 894,043; swine, 1,915,907. The value of live stock was 24,209,258 dollars; of animals slaughtered, 4,972,286 dollars. The products of animals were—wool, 2,150,113 lbs.; butter, 12,526,543 lbs.; cheese, 1,278,225 lbs.; bees'-wax, and honey, 869,444 lbs.; silk cocoons, 47 lbs.

Illinois is in general well supplied with timber. The most common trees are various kinds of oaks, sycamores, which in the alluvial soil along the rivers grow to an immense size, sugar-maple, walnuts, several kinds of ash, elm, cotton-wood, honey-locust, hickory, buck-eye, pecan, linden, wild cherry, sassafras, elder, and persimmon; in the southern and eastern parts yellow poplar and birch, and near the Ohio yellow pine and cedar. Hazel, red-bud, pawpaw, sumac, vines, dog-wood, and other under-growths are abundant. There are also various valuable medicinal plants.

The gray, black, and prairie wolf are still met with; the prairie wolf in considerable numbers. Panthers, wild-cats, foxes, racoons, opossums, and gophers, with musk-rats, otters, and occasionally beavers are also found, but they are being steadily exterminated. Partridges and prairie fowl abound; ducks, geese, swans, and various other aquatic birds visit the waters in the spring season. Fish in the greatest possible variety swarm in the rivers and lakes.

Manufactures and Commerce.—At present the manufactures of Illinois are chiefly connected with agriculture. Agricultural implements are extensively made; there are numerous wheelwright's shops; saw, grist, oil, flour, and other mills. The only important manufactures not immediately connected with agriculture are the iron-works, woollen-factories, and tanneries. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards in 1850 was 3099. Of these two were pig-iron manufactories, employing 150 hands, and a capital of 65,000 dollars, consuming annually 5500 tons of ore and 170,000 bushels of coke and charcoal, and producing 2700 tons of pig-iron; and 29 establishments engaged in the manufacture of cast-iron, employing 332 hands, and a capital of 260,400 dollars: there was no wrought-iron manufactured in the state. The woollen manufacture employs 178 hands, including 54 females, and a capital of 154,500 dollars; tanneries 275 hands (240 males), with a capital of 183,373 dollars; flour-mills, 834 persons; saw-mills, 937; distilleries, 176; pork and beef packing, 245; lead-mining and smelting, 213 persons. The 'home-made manufactures' for the year were valued at 1,155,902 dollars. There are the usual classes of professional men; the number of the principal classes were—clergymen, 1023; lawyers, 817; physicians, 1402; and surgeons, 3.

The direct foreign commerce of Illinois is chiefly with Great Britain. The exports, wholly of domestic produce, for the year ending June 30th 1852 amounted to 51,325 dollars; the imports to 4832 dollars. The commerce of the state is chiefly centred in Chicago, in our notice of which lower down will be found some further particulars respecting the trade of Illinois; Alton on the Mississippi, and Galena, are the other principal commercial towns. The internal trade is very considerable, and it is rapidly increasing with the increase of facilities of communication.

Divisions, Towns, &c.—Illinois is divided into 99 counties. Springfield is the political capital of the state, but the most important town is Chicago. The towns for the most part have as yet but small populations; the following are all which seem to require notice here: the population is that of 1850:—

Springfield, the capital of the state, is situated on the border of a broad prairie, about 4 miles from the left bank of the Sangamon River, in 39° 48' N. lat., 89° 33' W. long., 801 miles W.N.W. from

Washington: population, 4533. The town was laid out in 1822 on a regular plan, with a central public square, and wide streets crossing at right angles. In the centre of the principal square is the capital, a showy stone-building of three stories, with porticoes. The other public edifices are the court-house, market-house, jail, United States land-office, eight churches, academies, &c. There are some manufactures and an iron-foundry. The town is the centre of a very fertile district, the products of which are brought to its market. The Great Western Central, the Chicago and Mississippi, and the Massac and Sangamon railways meet here. Two daily and one weekly newspaper are published in the town.

Chicago, a city, port of entry, and capital of Cook county, is situated at the mouth of the Chicago River, on Lake Michigan, 42° 0' N. lat., 87° 35' W. long., 183 miles N.N.E. from Springfield: population 29,963 in 1850, in 1840 it was only 4470. The city is well and substantially built. It extends along the shore of the lake for above a mile, and for two miles back along the river which is separated into two branches, each having a depth of 12 to 15 feet. The site is low and level, but the town is said not to be unhealthy. The bar at the mouth of the river has been reduced, and piers have been carried out into the lake in order to prevent the accumulation of sand and drift. The largest lake craft and steamers can now pass over the bar, and within there is commodious anchorage for an almost unlimited amount of shipping. The commerce of the town has increased within the last few years in full proportion to the great increase of means of internal communication, and its fine position with respect to the navigation of the lakes. In 1839 the total value of property was assessed at 236,842 dollars, in 1850 it was assessed at 8,562,717 dollars. The imports in 1840 were 562,106 dollars, the exports 228,635 dollars. In 1848 the imports were 8,338,639 dollars, the exports 10,709,333 dollars. The arrivals of shipping in 1850 were:—Steamers, 662; propellers, 183; schooners, 1182; brigs, 230; barges, 13: making a total of 2270 vessels, of an aggregate burden of 958,600 tons. The principal exports in 1850 were:—Wheat, 437,660 bushels; maize, 3,221,317 bushels; oats, 767,197 bushels; hemp, 697,783 lbs.; coal, 2,091,552 lbs.; iron, 3,454,060 lbs.; lead, 1,376,879 lbs.; lumber, 67,957,287 feet; laths, 14,921,420 pieces; wool, 1,088,553 lbs.; besides considerable quantities of cheese, butter, flour, sugar, beef, pork, lard, and potash. The principal imports in the same year were:—Wheat, 358,077 bushels; maize, 2,647,465 bushels; bacon, 434,716 lbs.; hams, 1,086,933 lbs.; pork, 2,390,248 lbs.; lard, 2,069,625 lbs.; hemp, 1,035,648 lbs.; hides, 848,876; lumber, 125,523,122 feet; timber, 562,976 feet; laths, 27,533,475 pieces; shingles, 60,338,250 bushels; lead, 1,402,135 lbs.; wool, 731,956 lbs.; tobacco, 824,923 lbs. The public buildings are the usual county buildings, numerous churches and schools, banks, &c. There are several large hotels in the city. Besides the Illinois and Michigan Canal, the city is the terminus of several important railways, and a great many plank-roads facilitate communication with the interior. Five daily newspapers, each having also a weekly issue, six weekly, a fortnightly, and three monthly periodicals are published here.

Alton, on the left bank of the Mississippi, 3 miles above the confluence of the Missouri, is the chief port town of Illinois on the Mississippi, and the largest town on that river above St. Louis: population, about 12,000. Alton is a convenient port, and is now being connected with several railways; its commerce is greatly increasing. There are several churches, Shurtliff college and other buildings in the town. Bituminous coal is abundant in the vicinity. **Bevidere**, on the north branch of the Kishwaukee River, and on the Galena and Chicago railway, 78 miles W. from Chicago, population about 2000, is a flourishing and busy new town. There are several grist- and saw-mills. **Carlinville**, the capital of Macoupin county, 2 miles N. from Macoupin creek, and 41 miles S. by W. from Springfield, is one of the most flourishing places in the interior. The Sangamon and Alton railway has a principal station here. **Carrollton**, the capital of Greene county, on the border of Spring prairie, about 6 miles N. from Macoupin creek, and 56 miles S.W. from Springfield, is another rapidly increasing interior town, and the centre of a fertile district. **Carthage**, the capital of Hancock county, lies between Bear and Long creeks, and is a busy and prosperous place, being the mart of a fertile neighbourhood, and of a rich coal district. The village has acquired a wide notoriety as the scene of the murder of the Mormon prophet and leader, Joe Smith, and his companions. **Chester**, on the Mississippi, immediately below the confluence of the Kaskasia River, population about 1300; is a place of growing commercial importance, being the entrepôt for the produce of a considerable tract of back country. **Danville**, on the right bank of the Big Vermilion River, just below the confluence of the North and Salt Forks, 128 miles E. by N. from Springfield, population about 1200, is a good sized and flourishing place, and the centre of a fertile and populous district. Two weekly newspapers are published here. **Freeport**, on the Pecatonica River, 168 miles N. from Springfield, is another of the rising towns of Illinois, and from its position is likely to become an important commercial place. The surrounding country is rich in minerals, and very productive agriculturally. The Galena branch of the Central Illinois, and Galena and Chicago Union railways meet here. Two newspapers are published weekly. **Galena**, on the Feve River a little above its confluence with the Mississippi, and near the

north-western extremity of the state, population about 6500, is the centre of the lead mining district, and the chief commercial town of this part of Illinois. It is the capital of Joe Davies' county, and contains the usual county buildings, court-house, jail, several churches and schools, and some large copper smelting works, grist- and saw-mills, &c., and has a large lumber market. The chief exports in 1851 were—lead 33,082,190 lbs.; flour 39,339 barrels; barley 42,731 bushels; pork 3185 barrels; bacon 812,658 lbs.; lard 125,000 lbs.; butter 87,618 lbs.; eggs 22,880 doz.; hides and skins 9326; horses 800; cattle 1500, &c.; and in the same year it received 5,035,634 feet of lumber, and a very large quantity of shingles, timber, and wood of other descriptions. The largest river steamers ascend to Galena, and it has good railway accommodation. Two daily newspapers, having also weekly issues, are published here. **Jacksonville**, on the Mauvais-terre creek, 80 miles W. by S. from Springfield, population 2745, is a rapidly rising new town, situated on a rich prairie district. It contains a court-house, jail, churches, and schools. Illinois college, and the state deaf and dumb institution are situated here. There are extensive flour-mills, cotton-works, tanneries, and machine manufactories. The Sangamon and Morgan railway passes the town. A newspaper having tri-weekly and weekly issues is published here. **Joliet** on the Plane River, 40 miles S.W. from Chicago, population 2659, contains a court-house, jail, churches and schools, large hotels and warehouses. The river affords fine water-power, which is made available for numerous mills and factories. The Illinois and Michigan Canal, and Chicago and Rock Island railway pass the town. Two weekly newspapers are published here. **Kaskasia**, the original capital of Illinois, stands on the right bank of the Kaskasia River, 10 miles above its confluence with the Mississippi, 127 miles S. by W. from Springfield the present capital: population, about 1000. Kaskasia is one of the oldest towns in the state, having been founded by the French in 1683; it stands in the midst of very picturesque scenery, contains the usual county buildings, a Roman Catholic church, and a United States land office. **Mount Carmel** occupies a favourable site for commercial purposes, on the right bank of the Wabash, below the rapids, 140 miles S.E. from Springfield: population, 1500. It contains a court-house, jail, churches and schools, and several flour-mills, and machine-shops. **Naperville**, on the Du Page creek, 160 miles N.E. from Springfield, is a rising new town, the capital of Du Page county, having various county buildings, churches, schools, &c., and two weekly newspapers. **Ottawa**, at the junction of the Fox River with the Illinois, 120 miles N.N.E. from Springfield, is the capital of La Salle county, and a place of great and increasing commercial importance. By the Illinois and Michigan Canal the lake steamers reach the town, and the Chicago and Rock Island railway affords communication with the western districts; while the Illinois River yields immense water-power which is being turned to full advantage. The soil of the surrounding country is rich; there is a good deal of timber; and limestone and freestone abound. Two newspapers are published weekly. **Peoria**, on the right bank of the Illinois, at the foot of Peoria Lake, is the capital of Peoria county, and the shipping port for the surrounding grain district: population, 5562. It contains the usual county buildings, churches and schools, an incorporated academy, several steam-mills, factories, &c. Two weekly newspapers, and a semi-monthly magazine are published here. **Quincy**, stands on a high bluff on the left bank of the Mississippi, 88 miles W. from Springfield, population 6911; it is the capital of Adams county, and the mart for a well cultivated and populous neighbourhood. Besides the usual county buildings, churches, and schools, it contains a United States land office, numerous warehouses, stores, hotels, workshops, &c. Several steamboats arrive and depart daily during the season. Large quantities of barrelled pork and bacon are exported. One daily and three weekly newspapers, with two monthly periodicals are maintained. **Rock Island City**, at the junction of the Rock River with the Mississippi, and the terminus of the Chicago and Rock Island railway, by which it is 180 miles W.S.W. from Chicago, is a new town which has been laid out on an extensive plan, and though not at present very populous is expected to become one of the most considerable commercial towns on the upper Mississippi. The site is well adapted for trading purposes, and the surrounding country is not only a rich agricultural district, and well supplied with timber, but affords also abundance of coal and limestone. **Rockford**, the capital of Winnebago county, is situated at the rapids on Rock River, 92 miles N.W. by N. from Chicago by the Galena and Chicago railway: population, 2098. Steamboats ascend to the town. The rapids afford immense water-power, and there are several mills. A newspaper is published weekly. **Shawneetown**, on the Ohio, 164 miles S.E. from Springfield, population 1764, is one of the largest trading places in southern Illinois. Iron-ore and coal are obtained along the banks of the Ohio. There are very extensive salt-works at Saline creek, 12 miles from the town. Shawneetown possesses a paved levee of considerable length. An important branch of the trade of the place is the slaughtering and packing of hogs: one establishment has facilities for hanging up 1000 hogs a day. Tobacco is raised in the vicinity in considerable quantities: 300 hogsheads were shipped from here in 1852. **Vandalia**, from 1818 to 1839 the capital of Illinois, stands on elevated ground, on the right bank of the Kaskasia, 66 miles S.E. from Springfield: population, about 1100. The town was laid out on a large scale in

bruous. The upland prairies are generally healthy, owing to the genial periodic breezes which blow regularly over them. The temperature does not vary very remarkably throughout the state. Along the bottoms, where inundations occasionally happen, fevers sometimes occur; but from the rivers generally flowing rather rapidly the bottoms are less subject to miasmatic visitations than in the states lying along the lower courses of the great rivers. The winters commence in December and end in March; they are variable, and sometimes severe, but less so than is usual in similar latitudes. The summers are not oppressively hot, and showers are frequent.

The soil is generally good; indeed it is said that the government surveys have proved that there is no state in the Union which has a smaller extent of inferior land. Throughout the prairies a sandy loam prevails, which, while producing the finest natural grasses, has been found to be excellently adapted for the growth of grain. A red clay and gravel is also a prevalent soil in some parts of the state. Along the bottoms the alluvial deposits yield a deep and very rich black mould. The climate and soil seem to be generally suitable for the growth of most kinds of grain. All the usual fruits do well, and the melon tribe, grapes, &c., flourish. The various garden vegetables also grow extremely well.

At present Iowa is eminently an agricultural country. Its broad and fertile prairies not only afford the finest natural pastures, but very great facilities for the laying out of farms, from the circumstance of timber being always within comparatively easy reach, while there is abundance of good open and well-watered land. The progress of agriculture and the character of the products will be sufficiently shown by the following statement of the principal results of the inquiries made respecting the agricultural statistics of the state at the last census. The number of farms under cultivation in the state on the 1st of June 1850 was 14,805; the extent of improved land in farms was 824,682 acres, of unimproved 1,911,382 acres. The cash value of farms was returned at 16,657,567 dollars; of farm implements and machinery, 1,172,869 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 1,530,581 bushels (154,693 bushels in 1840); rye, 19,916 bushels (3792 in 1840); maize, 8,656,799 bushels (1,406,241 in 1840); oats, 1,524,845 bushels (216,285 in 1840); barley, 25,093 bushels (728 in 1840); potatoes, 276,120 bushels (234,063 in 1840); sweet potatoes, 6243 bushels; buckwheat, 52,516 bushels (6212 in 1840); peas and beans, 4775 bushels; tobacco, 6041 lbs. (8076 in 1840); hay, 89,055 tons (17,953 in 1840); grass-seeds, 2438 lbs.; flax, 62,660 lbs.; flax-seed, 1959 lbs.; maple-sugar, 73,407 lbs.; molasses, 3162 lbs.; hops, 8242 lbs. (83 lbs. in 1840). The value of orchard products was 8434 dollars (80 dollars in 1840); of market-garden products, 8848 dollars.

The natural pastures afford great facilities for cattle-farming. Sheep and swine succeed admirably with little care; and wool has become a staple production of the state. The number of horses in Iowa in 1850 was 38,536; of asses and mules, 754 (in 1840 there were 10,794 horses and mules); milch cows, 45,704; working oxen, 21,892; other cattle, 69,025 (in 1840 the total neat cattle were 38,049); sheep, 149,960 (15,354 in 1840); swine, 323,247 (104,899 in 1840). The value of live stock was 3,689,275 dollars; of animals slaughtered, 821,164 dollars. The products of animals were:—Wool, 373,898 lbs. (23,039 lbs. in 1840); butter, 2,171,188 lbs.; cheese, 209,840 lbs.; bees'-wax and honey, 321,741 lbs.; silk cocoons, 246 lbs.

Manufactures, Commerce, &c.—The manufactures of Iowa are as yet but of small extent; but from the abundance of coal, and the immense supply of water-power, there can be little doubt that this will some day become an important manufacturing state. At the census of 1850 there were returned 9255 free males above the age of 15 as employed in trade, commerce, manufactures, and mining; and 32,779 employed in agriculture. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards in 1850 was 482. Most of these were of the various kinds required in an agricultural country, as flour- and saw-mills, agricultural implement works, wheelwrights' shops, &c., with such others as were required to supply the demand for articles of ordinary domestic use. One woollen factory, 3 cast-iron works, and 14 tanneries, all on a small scale, were the only manufacturing establishments of a more general character.

Iowa has no direct foreign commerce, but it has an extensive and rapidly-increasing trade with the ports of the Atlantic and the Mexican Gulf, from which it receives European goods, the manufactures and products of the Eastern States, South America, &c., exporting in return its agricultural and mining products. Its interior trade is also very considerable.

Divisions, Towns, &c.—Iowa was divided into 49 counties at the census of 1850; but 49 new counties have since been formed. The city of Iowa is the political capital; but the most populous town is Burlington. The towns at present next in importance are Dubuque, the capital of the lead-mining district, and Keokuk, the chief shipping mart. Of these, with such others as seem to require notice, we append a brief account: the population, when not otherwise stated, is that of 1850; but as the returns as given in the 'Census Report' are acknowledged to be imperfect, and the numbers do not agree with those in other authorities, we have not always adhered to them, and they had better perhaps be received as approximations merely: all

the towns are however so rapidly changing that the want of definiteness is of comparatively little consequence.

Iowa City, the capital, is built on ground rising in terraces from the left bank of the Iowa River, 1485 miles W.S.W. from Washington: population, 1582. The city is laid out on a regular plan, and on a large scale; the principal avenues are 160 feet wide. The state-house is a handsome Grecian building, 100 feet long and 60 feet wide, surmounted with a dome resting on 22 Corinthian columns, and built of birds'-eye marble, a very beautiful variety of native limestone. The other public buildings are—a county-court house of good design, a United States land office, several churches, a jail, &c. Iowa city is the centre of communication between the principal ports of the Mississippi and the Pacific, and is to be the centre towards which the railways of the state are to converge. The Iowa River is navigable up to the city by steam-boats at all seasons; and the immense water-power which it affords immediately above the city has led to the erection of several extensive mills. Two newspapers are published here weekly. When this site was selected in 1839 as that of the capital of the state it was an entirely wild uncleared tract.

Burlington, the capital of Des Moines county, stands on ground rising gently from the Mississippi, 62 miles S.S.E. from Iowa city, population 4082; it was the original capital of Iowa territory, and is still the most populous town in the state. It contains some fine buildings, churches, &c., and several manufacturing and commercial establishments. Three weekly newspapers are published here. *Columbus*, on the right bank of the Iowa, 2 miles below the junction of Cedar River, and 27 miles S. by E. from Iowa city, population 1183, is a new and thriving city. *Council Bluffs*, on the Missouri, 216 miles W. by S. from Iowa city, is the last civilised settlement before entering on the wide unsettled country on the overland route to Oregon and California, and is consequently an important station for emigrants, who here complete their outfit before crossing the Missouri and entering the 'Indian country.' The distance from Council Bluffs to Oregon city is 1924 miles; to Sacramento city 2011 miles. *Davenport*, the capital of Scott county on the Mississippi, opposite Rock Island, and 51 miles S.E. from Iowa city, population about 2000, is already one of the busiest commercial towns of the state, and appears likely if the projected system of railways be constructed to become a place of considerable importance. It contains the county and other public buildings, and supports two weekly newspapers. *Dubuque*, the capital of the county of the same name, stands on an elevated terrace which stretches for some distance along the Mississippi, 72 miles N.E. from Iowa city, population 3108. The town is built on a regular plan; the streets, which are wide, intersect at right angles. It is one of the oldest places in this part of America, having been settled by the Canadian French in 1636, as a station for trading with the Indians. The town contains the county buildings, a United States land office, several churches, &c. Dubuque is the chief town of the lead-mining district, and a place of considerable trade. Its population had increased in 1852 to 4071, and is still rapidly increasing. Four weekly newspapers are published here, one of them in the German language. *Fort des Moines*, the capital of Polk county, on the left bank of the Des Moines River, 110 miles W. from Iowa city, is a flourishing little town, but is chiefly noticeable as a travelling station on the road to Council Bluffs, for emigrants taking the overland route to California, for whose convenience there are extensive stores, hotels, &c. It is on the line of the projected railway to the Pacific. *Fort Madison*, the capital of Lee county, on the Mississippi, 71 miles S. by E. from Iowa city; though only laid out as a village in 1835, is now a busy, commercial, and manufacturing town. It contains the county buildings, jail, penitentiary, and several churches. Steamboats arrive and depart several times daily, and it has a large trade with the interior. Two newspapers are published here weekly. *Kanawville*, the capital of Pottawattomee county, near the Missouri, 224 miles W. by S. from Iowa city, population in 1852 about 1200, is only noteworthy as having been settled and built by the Mormons, as a station on the overland route to their city on the Great Salt Lake. *Keokuk*, on the Mississippi, 3 miles above the confluence of the Des Moines, 86 miles S. by E. from Iowa city; population 2478 in 1850, and 3968 in 1852. The town is well laid out, and has a good landing-place and levee. Being at the foot of the Lower Rapids of the Mississippi, which are 11 miles long, steamboats at low water have to unload their freights here; but a canal is projected to be carried round the falls. Keokuk is the port of the rich valley of the Des Moines; and one of the most flourishing and busy towns in the state. It contains besides the county buildings, the state medical college and hospital, six churches, several academies and schools, and supports four newspapers. There are in the town and its immediate vicinity several steam saw-mills, and iron-foundries; large stores, warehouses, and hotels. Inexhaustible quarries of excellent limestone for building are in the neighbourhood. *Muscatine*, formerly *Bloomington*, the capital of Muscatine county, on the Mississippi, 30 miles S.E. by E. from Iowa city, population 2540, is the chief shipping port for the rich district between Iowa city and the Mississippi, and is steadily growing in importance. It contains besides the usual county buildings, several handsome churches, numerous large warehouses and stores, and supports two weekly newspapers.

Government, Judicature, &c.—The constitution by which the present government of Iowa is regulated was adopted in 1846. By it the right of voting in all state elections, &c. appertains to every male white citizen of the United States, infamous and insane persons excepted, who has resided in the state for six months, and in the county in which he claims to vote 30 days. The legislative body, styled the general assembly, consists of 30 members who are elected for four years (one half to be chosen every two years), and must be 25 years of age; and a house of representatives consisting of 59 members who are elected for two years, and must be 25 years old. The number of legislators is made dependent, to a certain extent, upon the population of the state; the representatives must not exceed 72 in number; the senators must not be less than a third, nor more than half of that number. The number of members and their apportionment among the counties is to be in accordance with a state census made for the purpose biennially of the number of white male citizens. The governor, who has a qualified veto on the acts of the legislature, is elected for four years, and has a salary of 1000 dollars: he must be 30 years of age and have resided for two years in the state. Among the special provisions of the constitution it is enacted that—no law shall embrace more than one object, and that object must be expressed in its title: no person holding any lucrative office under the state, or United States, is eligible to a seat in the house of representatives: no divorce shall be granted by the legislature: no state debt shall be created exceeding 100,000 dollars, except in case of war or insurrection, unless authorised by a special law which shall provide for the payment of the interest and of the principal within 20 years, which law shall be irrevocable, and before going into effect must be submitted to the people at a general election, after sufficient public notice, and be approved by a majority of the voters: no corporation with banking privileges shall be created; and all persons or associations shall be prohibited by law from banking or creating paper to circulate as money: corporations for other than banking purposes may be organised under general laws; the state shall never become a stockholder in any corporation. The funded debt of the state is 81,795 dollars, of which the interest is about 8000 dollars. The revenue is derived from taxes upon real and personal property. The total revenue for the two years ending October 31st 1852 was 139,633 dollars; the expenditure for the same period was 131,681 dollars. No return has been made of the state militia.

The judicature consists of a supreme court, district courts, and courts of local jurisdiction. The supreme court has appellate jurisdiction in chancery cases, and in common law cases under certain restrictions: it is presided over by a chief justice and two assistant justices, who are elected by joint vote of the general assembly for a term of six years, and receive a salary of 1000 dollars a year each. There are nine district courts, each of which is presided over by a judge, who is elected by the people of the district for a term of five years, and receives a salary of 1000 dollars a year. The courts of local jurisdiction are presided over by justices of the peace, and have jurisdiction in civil cases where the amount in dispute does not exceed 100 dollars, or by consent 500 dollars.

The constitution provides that a superintendent of public instruction shall be elected by the people every three years; and that all lands granted by Congress to the state, all escheated lands, and the percentage granted by Congress on the sale of public lands in Iowa, shall constitute a perpetual fund, the interest of which, and the rents of the unsold lands, shall be applied to the support of common schools; and that one such school shall be provided by the assembly in each school district for at least three months in the year. It also sets apart various fines, &c., for the maintenance of the schools and the establishment of school libraries. It further provides for the support of a state university. In 1850 Iowa possessed 3 colleges, having 8 teachers and 75 pupils; and 742 public schools, having 830 teachers and 29,616 pupils. The total number of children attending school, as returned by families, was 35,456, including 17 free coloured children. The number of adults unable to read and write was 5235, of whom 2318 were natives of the United States, and 2917 foreigners. The return of churches and church accommodation was too imperfect to be of any value. The number of newspapers and periodicals published in the state in 1850 was 29, circulating 1,512,800 copies annually.

The first settlement was made in Iowa by French Canadians at Dubuque in 1686. The country formed a portion of the French province of Louisiana, purchased by the United States in 1803. From that time it was included in the territory of Missouri till 1821, when it became a part of the territory of Michigan, and subsequently of that of Wisconsin. In 1838 it was erected into a distinct government with the title of the Territory of Iowa, and included within its limits the whole of the present territory of Minnesota west of the river Mississippi. In December 1846 it was admitted into the Union as an independent state; its area being circumscribed within its present boundaries. Since its acquisition by the United States there have been frequent 'difficulties' with the native Indians; but the several tribes have been successively expelled or induced to leave the territory, and there are now no Indians in Iowa.

(Colton, Haskell and Smith, and Lippincott, *Gazetteers of the United States; Seventh Census of the United States, Official Report, 1853;*

Dr. Dale Owen, *Report of a Geological Survey of Wisconsin, Iowa, &c.; Marcou, Geological Map of United States; American Almanac, 1854.*

IPSWICH. [AUBUSAMBOUL.]

IPSWICH, Suffolk, a market-town, port, municipal and parliamentary borough, the chief town of the county, and the seat of a Poor-Law Union, is situated in 52° 3' N. lat., 1° 9' E. long., distant 69 miles N.E. from London by road, and 68 miles by the Eastern Counties railway. The population of the borough of Ipswich in 1851 was 32,914. The livings are in the archdeaconry of Suffolk and diocese of Norwich. The borough is governed by 10 aldermen and 30 councillors, of whom one is mayor; and returns two members to the Imperial Parliament. Ipswich Poor-Law Union contains 14 parishes, with an area of 7270 acres, and a population in 1851 of 32,104.

Ipswich is pleasantly situated on the side of a hill near the junction of the rivers Orwell and Gipping. The town was pillaged and the fortifications were destroyed by the Danes in 991 and in 1000. Ipswich had a charter from King John in the first year of his reign, and has returned two members to Parliament since the 25th of Henry VI.

The streets are well paved, lighted with gas, and plentifully supplied with water. There are many good buildings, especially in the modern portion of the town; the older streets are narrow and irregular; some of the old houses are decorated with curiously-carved figures. Many of the houses have convenient gardens attached, which render Ipswich an agreeable and healthy place of residence.

Ipswich had 81 places of worship in 1851, of which 15 belonged to the Church of England, 4 to Methodists, 2 to Baptists, 2 to Independents, and one each to Quakers, Roman Catholics, Unitarians, and Jews. The total number of sittings provided was 16,017. The number of day schools was 91, with 4252 scholars. There were 15 Sunday schools, with 1609 scholars. The literary institute had a library of 5000 volumes; the mechanics institute had a library of 5924 volumes. The Grammar school, founded in the reign of Edward IV., has an income from endowment of 116*l.* 6*s.* 8*d.*; it has six scholarships, and two exhibitions at Pembroke College, Cambridge; the number of scholars in 1853 was 180. The mother-church of Ipswich is St. Mary-le-Tower; it is attended by the judges, the mayor and corporation, the Grammar school, &c. St. Mary's church is of the 14th century. It has a peal of ten very fine bells, and the organ is one of the best in the kingdom. The church of St. Lawrence is a fine example of the perpendicular style; and some of the other churches are interesting buildings. A museum for the study of natural history among the working classes has been founded by Mr. George Ransome. There are some almshouses; and an hospital entitled the East Suffolk and Ipswich hospital, founded in 1836, which receives 38 in-door patients, and has an average of 170 out-door patients. Among the public buildings are the town-hall, the custom-house on the quay, the corn-exchange, the county jail, the borough jail, court-houses for the assizes and sessions, a temperance hall, an assembly room, and a theatre. A handsome building, the foundation stone of which was laid by Prince Albert, accommodates the Grammar school, public library, and museum. Ipswich has two prosperous savings banks. A county court is held in the town. An arboretum has been recently formed. Among the old edifices may be mentioned Cardinal Wolsey's Gateway and Sparrow's House.

The river Orwell has been deepened and otherwise improved, and a wet dock covering about 38 acres has been constructed. Vessels drawing 15 feet of water can float in the dock. The exports consist chiefly of corn, malt, cheese, butter, and agricultural implements and machinery. Coal, iron, and timber are largely imported. Mating, ship-building, paper-making, and stay-making are somewhat extensively carried on. Constant communication is kept up with Harwich by steam-vessels on the Orwell. The number of vessels registered at the port of Ipswich on December 31st 1853 was as follows:—Under 50 tons 51, tonnage 1453; above 50 tons 112, tonnage 12,180: steam-vessels 5, tonnage 192, and 4 of 447 tons. The vessels entered and cleared during 1853 amounted to:—Coasting trade, inwards 1425, tonnage 108,524; outwards 700, tonnage 33,093: steam-vessels, inwards 289, tonnage 31,019; outwards 287, tonnage 30,166. Colonial and foreign trade:—British vessels, inwards 71, tonnage 5888; outwards 68, tonnage 7117: foreign vessels, inwards 62, tonnage 5759; outwards 31, tonnage 3759. A market for corn and cattle is held on Tuesday; a general market on Tuesday and Saturday. Fairs are held in May, August, and September. The banks of the river Orwell display some beautiful scenery in the neighbourhood of Ipswich. In the vicinity are many fine residences of opulent families.

IRAK-AJEMI. [PERSIA.]

IRAK-ARABI. [BAGHDAD.]

IRAPUATO. [MEXICO.]

IRAWADDY. [BURMA.]

IREBY. [CUMBERLAND.]

IREG. [CROATIA.]

IRELAND, the second in size of the British Islands, lies west of Great Britain, in the Atlantic Ocean, between 51° 26' and 55° 21' N. lat., 5° 20' and 10° 26' W. long. The arm of the Atlantic which separates Ireland from Great Britain is narrowest at its northern extremity, where it is called the North Channel, and the opposite coasts approach within 13 miles, between the Mull of Cantyre in Scotland and Fair Head in the county of Antrim. Southward from

this, that part of the Channel which contains the Isle of Man expands to a breadth of 120 miles, between the coasts of Louth and Lancashire, and bears the name of the Irish Sea. Being again contracted by the projecting coast of Wales to a breadth of about 65 miles, it assumes the name of St. George's Channel, which it bears until it expands into the Atlantic at its southern extremity. The remainder of the coast-line is formed by the Atlantic Ocean. The straight line joining Fair Head in the county of Antrim to Misen Head in the county of Cork, is the longest that can be drawn upon the island, and measures 302 miles; but the greatest length measured due north and south from Bloody Foreland, in the county of Donegal, to the Old Head of Kinsale, in the county of Cork, is only 237 miles. The greatest breadth, measured due east and west, from the eastern coast of the county of Down to the west coast of Mayo is 180 miles. The coasts are so indented by bays and inlets of the sea, that no part of the island is more than 50 miles from the sea. The area is 32,508 square miles, of which nearly 986 square miles are covered with fresh-water lakes and rivers. The population of Ireland in 1851 was 6,551,970; namely:—3,190,507 males, and 3,361,463 females. The majority of the inhabitants of Ireland are Roman Catholics.

Coast.—The southern and western coasts of the island are deeply indented by arms of the sea penetrating between rocky and mountainous promontories, and forming a great number of excellent harbours. The principal harbours on the south coast are those of Waterford, Youghal, Cork, and Kinsale. Along the western shore of the province of Munster the bays and harbours include Bantry Bay, Valentia Harbour (one of the finest and best sheltered natural harbours in the world, having a double entrance on the north and south sides of the island of Valentia), Dingle Bay, Tralee Bay, and the estuary of the Shannon, which is navigable for large vessels up to Limerick. On the west coast of the province of Connaught are Galway Bay, the numerous inlets that indent the coast of Connemara, Killery Harbour, Clew Bay, Killala Bay, and Sligo Bay. Farther north, penetrating far into the province of Ulster, are Donegal Bay, Sheep Haven, Lough Swilly, and Lough Foyle, which last is navigable for vessels of 900 tons up to the bridge of Derry. The shores of the island are in general lofty and precipitous. The eastern side is flat and little indented, except towards the north, where Belfast Lough, Strangford Lough, and Carlingford Bay run a long way into the land. The chief of the other harbours on the eastern side are Dundalk Bay; the beautiful Bay of Dublin, at the southern side of which is Kingstown Harbour; and Wexford Haven, which receives the river Slaney, a little west of Wexford town. It has been estimated that the total number of harbours on the Irish coast includes 14 capable of accommodating the largest men-of-war; 14 for frigates; upwards of 30 for coasting vessels; 25 good summer roadsteads; besides numerous inlets for fishing craft. There are 62 lighthouses and 3 floating lights round the coast of Ireland, of which 26 are first-class lights. About 196 islands are strewed along the coast, chiefly on the western side of the island: the largest are Rathlin, Tory, Arranmore, Achill, Clare, the South Arran Isles, Valentia, Dursey, Bear, Whiddy, and Cape Clear.

Surface and Geology.—The most remarkable feature in the distribution of high and low land over the surface is the great limestone plain which occupies, with little interruption, the central district extending from the sea at Dublin on the east to the Bay of Galway on the west, and from the counties of Sligo and Fermanagh on the north to the confines of Cork and Waterford on the south. The first interval between the limestone country and the Channel is occupied by the granitic range of the Wicklow and Mount Leinster Mountains, which extends southward from the confines of Dublin and Wicklow into Carlow, and terminates near the confluence of the Barrow and Nore. Lugnaquilla, the highest of the Wicklow Mountains, is 3039 feet above the sea. From the flanks of this chain a claylate formation extends on the one hand into the eastern portion of Kildare, and on the other to the sea, forming the more cultivable portions of Wicklow, and almost the entire of Wexford. Abutting on the southern extremity of the granite range commences a series of mountain groups, the main constituent of which is claylate and old conglomerate supporting flanks of yellow sandstone. This is the most extensive mountain district of Ireland. Commencing from the east the Slievenaman, Knockmeledown, and Galtee ranges extend in successive elevations of from 2000 to 3000 feet across the south of Kilkenny, Tipperary, and Limerick. After subsiding under the coal district which spreads from Limerick over the north-east of Kerry, they rise again towards the Atlantic, where Mount Brandon (3126 feet), between the Bay of Dingle and the mouth of the Shannon, terminates the series. The entire counties of Cork and Kerry are occupied by the same formation; the elevations attain a considerable altitude as they trend towards the sea, occupying the whole western part of Cork and the southern portion of Kerry with precipitous and sterile ridges, among which Carran-Tual, the highest summit of Mac Gillicuddy's Reeks in Kerry, rises to the height of 3414 feet, being the highest ground in Ireland. Throughout the western parts of Limerick and Clare the limestone is overlaid by the great Munster coal-tract, from under which it again emerges on the south side of the Bay of Galway. An extensive tract of granite with peaks of quartz and greenstone rising in Mulreea the culminating point to the height of 2688 feet, forms the

northern boundary of the Bay of Galway, and from this point northward to Killala Bay a series of primitive rocks, consisting chiefly of mica-slate and protruded masses of quartz is interposed between the Atlantic and the inland plain, except in one instance where the limestone reaches to the sea through the low country connecting the plains of Mayo with the head of Clew Bay. A primitive ridge of mica-slate and granite prolongs this district northward and westward through Sligo to within a short distance of the borders of Donegal, where it subsides to rise again in that extended primitive formation which occupies almost all the county of Donegal and a great part of the counties of Derry and Tyrone. The north-western portion of this district consists of granite and quartz with numerous veins of primitive limestone, which is also of frequent occurrence throughout the great field of mica-slate that constitutes the remainder and rises in mountains from 1500 to 2500 feet high. This district is succeeded on the east by the great trap-field of Antrim, which overlies it through an extent of nearly 800 square miles. The cap of trap is supported throughout by a bed of chalky white limestone reposing on lias, the denuded edges of which give an extraordinary variety of colouring and structure to the cliffs of that coast. A tract of claylate succeeds the trap-field on the south and west, extending over Down and Armagh into Monaghan, Louth, and parts of Cavan, Meath, Longford, and Roscommon. The granite group of the Mourne Mountains, which attain in Slieve Donard, their highest point, an elevation of 2796 feet above the sea-level, and the granite and greenstone group of Slieve Gallion occupy a considerable portion of this claylate tract, protruding in conspicuous masses in the southern parts of Down and Armagh to a height of 2500 feet and upwards.

The principal detached groups which occur within the limestone plain are the Slieve Bloom and Slieve Baughta ranges, consisting of nuclei of claylate supporting flanks of red and yellow sandstone, which extend to a considerable distance on each side of the valley of the Shannon in the county of Tipperary and Queen's County, and Clare and Galway counties respectively. A tract of old red-sandstone rises into a chain of moderate elevation on the borders of Roscommon and Sligo in the north-west part of the plain, and several greenstone elevations occur in the centre and south-west. The limestone plain also contains seven coal districts, the chief of which is in the province of Munster, extending through parts of Cork, Kerry, Limerick, and Clare counties. The Connaught or Lough Allen coal-field extends over a space of nearly 16 miles in its greatest length and breadth in the counties of Roscommon, Sligo, and Cavan; its total area is 140,000 acres. In the other coal-fields, which are small, the seams are narrow.

The central district of Ireland also contains upwards of 1,570,000 acres of flat bog, the greater portion of which lies west of the Shannon in the counties of Galway, Roscommon, and Mayo; the remainder, extending in various tracts through King's County, Longford, Westmeath, and Kildare, is known collectively as the Bog of Allen. The total area of turf bog, from which the chief supply of fuel is obtained, is 2,830,000 acres, of which above 1,250,000 acres are scattered over the uplands near the coast.

Besides these incumbrances the lower carboniferous limestone, which constitutes the central plain, is overlaid in many tracts towards the borders of the district by the upper limestone, and this is generally accompanied by a craggy and rough surface: as in the vicinity of the coal districts and throughout the counties of Sligo, Fermanagh, Cavan, and Leitrim. These districts contain numerous caverns; and streams sinking into subterranean channels are of frequent occurrence.

By much the greater part of the central plain however is unincumbered, and has the pure carboniferous limestone for its substratum. Throughout these districts the soil is rich and the surface gently undulating. The mountain groups and waste lands on the whole occupy a comparatively small portion of the entire island, and many of the districts lying outside the central plain rival the richest limestone lands in easiness of access and fertility.

Minerals.—The principal minerals are coal, iron, copper, and lead. Lignite is found in deep strata encompassing the southern half of Lough Neagh. Iron-ores are found in all the coal districts, and were largely manufactured while timber for smelting was abundant; but for a long time the mines have been abandoned. The iron-stone of Kilkenny is but little inferior to that of Arigna in Leitrim; and the ores of Lough Allen are only equalled in richness by the blackband iron-stone of Glasgow. The copper-ore is distributed throughout the claylate districts. The principal mines are in the counties of Wicklow, Waterford, Cork, and Tipperary. The total quantity of copper-ore exported to Swansea in 1851 was 10,577 tons, which sold for 77,713*l*. Lead is more extensively diffused through Ireland than copper. Numerous veins are found and worked in the granitic district of Wicklow, and also in the clay-slate districts of the island, where however but few of the mines are profitable. At the Ballycorus smelting-works, in the county of Wicklow, where the lead ores from the mines worked by the Mining Company of Ireland are smelted, 460 tons of lead were produced in 1851 from 674 tons of ore obtained from Luganure mines, being nearly 69 per cent. The machinery in all the Irish mines is driven by steam or water power, or by both, with the exception of three, where horse power is employed. Silver is found

in connection with lead ore in varying proportions of 7 oz. to 120 oz. in a ton of lead. Native gold was found at the end of the last century in the streams of the Croghan-Kinahela Mountain in Wicklow; but the quantity realised was not sufficient to pay for working. Tin-stone is found in the auriferous region of Wicklow, but no working deposits have been discovered. Other minerals found in various parts of the country are—manganese, antimony, zinc, nickel, iron pyrites, alum, clays of various kinds, gypsum, ochre, building-stone, marble, paving and roofing slates, besides the various substances incidentally mentioned above.

Rivers and Lakes.—From the arrangement of the mountain groups round the borders of the central plain, the courses of the greater number of the rivers of Ireland are necessarily short. Of those which drain the external districts, the chief are the Blackwater and Lee in Cork, the Foyle in Donegal and Derry, the Bann and Lagan in Antrim and Down, and the Slaney in Wexford. The rivers of the central district have longer courses and a much greater body of water. The chain of Slieve Bloom divides the central plain longitudinally into two unequal portions, of which the western division is by much the larger. The eastern or smaller division is again subdivided by the summit level of the Bog of Allen into a northern district, the waters of which discharge themselves into the Irish Sea by the Boyne, and a southern district, which sends its drainage in an opposite direction into the Atlantic by the united streams of the Barrow, Nore, and Suir, all navigable rivers. The western division, which much exceeds the united basins of these several rivers, is drained solely by the Shannon, which, from its great body of water and course through a flat country, possesses the extraordinary advantage of being navigable nearly from its source to its mouth, a distance of more than 200 miles. Those portions of the central plain which lie beyond the basins of the Shannon and Boyne, discharge their chief drainage into a series of lakes which skirt the limits of the limestone country on the west and north. The lakes of Galway and Mayo form such a series, separating the primitive district of Connaught from the plain on the west; the extended line of Lough Erne in like manner drains that portion of the central plain which stretches towards the primitive district of Donegal and the high lands of Tyrone on the north; and Lough Neagh, which covers an area of 98,255 acres, collects the waters of the remainder on the north-east. The other principal lakes of Ireland lie within the basin of the Shannon, those of most consequence being merely expansions of that river. The water-power afforded by the different rivers and natural dams of Ireland is greater than in any equal extent of accessible country in Europe.

Climate.—The climate of the island, owing to the proximity of the Atlantic, is more moist and less liable to severe cold than that of the neighbouring countries. The mean annual temperature of Londonderry is 49° Fahr.; of Dublin and the central parts of Ireland a little over 50°; and on the south coast nearly 52°. The maximum heat at Londonderry has reached 81° Fahr., at Dublin 81°50', at Kilkenny 79°, at Limerick 75°; and the greatest cold observed at these places respectively is expressed by 21°, 14°50', 29°, and 28° Fahr. The county of Cork is remarkable for its equable temperature, so much so, that Cove and some other places in the county are resorted to by consumptive persons in winter. The average annual quantity of rain which falls at Cork in the southern extremity of the island is, according to one authority, 40-20 inches, according to another 36-03 inches; at Dublin 30-87 inches; at Belfast 34-96 inches; and at Derry, in the northern extremity, 31-12 inches. Sir R. Kane estimates the average annual rain-fall over the entire surface of Ireland at 36 inches. Frosts are rarely severe in Ireland, and snow does not lie so long as in England; neither are thunder-storms of such frequent occurrence or of so formidable a character. The prevalent winds are from the west and south, and these are usually accompanied by a mild state of the atmosphere. Easterly winds are keen, and much dreaded by invalids. The chief characteristics of the scenery are freshness and verdure, whence Ireland has been poetically styled the Emerald Isle. The surface is less rugged than that of Scotland, and more varied and undulating than that of England; it is however generally deficient in timber.

Area and Population.—Ireland is divided into 4 provinces, Leinster, Munster, Ulster, and Connaught; and into 32 counties. Leinster contains twelve counties, Munster six, Ulster nine, and Connaught five. The following table shews the population of each county and city at the time of the Census in the years 1821, 1831, 1841, and 1851, with their respective areas in statute acres. The large decrease in population between 1841 and 1851 was mainly owing to the disastrous famine which afflicted Ireland in 1845-47, in consequence of the failure of the potato crop: it was partly owing also to emigration. It has been estimated that the total emigration from Ireland during the ten years between 1841 and 1851 amounted to 1,289,133. It is deserving of notice that emigrants who have gone to the United States and have succeeded in improving their circumstances, have sent home contributions to a large amount to enable their relations and friends to follow them, or to assist them in their struggle with difficulties at home. The Colonial Land and Emigration Commissioners say, in their twelfth 'Report,' that "The contributions so made, either in the form of prepaid passages or of money sent home, and which are almost exclusively provided by the Irish,

were returned to us, as in 1848, upwards of 400,000*l.*; in 1849 upwards of 540,000*l.*; in 1850 upwards of 957,000*l.*; in 1851 upwards of 990,000*l.*; and in 1852 upwards of 1,404,000*l.*" The commissioners calculate the Irish emigration in 1851 at 257,372; in 1852 at 224,830, and they add that "as this emigration has varied with considerable regularity according to the variations in the state of the labouring classes, we trust we may consider the decrease as indicative of the decrease of destitution among those classes." The returns for the first four months of 1853 indicate a still further decrease in the number of persons emigrating from Ireland. The spontaneous emigration from Ireland is chiefly to the United States and British North America.

Provinces, Counties, and Cities.	Area in Statute Acres.	Population.			
		1821.	1831.	1841.	1851.
Leinster:—					
Carlow	221,342	78,952	81,988	86,228	68,059
Dublin	222,714	150,011	176,012	140,047	146,731
Dublin city	3,700	185,881	204,155	232,726	258,361
Kildare	418,436	99,065	108,424	114,488	95,688
Kilkenny	508,811	158,716	169,945	183,349	138,773
Kilkenny city	921	23,230	33,741	19,071	19,973
King's County	493,985	131,088	144,225	146,857	112,080
Longford	269,409	107,570	112,558	115,491	82,350
Louth	201,434	101,011	107,481	111,979	90,812
Drogheda	472	18,118	17,365	16,261	16,845
Meath	579,899	159,183	176,826	183,828	140,750
Queen's County	424,854	134,275	145,851	153,930	111,823
Westmeath	453,468	128,819	136,872	141,300	111,409
Wexford	576,588	170,806	182,713	202,033	180,159
Wicklow	500,178	110,767	121,557	126,143	98,978
Total of Leinster province	4,876,211	1,757,492	1,909,713	1,973,731	1,672,591
Munster:—					
Clare	827,994	208,089	258,322	286,394	212,428
Cork	1,843,650	629,786	703,716	773,398	563,326
Cork city	2,683	100,658	107,016	80,720	85,745
Kerry	1,186,126	216,185	263,128	293,880	238,339
Limerick	678,224	218,432	248,801	281,638	208,668
Limerick city	2,618	59,045	66,554	48,391	53,448
Tipperary	1,061,731	346,896	402,563	435,553	331,487
Waterford	460,884	127,842	148,233	172,971	136,754
Waterford city	669	28,679	28,821	23,216	25,297
Total of Munster province	6,064,579	1,935,612	2,227,152	2,396,161	1,857,412
Ulster:—					
Antrim	743,881	217,683	268,085	276,188	251,381
Belfast	1,872	43,177	48,224	75,308	100,300
Carrickfergus	16,700	8,023	8,706	9,379	8,520
Armagh	328,076	197,427	220,134	232,393	196,085
Cavan	477,360	195,076	227,933	243,158	174,071
Donegal	1,193,443	248,270	289,149	296,448	255,160
Down	611,919	325,410	352,012	361,446	320,817
Fermanagh	457,195	130,997	149,763	156,481	116,007
Londonderry	518,595	193,869	222,012	222,174	191,868
Monaghan	319,757	174,697	195,536	200,442	141,813
Tyrone	806,640	261,865	304,468	312,956	255,734
Total of Ulster province	5,475,438	1,998,494	2,286,622	2,386,373	2,011,756
Connaught:—					
Galway	1,565,726	309,599	381,564	422,923	298,136
Galway town	628	27,775	33,120	17,275	23,695
Leitrim	392,363	124,785	141,524	155,297	111,841
Mayo	1,363,882	293,112	306,328	388,887	274,612
Roscommon	607,691	208,729	249,613	253,591	173,417
Sligo	461,753	146,229	171,765	180,866	128,510
Total of Connaught province	4,392,043	1,110,229	1,343,914	1,418,859	1,010,211
Total of Ireland	20,808,271	6,801,827	7,767,401	8,175,124	6,551,970

Agriculture, Botany, Zoology, &c.—The extent of land under crops in the years 1850-1853, with the nature of the produce, will be seen from the following table:—

Crops.	1850.	1851.	1852.	1853.
	Acres.	Acres.	Acres.	Acres.
Wheat	604,867	504,248	353,566	327,254
Oats	2,142,596	2,189,775	2,283,449	2,156,674
Barley, Bere, Rye, Beans, and Peas	403,093	405,378	339,591	349,017
Potatoes	875,357	868,501	876,532	897,774
Turnips	347,331	383,548	358,790	399,335
Other Green Crops	94,884	100,266	121,565	120,561
Flax	91,040	140,536	137,008	174,423
Meadow and Clover	1,200,124	1,266,699	1,270,713	1,270,309
Total	5,758,292	5,868,951	5,789,214	5,695,347

The produce of corn, beans, and peas, reduced to tons of 2240 lbs. each, was 2,182,514 tons in 1849; 2,113,327 tons in 1850; and 2,165,864 tons in 1851. The quantity of potatoes grown in 1851 amounted to 35,528,175 barrels of 20 stones each, or 4,441,022 tons.

The number of each description of live stock on 570,338 holdings (of which 29,057 holdings exceeded 100 acres) in Ireland in the year 1851, stood as follows:—Horses and mules, 543,312; asses, 136,981; cattle, 2,967,461; sheep, 2,122,128; pigs, 1,084,857; goats, 235,313; poultry, 7,470,694. The estimated value of the live stock throughout Ireland in 1841 was 21,105,808*l.*; in 1847 it was 24,820,547*l.*; in 1850 it was 26,951,957*l.*; in 1851 it was 27,737,393*l.*

In 1851 there were 17,175 deer in Ireland, namely:—in Leinster, 4857; Munster, 7008; Ulster, 3380; and in Connaught, 1930.

The Commissioners employed in procuring the 'Returns of the Census' of Ireland in 1851, in their report to the Lord-Lieutenant, congratulate his Excellency on "the evidence which" the "tables afford of the steadily increasing amount of farm stock, and the generally improved condition of agriculture in Ireland."

The Flora of Ireland contains some rare varieties; the *Arbutus unedo* flourishes along the lakes of Killarney; new varieties of saxifrage and ferns have been discovered on the Kerry Mountains; scarce alpine plants are found in Connemara, Benbulbin Mountain in Sligo, and in the county of Antrim; and many new or rare species of *Alga* have been met with on various parts of the coast.

The elk or moose deer formerly had its habitat in Ireland, where its bones have been found in several places. Wolves were once numerous, and the Irish wolf-dog, a race now all but extinct, was kept for hunting them. Venomous animals are unknown. The surrounding seas abound with round, flat, and shell-fish; the sun-fish frequents the western coast, which is occasionally visited also by whales. [GALWAY COUNTY.] Seals are met with about the exposed headlands.

Government, Revenue, &c.—The executive government is administered by a viceroy, whose official title is Lord-Lieutenant-General and General Governor of Ireland. The Lord-Lieutenant is assisted by a privy council, appointed by the crown, and by a chief secretary, a member of the House of Commons. Ireland is represented in the Imperial Parliament by 4 spiritual and 28 temporal peers, and 105 commoners, namely, 64 for the 32 counties, 2 for Dublin University, 12 for the cities and towns of Dublin, Cork, Limerick, Waterford, Belfast, and Galway, and 27 for the boroughs. The number of electors on the register for 1852-53 was 179,488, being 149,854 for the counties, and 29,634 for the boroughs. The militia of Ireland comprises, when embodied, 38 regiments, namely: 6 of 10 companies each; 1 of 9 companies; 14 of 8 companies each; 15 of 6 companies each; and 2 of 7 companies each. The constabulary force consists of 12,346 men, including 620 officers, and cost 572,541*l.* in 1852, of which 29,007*l.* was charged on the counties, cities, and towns of Ireland, the rest being charged on the consolidated fund. The judicial establishment consists of the lord-chancellor, the master of the rolls, four judges each in the Courts of Queen's Bench, Common Pleas, and Exchequer, those of the Exchequer being styled Barons, a Bankrupt Court with two judges, two commissioners of the Insolvents' Court, and the judges of the Prerogative Court and the Admiralty. The superior courts are held in Dublin. For the assizes there are six circuits, in which two of the judges try causes twice a year, in spring and summer. There are 595 petty sessions courts in Ireland. There are 34 county prisons, 10 city or town prisons, and 114 bridewells: of the county prisons 27 have treadmills. In the year 1852 the number of summary convictions for petty offences was 59,215; for drunkenness 19,504; the number of cases at assizes and quarter-sessions was 17,678; the number of convictions was 10,454; of these the sentences for 6 months' imprisonment and under amounted to 6446; the capital sentences to 22; the number of executions was 6. The number of male convicts in custody on January 1st 1853 was:—In depôts, 3567; in jails 477: total 4044. Of female convicts there were 187 in custody. The number of paupers receiving relief at the Union Workhouses in 1852 was, in-door, 504,864, out-door, 14,911: total 519,775. The total expense of the Poor-Law establishment for 1852 was 883,267*l.*; for the year ending September 29th 1853, the total expenditure was 814,000*l.* The total number of persons receiving relief on October 15th 1851 was 145,743; on October 16th 1852 it was 115,810; on October 15th 1853 it had fallen to 82,846. From 1848 to 1851 there were sent to the Australian colonies 4385 orphan girls from workhouses in Ireland, the government granting a free passage, and the boards of guardians in each case defraying the cost of outfit and conveyance to the port of embarkation. In the year ending March 1853, the total number of emigrants sent out or assisted to emigrate by boards of guardians was 3825, from 93 unions, of whom 495 were males of 15 years of age and upwards, and 2218 females, with 1116 children under 15 years of age dependent on them.

By an Act passed in 1849 (12 and 13 Vict. cap. 77), a Commission for the Sale of Incumbered Estates was appointed, the operations of which have been considered on all hands to be highly beneficial, and to give promise of much improvement in the social condition of the Irish people. Large estates have thus been transferred from bankrupt proprietors, groaning under the weight of irredeemable mortgages and without capital to employ labour, to the hands of competent and

improving landlords, of whom a large proportion are skillful cultivators from England and Scotland. From the opening of the court in October 1849 to October 21st 1853, the number of lots sold by the Commissioners was 5809; the gross amount realised was 10,430,463*l.*, of which 7,578,483*l.* had been applied in liquidation of claims upon the estates sold. About 1,691,702 acres, the net rental of which is estimated at 635,723*l.*, have thus been disposed of to new owners.

The ordinary revenue of Ireland for the year 1852, exclusive of the receipts from the Crown lands, amounted to 3,816,357*l.* 4*s.* 6*d.*; the expenditure, so far as paid from the Irish exchequer, was 3,576,802*l.* 5*s.* 10*d.* The gross amount received for Customs duties in 1852 was 2,060,469*l.*; for Excise, 1,632,302*l.* 18*s.* 2*d.* The gross income from the Irish Post-office in 1852 was 200,262*l.*; the cost of management was 192,667*l.* The number of letters which passed through the post-office in one week in November 1839 was 179,931; the number in one week in November 1853 was 772,215. The number of post-office orders issued at the post-offices throughout Ireland in 1852 was 393,879, representing an amount of 656,111*l.*; the number paid during the same period was 526,233, amounting in value to 730,490*l.* There are 108 newspapers published in Ireland, of which 27 appear in Dublin. Of the whole number 3 are published daily (in Dublin); 12 three times a week; 21 twice a week; 4 monthly; 1 occasionally; and the rest once a week. The number of newspaper stamps issued in 1852 was 8,509,937.

Religion and Education.—Ireland is divided into two ecclesiastical provinces, the northern province having the Archbishop of Armagh, Primate and Metropolitan of all Ireland, as its president, and the southern province having the Archbishop of Dublin and Primate of Ireland as its metropolitan. The income of the two archbishops, and of their ten suffragan bishops, amounts to 67,539*l.* The number of the clergy is about 2000. The dignitaries of the Roman Catholic Church are the four archbishops of Armagh, Dublin, Cashel, and Tuam, and 25 bishops. The number of parochial clergy is upwards of 2000. Of Presbyterian, Methodist, Baptist, and Independent churches and ministers there are upwards of 800. The University of Trinity College, Dublin, comprises a provost, 7 senior fellows, 23 junior fellows, and 70 scholars. The library includes about 106,000 printed volumes, and 1500 manuscripts; there is also a well-stocked botanic garden and a museum. The income of the college amounts to about 64,000*l.* a year, about half of which is received from the students and graduates. The number of students is about 1500. The Queen's Colleges, opened for students in October, 1849, had at the close of the session in June 1853 the following number of students:—Belfast, 182; Cork, 126; Galway, 124. At Maynooth College, for the education of Roman Catholics for the priesthood, there were 516 students in December 1851. The College of St. Columba, at Whitechurch, Rathfarnham, near Dublin, is a classical preparatory school, under the management of members of the Established Church. In 1849 there were in Ireland 7 Royal Endowed schools attended by 289 boys, and 3 Private Endowed schools attended by 51 boys. In September 1852 there were 4875 National schools in operation, with an attendance of 540,310 scholars, about six-sevenths of whom were Roman Catholics. The number of teachers trained during 1852 was 302, of whom 240 were Roman Catholics. Nine district Model schools, 133 Workhouse schools, a Model farm (at Glasnevin, near Dublin), and 25 Model Agricultural schools, have been established by the National Board. In December 1852 there were 23 Workhouse Agricultural schools, with 2355 pupils. The Church Education Society had 1858 schools in the year 1852, with 105,387 pupils, of whom 61,630 were of the Established Church, 15,674 Protestant Dissenters, and 28,083 Roman Catholics.

Shipping.—The number of sailing-vessels registered as belonging to the various ports of Ireland on December 31st 1853 was:—Under 50 tons 1037, tonnage 29,721; above 50 tons 1061, tonnage 199,419. The number of steam-vessels was:—Under 50 tons 17, tonnage 554; above 50 tons 104, tonnage 29,670. In the coasting and cross-channel trade during 1853 the number of sailing-vessels inwards was 18,101, tonnage 1,417,465; outwards 8570, tonnage 648,195: of steam-vessels 4860 of 1,484,127 tons entered, and 4692 of 1,459,410 tons cleared. In the colonial and foreign trade there entered 1159 British vessels of 234,892 tons, and 1195 foreign vessels of 237,499 tons, and 2 British steam-vessels of 704 tons; and there cleared 539 British vessels of 144,204 tons, 1014 foreign vessels of 219,105 tons, and 2 British steam-vessels of 166 tons.

Savings Banks.—The number of savings banks in Ireland on November 20th 1852 was 51; the number of accounts remaining open at that date was 52,184; and the total amount owing to depositors was 1,449,297*l.* 16*s.* 7*d.*

IRELAND ISLAND. [BERMUDAS.]

IRELAND, NEW. [NEW IRELAND.]

IRIS, RIVER. [ANATOLIA.]

IRKUTSK. [SIBERIA.]

IRON ACTON. [GLOUCESTERSHIRE.]

IRONVILLE. [DERBYSHIRE.]

IRTISH. [SIBERIA.]

IRUN. [BASQUE PROVINCES.]

IRVINE, Ayrshire, Scotland, a royal and parliam

sea-port, and market-town, in the parish of Irvine, is situated on a rising ground on the right bank of the river Irvine, in 55° 38' N. lat., 4° 40' W. long., 10 miles N. from Ayr, 68 miles S.W. by W. from Edinburgh, and 29½ miles S.W. from Glasgow by the Glasgow and South-Western railway. The population of the parliamentary burgh in 1851 was 7584. It is governed by a provost and 16 councillors, and, conjointly with Ayr, Campbeltown, Inverary, and Oban, returns one member to the Imperial Parliament.

The town consists chiefly of one broad street, which communicates with a southern suburb by means of a stone bridge of four arches, rebuilt in the year 1826. It is well paved and drained, and lighted with gas. The principal public buildings are the church and the town-house. Besides the parish church there are two chapels for United Presbyterians, and one each for the Free church, the Baptists, and the Roman Catholics. The harbour has from 9 to 11 feet of water on the bar at spring-tides, though during violent gales from the south it rises to 16 feet. In 1853 there were 118 vessels belonging to the port, of 18,908 aggregate tonnage. During 1853 there entered the port in the coasting trade 175 sailing-vessels of 9242 tons, and 154 steam-vessels of 35,230 tons; and cleared 3657 sailing-vessels of 230,382 tons, and 289 steam-vessels of 43,501 tons. In the colonial and foreign trade there entered 37 vessels of 10,000 tons, and cleared 322 vessels of 86,507 tons. The amount of Customs duties received at the port during 1850 was 668*l.* 1*s.* 8*d.*; in 1851 the amount was 395*l.* 1*s.* 4*d.* Ship-building and its attendant trades are carried on. Coal is the principal export. Many females are employed in muslin-sewing. Young trees are largely grown and exported; oats, butter, hides, limestone, timber, &c., are imported. The town is during the summer months frequented for sea-bathing. Besides the academy, (which was incorporated by charter in 1816, has an income from endowment of 90*l.* a year, and had upwards of 300 scholars in 1853), the town possesses several other schools, a savings bank, a news-room, and a subscription library. An extensive common, called the Golf-Fields, and a town-moor belong to the burgh.

ISCHIA, the ancient *Ænaris*, an island situated at the northern entrance of the Bay of Naples, the smaller island of Procida lying between it and the promontory of Misenum on the mainland. Procida (*Prochyta*), according to an old tradition, was rent from Ischia by an earthquake. The island is mountainous and of volcanic origin; the highest summit, called Mount Epomeo, which is an extinct volcano, rises about 2500 feet above the sea, and has near its summit distinct traces of two very large craters, and numerous cones on its sides. The volcanic district of Naples is considered to comprise not only Vesuvius, with Pozzuoli and Cumæ, but also the islands of Procida and Ischia. The last eruption of the Epomeo was in 1301, when a broad stream of lava ran over the eastern part of the island, nearly two miles, as far as the sea. Strabo calls this island by the name of *Pitheussa*, which is not, as Pliny observes, derived from *πίθηκος* (an ape), but from *πίθος* (an earthen vessel). This name and the other ancient names of the island have been traced by some to Phœnician, or Syriac words, expressive of the volcanic action to which it was subject in early times. The modern name is a corruption of *Iscla*, under which designation it is spoken of in ecclesiastical records of the 8th century. The clay of the island, it seems, has been used for earthenware from the remotest time. The island was settled by Greeks of Chalcis and Eretria. There were numerous traditions of volcanic action having taken place in this island; and Timæus mentions a violent eruption of Epomeo a little before his time. The soil of Ischia is very fertile, and produces corn, abundance of wines, and all sorts of fruit. The hills are covered with chestnut-trees. The island is about 20 miles in circuit, and contains 25,000 inhabitants. Ischia forms part of the province of Naples; it contains four small towns or villages: *Ischia*, which is a bishop's see and has a castle, is situated on the north-east coast, and has about 5500 inhabitants. *Fornia*, which is the most commercial place on the island, is situated on the western coast, and has a harbour and 6000 inhabitants. *Casamicciola*, the neighbourhood of which contains excellent clay, of which a great quantity of pottery is made and sent to Naples, stands on high ground about a mile and a half from Fornia, and has 3800 inhabitants. The most famous springs in the island are situated around *Casamicciola*. *Lacco*, a pretty village, is situated on a cove in the shore below *Casamicciola*, and has about 1600 inhabitants mostly engaged in the tunny fishery. The island abounds with warm springs, which are much frequented by invalids from Naples. Ischia is altogether one of the finest islands near the coast of Italy. The Latin poets sometimes call the island *Isarime*. (De Quintia, *Isarime*, Naples, 1726; Scrope, *On the Volcanic District of Naples*, in 'Geol. Trans.,' Blowitz, *South Italy*; Strabo, Casaub., p. 248; Pliny, 'Nat. Hist.,' ii. 88, iii. 6.)

ISEHIL. [ENB.]

ISEGHEM. [FLANDERS, WEST.]

ISER, or ISAR, a feeder of the Danube, rises in the Tyrol to the north-west of Innsbruck, near 11° E. long. It runs at first for a few miles eastward along the northern base of the Solstein Mountain, which separates it from the Inn and enters Bavaria near the village Mittenwald, whence it runs with rapid course in a north-north-east direction down to Munich, receiving in the interval the outfall of several alpine lakes. From Munich the Isar gradually bends to the

east of north-east, passing Landschut and Landau, and enters the Danube on the right bank at a short distance below the village of Deggendorf, and near 18° E. long. The whole length of the river is about 170 miles. The stream is too impetuous to be navigable; but large rafts are floated down it. Its principal feeder, the *Ammer*, joins it on the left bank between Landschut and Munich, and brings into it the surplus waters of the Wurm-see, the Ammer-see, and a few other small mountain lakes. There are numerous islets in the lower course of the Isar: particles of gold have been found in its sands.

There is another *Isar* in Bohemia which carries down a considerable portion of the drainage of the southern slope of the Riesengebirge into the Elbe near Brandeis, a few miles north-east of Prag. Turnau and Jung-Bunzlau are on its banks. This river also rolls down particles of gold, and many chalcodones are found in its bed.

ISÈRE, a department in the east of France, is bounded E. and N. by Savoy and the department of Ain, S.E. and S. by the department of Hautes-Alpes, S.W. and W. by those of Drôme and Rhône. It lies between 44° 42' and 46° 52' N. lat., 4° 42' and 6° 20' E. long.; its length from north-west to south-east is 94 miles; the average width is about 41 miles. The area is 3201½ square miles. The population in 1846 was 598,492; at the census of 1851 it amounted to 608,497, which gives 188,528 to the square mile, or 13,944 above the average per square mile for all France.

The department is formed out of a portion of the old province of Dauphiné, and named from its principal river the Isère. The surface presents lofty mountains, which are branches of the Alps, peaks covered with snow that never melts, glaciers, dark pine forests, numberless steep, narrow, and abrupt gorges, torrents, waterfalls, and extensive plains towards the north and in the centre, the whole forming perhaps the most varied and picturesque scenery in France, ranging between the extremes of the bleakest barrenness and the most smiling and luxuriant fertility. The cols of Saix and Sept-Laux, and the peaks of Granier and Belledonne, rise respectively to the height of 10,968, 9742, 9840, and 9781 feet above the level of the sea. The mountains abound in grottoes of great extent and rich in stalactitic concretions. Lakes are numerous, but small. There are no navigable canals; but canals and rills of irrigation are employed very extensively in most of the valleys and plains. The plain of Echirolles near Grenoble presents the most complete system of irrigation in the department. Every spot capable of cultivation is carefully tilled; the mountain sides are shaped into terraces, which are formed with carried earth, supported by walls of dry-stones; and crops are grown at the height of 2700 feet above the level of the valleys.

The arrondissement of Grenoble contains no plains; the tillage is confined to the valleys and mountain slopes. The valley of Grésivaudun, remarkable for its extraordinary fertility and high cultivation, is watered in its whole length by the Isère, and extends from the point where that river enters France to its junction with the Drac in the neighbourhood of Grenoble, a length of 29 miles, with an average breadth of 3 miles. It is inclosed in its whole extent by two chains of mountains of great and varied beauty, the lower slopes of which are converted into corn-fields, meadows, orchards, and mulberry plantations; the central parts are covered with forests of oak, chestnut, and pine, or clothed with pasture, while the summits and crests are crowned with snow or with naked rocks. In this valley the walnut, mulberry, and vine flourish. Wheat, barley, maize, hemp (which frequently grows 15 feet long), clover, &c. are produced in great abundance. The whole of the valley is cultivated like a garden, and manure and an extensive system of irrigation excite the naturally fertile soil to extraordinary productiveness. Rye and oats are the chief crops in the mountain districts. Oxen are employed in farm-work. Numerous flocks from this and the neighbouring departments graze upon the mountain pastures during the summer. The arrondissement of St-Marcellin presents towards the north a vast plain, known under the names of Bièvre and Côte-St-André, consisting of a dry gravelly soil, which is tolerably fertile and well cultivated. The centre of this arrondissement is hilly, and contains some good wheat land. Another part of the arrondissement is the valley of Tullins, a prolongation of that of Grésivaudun, to which it yields neither in beauty nor fertility. The southern part of the arrondissement of La-Tour-du-Pin, known as the *Terres Froides* (cold lands), consists of high ridges divided by narrow vales, while the northern part consists of hills of moderate height, intersected by moist and marshy plains. In this part are the lakes of Paladru and Lempis, and the extensive morasses of Bourgoin. The arrondissement of Vienne presents in its northern part a vast dry sandy plain, on which rye is the chief crop; in the central parts it is covered with hills, the lower slopes of which are well cultivated and very productive, while their summits are covered with wood; to the south this arrondissement comprises the extremely fertile plain of Valoir, which yields corn, wine, oil, and silk. The slopes that screen the valley of the Rhône in the neighbourhood of Vienne produce some of the finest Rhône wines.

The *Isère* rises on the western slopes of the Graian Alps in the Tarentaise district of Savoy, flows in a general westerly direction to Moutiers, whence its course is north-west for a few miles, then south-west to its junction with the Arc and as far as Montmeillan, where it becomes navigable, and soon after enters France. Here its

course is nearly south to Grenoble, where it is joined by the Drac from the left bank: below this point it makes another bend first to north-west, then to south-west, passing St-Marcellin, below which town it enters the department of Drôme, and falls into the Rhône a few miles above Valence after a course of 180 miles, 87 miles of which are navigable. This river, which is subject to disastrous floods, is of moderate width, but very deep; its waters are always of a blackish tint, owing to the débris which it receives from the slate-quarries of the Tarentaise. Of the other streams, which are very numerous, the most important are the *Drac* [ALPES, HAUTES]: the *Romanche*, which drains the valley of L'Oysans and the south-east of the department, and joins the Drac on the right bank, a few miles south of Grenoble: the *Bourbre*, which rises south of Virieu, and flowing past La-Tour-du-Pin and Bourgoin enters the Rhône on the northern boundary of the department: the *Guiers*, which is formed by the union of the *Guiers-Vif* and the *Guiers-Mort* (two streams that run down from the mountains of the Grande-Chartreuse), and flows along the frontier of Savoy from Les-Echelles to its junction with the Rhône, a few miles south of Belley. The waters of the Romanche, the Bourbre, and most of the other streams are turned to advantage in irrigating the land and in driving machinery. The Rhône forms the northern and western boundaries of the department, and is navigable. Salt and other articles are conveyed in barges from the Rhône up the Isère; the transports down the latter are iron, hemp, linen, woollen-cloth, timber, &c. Many of the mountain streams of the department form beautiful cascades.

The department is crossed by 7 imperial and 17 departmental roads: the Lyon-Avignon railroad, now in course of construction, runs along the west of the department down the left bank of the Rhône, sending off a branch to Grenoble, which lies on the electro-telegraphic route from Paris to Turin and French Africa.

The department contains 2,048,716 acres, of which 781,837 acres are under tillage; 164,857 are pasture land; 68,446 are under vine culture; 499,695 are covered with woods and forests; 20,009 are occupied as gardens, orchards, nurseries, and plantations of different sorts; and 38,276 acres are covered with rivers, lakes, canals, &c. The rest of the surface, amounting to about 500,000 acres, consists of irreclaimable rocks and mountains. The products are of the most varied description—wheat, rye, barley, maize, buckwheat, peas and beans, potatoes, fruits of all kinds, walnuts, mulberries, almonds, medicinal plants, hemp, &c. Vines are mostly grown in the fertile valleys, trained either to greenwood supports of maple or cherry-tree, or to tall dry poles of chestnut-wood; vines thus grown are called high vines (*hautains*). But on the hill slopes, in favourable situations and in the Rhône district in the arrondissement of Vienne, the low vines, as they are called when unsupported, produce a stronger better-keeping wine, and more fitted for transport. The produce of wine in ordinary years is 5,324,000 gallons, the best of which is produced in the neighbourhood of the Rhône. Horses, asses, and cows are numerous, but small; mules of large size are reared in the mountains; sheep are bred in great numbers, and yield a fine silky wool; pigs, goats, and poultry are plentiful. The rivers and lakes abound in fish. The art of pisciculture, or the rearing of fish from deposits of spawn in the rivers, is extensively practised in the department. Game is abundant; among the wild animals are the boar, wolf, chamois, ibex, porcupine, weasel, red and gray partridge, &c. The mulberry grounds are extensive; the number of trees exceeds a million.

The climate is healthy; cold in winter, very hot in the valleys and plains in summer. The prevailing winds are from the north and north-west; about 85 days in the year are rainy; hail-storms are sometimes very destructive.

In mineral wealth the department is very rich. Iron, lead, copper, and coal mines are worked; gold and silver mines have been worked, but are now abandoned. In the year 1837 a vein of platina was discovered in the valley of the Drac. Marble, granite, porphyry, gypsum, and slate are quarried. Antimony, zinc, cobalt, rock-crystal, vitriol, and sulphur are found.

The industrial products consist of sailcloth, table and household linen, gloves, soldiers' uniforms, calicoes, printed cottons, oil, turpentine, liqueurs, and mineral acids. There are iron, copper, and lead foundries, steel-works, zinc and copper rolling factories, marble-works, saw-mills, paper and vellum works, naileries, dye-houses, glass-works, cotton-yarn manufactories, and establishments for the rearing of silkworms and the reeling of silk. Large quantities of charcoal are burnt in the forests round the Grande-Chartreuse. The number of wind- and water-mills is 1367; of forges and smelting furnaces, iron- and steel-works, 119; of factories and workshops of different kinds, 969.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Grenoble	20	212	220,192
2. La-Tour-du-Pin	8	122	136,593
3. St.-Marcellin	7	84	87,198
4. Vienne	10	134	159,514
Total	45	552	603,497

1. Of the first arrondissement and of the whole department the capital is GRENOBLE. Of the other towns we notice the following, giving the population of the commune with each:—*Allevard* stands in a high valley N.E. of Grenoble, watered by the Breda, a feeder of the Isère, and has 2638 inhabitants, who are chiefly employed in the neighbouring iron-mines, forges, smelting-furnaces, and foundries, the machinery of which is driven by the Breda. *Bourg-d'Oysans*, S.S.E. of Grenoble, in the picturesque valley of the Romanche, which is hemmed in by high wooded mountains, echoing with numerous cascades, has an ecclesiastical college and 3196 inhabitants, who manufacture cotton, and work in the lead- and rock-crystal mines of the neighbourhood. *St.-Laurent-du-Pont*, 20 miles N. from Grenoble, is most picturesquely situated at the foot of very high and almost perpendicular mountains, on the road to the monastery of the Grande-Chartreuse, which was founded by St. Bruno in 1084, in a wild and rocky defile traversed by the *Guiers-Mort*; population, 1734. *Mens*, 25 miles S. from Grenoble, stands among the Trièves Mountains, and has 2126 inhabitants, important linen manufactories and glass factories. *La-Mure*, S. of Grenoble, on the road to Gap, situated at the extremity of the valley of the Matésine, which is inclosed by the Trièves Mountains, has 3106 inhabitants, who manufacture coarse linen and leather, and work in the coal-mines and marble-quarries near the town. *Vif*, 10 miles S. from Grenoble, has potteries, silk-throwing factories, and 2314 inhabitants. *Villard-de-Lans*, near the right bank of the Bourne, has a population of 2298. *Visille*, in a fertile plain on the right bank of the Romanche, has an ancient castle now converted into a factory for printed cottons, and contains 2907 inhabitants. *Voiron*, N. of Grenoble, a well-built town of 7694 inhabitants, stands at the foot of a hill on the Morge, a small feeder of the Isère, which drives the machinery of several industrial establishments. The principal manufactures are cloth, silk-stuffs, canvas, liqueurs, soap; there are also iron- and steel-works, paper- and hemp-mills, naileries, and tan-yards. *Voreppe*, a flourishing village S. of Voiron, has oil- and corn-mills, tan-yards, and 3005 inhabitants.

2. In the second arrondissement the chief town, *La-Tour-du-Pin*, stands on the left bank of the Bourbre, on the road from Lyon to Chambéry, in 45° 33' 50" N. lat., 5° 27' 7" E. long., at an elevation of 1046 feet above the level of the sea, and has 2559 inhabitants, and some beet-root sugar factories. It was formerly important on account of its fortifications, of which there are still some remains. The tribunal of first instance is at *Bourgoin*, a town of 4271 inhabitants, situated among hills at the junction of three small rivers, and at the point where the Lyon road branches off southward to Grenoble, and eastward to Italy through Chambéry. Its situation is favourable for trade, but unhealthy on account of the marshes and bogs near it. Its manufactures are printed calicoes, canvas, cotton cloth and yarn, thrown silk, and beet-root sugar; there are also several flour-mills. *Crémieux*, 6 miles N. from Bourgoin, has 2292 inhabitants, and is famous for its poultry. It stands at the foot of a chain of calcareous hills, in which is the famous grotto of La Balme, reckoned as one of the seven wonders of Dauphiné. The grotto consists of two long galleries, one facing the entrance, the other to the right, and both contain beautiful stalactites; in the former there is a lake of pellucid water, the transit of which to and fro occupies one hour, and is made by torchlight in a boat kept for the purpose. *Le-Pont-de-Beau-voisin*, is situated on the *Guiers*, here crossed by a bridge of one arch, the line joining the keystones of which marks the boundary between France and Savoy. The larger part of the town is on the Savoy side; the commune on the French side has 2268 inhabitants.

3. In the third arrondissement the chief town, *St.-Marcellin* is situated in 45° 9' 18" N. lat., 5° 19' 32" E. long., 1073 feet above the level of the sea, 20 miles W. from Grenoble, in a pretty country at the foot of a vine-clad hill, at a short distance from the right bank of the Isère; and has a tribunal of first instance, a college, and 3344 inhabitants in the commune. The town is surrounded with walls pierced by four gates; it is well built, with straight streets, ornamented with fountains. *Rives*, N.N.E. of St.-Marcellin, is situated in a smiling valley, watered by the Fure, and has 2270 inhabitants. This town is the centre of considerable manufactures of iron, steel, paper, crape, and silk handkerchiefs; the steel forges, of which there are 23 in the town and neighbourhood, are famous for the excellence of their products. *Roybon*, N.W. of St.-Marcellin, has manufactures of coarse woollens and 2288 inhabitants. *Tullins*, formerly a well-fortified town, stands a few miles S. of Rives in a beautiful valley, and has 4701 inhabitants. It is surrounded by iron-forges, steel-works, copper foundries, and hemp-dressing establishments. Arms and tools of various kinds are manufactured here. *Vinay*, 5 miles N.E. from St.-Marcellin, has iron-works, silk-throwing establishments, and 3351 inhabitants.

4. In the fourth arrondissement the chief town is *Vienne*, the *Vienne* of the Allobroges, and the capital of the first and second kingdoms of Bourgogne. It stands in 45° 31' 28" N. lat., 4° 52' 33" E. long., 492 feet above the level of the sea, at a distance of 50 miles N.W. from Grenoble, on the left bank of the Rhône, which is lined with quays and crossed by a suspension-bridge. The town has tribunals of first instance and of commerce, a consultative chamber of manufactures, a college, and 19,052 inhabitants in the commune. Hemmed in between steep hills and the river, Vienne has a much

greater length than breadth; it is like most ancient towns, ill-built, with narrow winding streets, with the exception of that traversed by the road from Lyon to Marseille. It contains some Roman remains, among others a temple now converted into a museum, a triumphal arch, some vestiges of an amphitheatre on Mont-Pipet, and south of the town, near the gate of Avignon, a pyramidal obelisk, called Plan-de-l'Aiguille, which is 46 feet high, and constructed with cut stone without cement. The modern structures of most note are the fine Cathedral of St. Maurice, the church and cloisters of the former abbey of St. André-le-Bas, the cavalry barracks, the public library of 10,000 volumes, the college, which is one of the finest structures of the kind left by the Jesuits, the hospitals for the sick and poor, the voin-market, and the abattoir. The Gère, which joins the Rhône at Vienne, drives the machinery of several factories. This town is one of the principal seats of the woollen manufactures in the south of France; common cloth, pasteboard, soap, leather, glass bottles, paper, chemical products, &c., are also made; and there are establishments for reeling and throwing silk, dye-houses, iron furnaces, steel-works, sheet-copper and lead works, copper and brass foundries. The commerce of the town is composed of its industrial products, and of wine, zinc, &c. Vienne formerly had an archbishop of its own; but the archiepiscopal province is now united to that of Lyon. The railway in course of construction from Lyon to Avignon passes through Vienne. In the suburb of St. Colombe, on the right bank of the Rhône, and in the department of Rhône, stands the old square tower of Mauconseil, from which it is said Pontius Pilate precipitated himself into the river. *Beaurepaire*, 16 miles S.S.E. from Vienne, has cloth-factories, corn- and fulling-mills, and 2322 inhabitants in the commune. *La Côte-St.-André* stands at the foot of a hill, in a pretty situation on the Frette, 21 miles S.E. from Vienne, and has 4083 inhabitants, who manufacture liqueurs, pyroligneous acid, wax-candles, and plate-glass. *St-Jean-de-Bournoy*, 14 miles E. from Vienne, on the Veronne, a small stream that drives the machinery of several factories and then loses itself underground, has 3492 inhabitants, who manufacture woollen plaids, beet-root sugar, and leather.

The department forms the see of the Bishop of Grenoble; is included in the jurisdiction of the High Court of Grenoble, and belongs to the 8th Military Division, of which Lyon is head-quarters. It returns 4 members to the Legislative Body of the French Empire.

(*Dictionnaire de la France, Annuaire pour l'An 1853; Official Papers, &c.*)

ISIGNY. [CALVADOS.]

ISLA, or ISLAY, Argyleshire, the most southern of the Hebrides, an island in the Western Ocean, 15 miles W. from Cantyre, and S.W. from Jura, from which it is separated by a strait nearly two miles wide. It is 23 miles long and about 18 miles broad, and is generally of a mountainous character, especially towards the north; there is however much low and well-cultivated land. The population of the island, which was 13,602 in 1841, was only 12,334 in 1851, the decrease being accounted for in a great measure by emigration. The houses are good, and the roads are in good repair. There are a few small lakes, and the island is watered by several streams and rivulets, which abound with trout and salmon. One of the chief productions is whisky, which is exported from Port Askaig in the Sound of Jura, or Port Ellen on the south-east coast of the island, at each of which places are small harbours.

Bowmore, population 1202, is a post-town of the island, and the seat of a sheriff small-debt court. Port Askaig, and Port Charlotte, are also post-towns.

Islay possesses steam communication with Glasgow by Campbeltown, and a great many small coasters belong to the island. Besides the parish churches there are several chapels for Free Church and Independent congregations.

ISLA DE LOS PINOS. [CURA.]

ISLAMABAD. [CASHMERE.]

ISLE-EN-JOURDAIN. [GERS.]

ISLE OF MAN. [MAN, ISLE OF.]

ISLE OF WIGHT. [WIGHT, ISLE OF.]

ISLE ROYALE. [CAPE BRETON.]

ISLEWORTH. [MIDDLESEX.]

ISLINGTON. [MIDDLESEX.]

ISMAIL, or IZMAIL, a strongly fortified town of Russia in the province of Bessarabia, is situated on the left bank of the northern or Kilia arm of the Danube, 20 miles E. from the mouth of the Pruth, and about double that distance from the Black Sea, in 45° 21' N. lat., 28° 50' E. long., and has about 20,000 inhabitants. It was taken by storm by the Russians under Suwaroff, Dec. 22, 1790, when the Turkish garrison numbering 30,000 men were put to the sword; the Russians lost 20,000. Under the Turks Ismail was important not only in a military but in a commercial point of view; it contained 17 mosques, a large number of khans and bazaars, and many splendid houses. On its capture by the Russians all was put to fire and sword, and the town remained in a ruinous condition till 1812, when it was ceded to Russia by the treaty of Bukharest. Since then it has been rebuilt, and now contains about 2300 houses and 12 churches. The Kilia arm of the Danube is navigable for steamers and for vessels of considerable burden, of which about 150 enter the harbour of Ismail annually, and are chiefly engaged in the corn trade. There are remains of a

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fine Turkish palace in the town. Ismail is now chiefly of importance in a military point of view, and the Russians have rendered its defences very strong.

ISMID, or ISNIK MID. [BITHYNIA; NICOMEDIA.]

ISMIR. [SMYRNA.]

ISNIK. [ANATOLIA; NICOMEDIA.]

ISPAHAN. [PERSIA.]

ISSOIRE. [PUY-DE-DÔME.]

ISSOUDUN. [INDRE.]

ISTRES. [BOUCHES-DU-RHÔNE.]

ISTRIA, or HISTRIA, a peninsula in Austria projecting into the Adriatic Sea from the former kingdom of Illyria, between the Bay of Trieste on the west and the Gulf of Quarnero on the east. It is nearly triangular in shape, the base or isthmus from near Capo d'Istria to the head of the Gulf of Quarnero, a few miles west of Fiume, measuring about 30 miles, and the altitude measured from a point on the road between Trieste and Fiume, near 14° E. long., to the Punta di Promontore, its most southern point, being 54 miles. The greatest breadth of the peninsula is about 40 miles. Its total area is stated to be 1900 square miles; and its population, according to the official estimate of the population of the Austrian empire for 1850-51, was 232,909. According to the new division of the empire Istria is included in the *Küstenland*, or Maritime District, which comprises also the circle of GÖRTZ, and the Territory, but not the town, of Trieste.

The country is in general mountainous. Towards the north it embraces a portion of the high naked rocky district called Karst, which is connected with the Julian Alps; and from this dreary region a chain runs down the centre of the peninsula, reaching its culminating point in the Monte Maggiore (4570 feet above the sea), and terminating in the Punta di Promontore. From the central chains, which, as well as the whole peninsula, are of calcareous formation, long ridges of hills radiate, gradually declining as they approach the coast, which though hilly and rocky cannot be described as either very high or bold, except along the Gulf of Quarnero, where it is in parts precipitous. The western and southern coasts are indented by deep inlets, which form excellent harbours: among these the basin of Pola sheltered and land-locked on all sides, even towards the entrance, where it is screened by the rocky Brioni Isles, has been celebrated in all ages. The soil of Istria is dry, calcareous, and rocky, of no great natural fertility, but well adapted for the growth of the olive; and the oil of Istria has always been held in high repute. A little corn, wine of excellent quality, lemons and other fruits, chest-nuts, hazel-nuts, honey, and silk are also produced. A good many cattle are reared on the mountain pastures. The principal minerals are marble, freestone, alum, and coal. The Brioni Isles are famous for their marble-quarries. The coast fisheries are profitable, and a good deal of salt is made by evaporating the sea-water. The peninsula abounds with fine oak-timber. The climate is mild; it is also healthy, except in the low grounds along the western coast, where malaria prevails at certain seasons.

The calcareous rocks of which the peninsula is composed are scored and furrowed by numerous glens and vales, but there are no rivers of importance. Among its streams however may be mentioned:—the *Arsa* (the ancient *Arsia*), which flows south from the Monte Maggiore through the Lake Zepich, and enters an inlet of the Gulf of Quarnero to the west of the town of Albona; the *Quisio*, which flows from the central mountains westward, through a fine forest-country into the Adriatic near Citta-Nuova; and the *Risano* (the ancient *Formio*), which enters the sea a little north of the town of Capo-d'Istria, and separates Istria from the territory of Trieste, as it formerly did from Venetia.

Istria seems to have derived its name from a fabulous notion entertained by the Greeks that an arm of the Danube (which they called Ister) flowed into the Adriatic near the head of the peninsula. The inhabitants belonged to the ancient Illyrian stock, and became first known to the Romans by their piratical expeditions, for the suppression of which the legions of Rome often invaded Istria in the third and second centuries before Christ. The country was reduced to subjection to Rome by Caius Claudius a.c. 177. Augustus extended the limits of Italy so as to include all that part of Istria west of the Arsa; the remaining part, afterwards called East Istria, was included in Liburnia. The country remained subject to Rome till the 6th century, when it was overrun by the Goths, from whom it was taken by the Byzantine emperors. In the 10th and 11th centuries Istria formed an earldom subject successively to the dukes of Carinthia and Dalmatia. In 1204, on the outlawry of Henry duke of Dalmatia, the Italian part of Istria fell to the Patriarch of Aquileia, from whom it was taken by the Venetians, who held it till 1797. East Istria, which formed the earldom of Mitterburg, belonged to the counts of Görz, from whom on failure of issue it passed to Austria and was incorporated with Carinthia. By the treaty of Campo-Formio the Venetian part of Istria also came into the possession of Austria; but she was obliged by the treaty of Presburg to cede the whole of Istria, with the other Venetian provinces, to Napoleon I. Istria was then united to Illyria, and continued so until its restoration to Austria in 1813. Subsequently, and up to 1849, Istria was included in the government of Trieste. The inhabitants of the coast towns are mostly of Italian origin, and speak a dialect of Italian; the great

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bulk of the population however speak a Slavonic dialect, and are almost wholly of the Slavonic stock.

Towns.—*Capo-d'Istria*, an episcopal town of 6000 inhabitants, is situated on a circular island joined to the mainland by a causeway-bridge, about 8 or 10 miles S. from Trieste. It occupies the site of the ancient *Algida*, which after its reiteration by the emperor Justin took the title of *Justinopolis*. The town was long a dependency of the Venetian republic. The most remarkable buildings are the cathedral, the citadel, and the town-house, a gothic structure erected on the site of a temple of Cybela. There are a great number of churches, three monasteries, a gymnasium with six professors, and three hospitals. A considerable trade is carried on in wine, oil, and sea-salt made by evaporating the sea-water in the shallow strait between the island and the shore.

Citta-Nuova, supposed to occupy the site of the ancient *Neapolis*, stands on the north shore of the estuary of the *Quieto*, in $45^{\circ} 18' 20''$ N. lat., $13^{\circ} 33' 13''$ E. long., and has a cathedral, three other churches, a good harbour, and about 1000 inhabitants, who are chiefly engaged in the coast fisheries. East of *Citta-Nuova*, in the interior, and near the left bank of the *Quieto*, is *Montona*, with about 1000 inhabitants. The oak-forests in this neighbourhood formerly supplied the arsenals of Venice with oak-timber. Still farther east, in the heart of the mountain district, is the small town of *Pinguente*, which is supposed to occupy the site of the ancient *Piguntum*, and has about 1000 inhabitants, who are engaged in the alum-mines, vitriol-works, and millstone-quarries of the vicinity. *Pinguente* stands on the high-road from Trieste to Rovigno and Pola. A couple of miles N. from *Montona* is the ill-built straggling town of *Portole*, with about 2500 inhabitants.

Isola, 4 miles W. from *Capo-d'Istria*, is situated on the southern shore of the Bay of Trieste, and has about 3700 inhabitants, who are engaged in the coasting trade and in the cultivation of the vine, which in this district yields an excellent wine named 'ribolla.' Four miles farther west is *Pirano*, a town of 6500 inhabitants, built on the extremity of a peninsula which separates the Bay of Trieste from the Bay of Largone. It is supposed to represent the ancient *Piræon*, which rose on account of its port to some eminence in trade under the Roman empire. It is a well-built town, with a good harbour, a handsome gothic cathedral, and an old castle. In the neighbourhood are the largest salt-works in Istria. The inhabitants export wine, oil, and salt. Between *Pirano* and *Citta-Nuova* is another coast-town, *Omago*, or *Umago*, which retains its ancient name. It is now an unhealthy place, with about 1800 inhabitants. Eight miles S. from *Citta-Nuova* is *Parentino*, on the site of the ancient *Parentium*. The town, which gives title to a bishop suffragan of the Patriarch of Venice, stands on a peninsular projection into the Adriatic, forming a good harbour, which is further sheltered by several small islets. On *San-Nicolo*, the largest of the islets, is a convent and an ancient tower, which was formerly a lighthouse ($45^{\circ} 13' 47''$ N. lat., $13^{\circ} 35' 47''$ E. long.). The cathedral, which is surmounted by a dome, is the most remarkable building in the town; it dates from A.D. 542, and presents in the interior a nave and two aisles terminating in three apses, being an unaltered specimen of the ancient basilica: the style is Byzantine. The population of *Parentino* is about 3000.

Rovigno, 10 miles S. from *Parentino*, is also called *Trevigno*, and occupies the site of the ancient *Ruevignis*. It is built on a rocky promontory, which forms a double harbour, in $45^{\circ} 4' 56''$ N. lat., $13^{\circ} 28' 5''$ E. long. The town has superior courts of justice, and about 10,000 inhabitants, who are engaged in ship-building, in the tunny and sardine fisheries, in the coasting trade, and in the manufacture of ship-cables, sail-cloth, &c. It is about a mile in circuit, and contains ten churches, among which the cathedral, a large and handsome gothic structure, is remarkable for its lofty tower, built after the model of the tower of St. Mark in Venice. The neighbourhood produces abundance of wine and olive-oil, and possesses quarries of fine marble. *Rovigno* has a gymnasium and two hospitals.

About 20 miles S.S.E. from *Rovigno* is the episcopal town of *Pola*, situated at the head of a beautiful bay of the same name. *Pola* is girt by bastioned walls, built by the Venetians, and entered by four gates. It is further defended by a castle. The principal building is the cathedral, which is a basilica built in the Roman style from the ruins of ancient buildings; there are also three convents and a Greek church in the town. On the island of *Santa-Catharina*, in the Bay of *Pola*, is a very ancient Byzantine church surmounted by a dome. *Pola*, the origin of which is ascribed to the Colchians sent in pursuit of Jason, was destroyed by Julius Cæsar for its adherence to Pompey; rebuilt by Augustus at the request of his daughter Julia, and from her named *Pictas Julia*. It was the station of a division of the Roman navy; and had in the time of the emperor Septimus Severus a population of 30,000. It still possesses many splendid remains of antiquity—an amphitheatre, outside the walls of the present town, remarkably fresh in appearance, 366 feet long, 292 feet broad, and 75 feet high, constructed of marble, and capable of containing 27,000 spectators; and within the town an elegant Corinthian temple of Augustus and Roma, a temple of Diana, and a triumphal arch of the Corinthian order called *Porta Aurea*. There are many fragments of Roman architecture built into the walls round the market-place of *Pola*, which is supposed to be the site of the ancient forum. *Pola*, long

decaying and neglected, is likely again to become a place of some importance, the Austrian government having expressed an intention of making it a naval station and port of war. For this purpose fortifications have been erected on the heights around and on the island of *Scoglio-Grande*, which commands the entrance to the harbour; roads have been laid out and drains cut. The harbour—safe, commodious, and spacious—admits the largest three-deckers close in shore.

Six miles due north of *Pola*, on the high road to Trieste, and pleasantly situated on an eminence, is *Dignano*, with 8600 inhabitants, who trade in the excellent wine of the neighbourhood, which is celebrated for its rose-like perfume. Fourteen miles farther north on the same road, and at the point where it is joined by a branch road to *Rovigno*, is the small town of *Gessino*; 5 miles N.E. from which is *Pisino* (in German *Mitterberg*), which is beautifully situated round a limestone bluff crowned with a castle. It is a thriving little town, with 2500 inhabitants, a gymnasium with 8 professors, and some trade in corn, wine, and oil, the produce of the vicinity. The little river *Fluva* has excavated an immense cavern in the limestone below the town.

On or near the coast of the Gulf of Quarnero are several small places, among which we notice *Albona*, the ancient *Albon* or *Albona* situated in a rocky district east of the *Arza*, productive of oil, wine, and chestnuts, population about 1000; *Flanona*, on the site of the ancient *Flanona* (a town probably of the *Flanates*, who gave name to the *Flanaticus Sinus*, now the Gulf of Quarnero), situated at the head of a small bay of the same name, population 900; and, further north, *Loarana*, or *Laurana*, which has a small harbour and about 500 inhabitants.

The islands *Losini*, *Oberso*, and *Veglia* were annexed to Istria whilst it was included in the government of Trieste. *Losini* (which is also called *Osero*) and *Cherso* were in ancient times called *Abeyrtides*, or *Apyrtides*, from a tradition that *Abayrtus* was here slain by Jason and Medea.

ITALY, one of the great natural divisions of Europe, consists of a peninsula stretching in a south-eastern direction between the Adriatic and Mediterranean seas, and of the islands of Sardinia, Sicily, and adjacent smaller islands. The Italian mainland, or Italy proper, extends from its most southern point, *Capo dell' Armi*, in $37^{\circ} 55'$ N. lat., to $46^{\circ} 32'$ N. lat., its most northern limit, where the *Piave*, the *Adda*, and the *Ticino* have their sources at the foot of the *Pennine*, *Rhætan*, and *Noric Alps*. It lies between $6^{\circ} 30'$ and $18^{\circ} 30'$ E. long., the latter being the longitude of the most eastern part of Italy, near *Otranto*. The northern part of Italy is bounded N., N.E., and N.W. by the *Alps*, which sweep round it in a semicircle, beginning from the coast near *Nizza* on the Mediterranean, and extending to the Adriatic in the neighbourhood of Trieste; it is bounded E. by the Adriatic, and S. and W. by the Mediterranean. The area of Italy, with Sicily, Sardinia, and the adjacent small islands, is about 120,000 square miles, or rather more than twice that of England and Wales. The entire population, according to the most recent censuses, is somewhat under 25,000,000.

The political divisions of Italy are as follows:—LOMBARDY AND VENICE, the former Lombardo-Veneto kingdom, of which the Emperor of Austria is king; SARDINIA, or the Sardinian monarchy, consisting of the *Stati di Terra Ferma*, or continental territories, and the island of Sardinia; the kingdom of the TWO SICILIES, consisting of the *Dominj di quâ dal Faro*, or kingdom of Naples, and *Dominj di là dal Faro*, or island of Sicily; the PAPAL STATES; the grand duchy of TUSCANY, including the duchy of *Lucca*; the duchy of *PARMA*; the duchy of *MODENA AND MARRA*; the principality of *MONACO*; and the republic of *SAN MARIÑO*; the area and population of all of which, except *Lombardy* and *Venice*, which are given under AUSTRIA, will be found under EUROPE. The island of *CORSIKA*, which physically belongs to Italy even more strictly than does Sardinia, is politically united to France.

These states being described under their respective titles, and the great physical features of Italy being separately noticed, it would be superfluous to repeat such descriptions here. We shall therefore under the present heading merely give such a general notice of the physical geography of Italy as may facilitate reference to particular articles, adding a brief sketch of its history, language, and literature.

Physical Geography.—The ridge of the *Apennines*, which runs along the *Riviera* of *Genoa* and the northern boundaries of *Tuscany* to near *Rimini* on the Adriatic coast, divides Italy into two distinct regions. One of these regions is situated north of the *Apennines*, and is chiefly occupied by the basin of the *Po* and its numerous affluents; while its north-east extremity, which is contracted between the *Carnic Alps* and the *Adriatic*, contains the basins of the *Brenta*, the *Piave*, and the *Tagliamento*. The whole region extends in length from west to east, from *Mount Viso* in 7° E. long. to the river *Isone* in $13^{\circ} 25'$ E. long., a distance of 320 miles. [FRULL.] Its greatest breadth, from the *Tuscan Apennines* to the sources of the *Adda*, is about 150 miles. [Po.]

The other region, which is the real peninsula, extends in a south-east direction, between the *Adriatic* and the *Mediterranean seas*, for above 500 miles, its breadth varying from 130 to 50 miles, and still less in some parts of *Calabria*. The *Apennines*, and the lower ranges which are connected with them, occupy the greater part of the Italian

peninsula. The tracts of level country, with the exception of the Roman Campagna and the plains of Foggia and Campania, are of inconsiderable extent, and the peninsula may be viewed as determined in its chief physical features by the long mountain range which traverses it in its whole length. [APENNINES.] The Tuscan Apennines, after running in a direction east-south-east to within a few miles of the Adriatic near Rimini, make a bend to the south-south-east, and run parallel to and near the Adriatic coast, towards which they detach numerous offsets which terminate abruptly on the sea, whilst towards the Mediterranean the slope of the ground is much more gradual, the offsets or secondary ridges running more obliquely to the coast, and forming considerable longitudinal valleys. The larger rivers of the peninsula are on the western side, and the principal basins are those of the Arno, the Tiber, the Garigliano, and the Volturno. [ABRUZZO; ARNO; CAMPAGNA DI ROMA; PAPAL STATES.] In the neighbourhood of Isernia, between the sources of the Volturno and those of the Sangro, the main ridge of the Apennines begins to run more in the centre of the peninsula, leaving to the east the vast plain of Foggia [CAPTANATA], and to the west the plains of Campania. [LAVORO, TERRA DI.] Farther south, near the sources of the Ofanto, two ridges detach themselves from the main group, one of which runs eastward through the Messapian peninsula, and the other westward through the peninsula of Sorrento to Cape Campanella. The central chain continues to run southward between the basin of the Sele on one side, and those of the Bradano and Basiento on the other. [BASILIATA.] It then runs through Calabria, keeping however nearer to the western than to the eastern coast, but occupying with its offsets nearly the whole breadth of that part of the peninsula. [CALABRIA.]

Northern Italy includes the Sardinian states, Lombardy, Parma, Modena, the Venetian territories, Bologna, Ferrara, and the Romagna. Southern Italy includes Tuscany, the greater part of the Papal States, and the kingdom of Naples. With regard to climate and aspect, the narrow strip called the Riviera of Genoa, which stretches between the Apennines and the sea, may be included in Southern Italy. The islands of Sicily and Sardinia, and several minor ones near the coast, belong to Italy. A general view of the surface and geology of Italy is given in the article APENNINES.

The climates of North and South Italy are very different. In the north frosts and snow are of common occurrence in winter, and delicate plants, such as the orange and the lemon, do not thrive except in sheltered situations; but in the south, especially near the sea-coast, tender plants thrive in the open air, and in the southernmost part of the peninsula, as well as in Sicily, even tropical plants, such as the sugar-cane, the cotton-plant, the Indian fig, and the date-palm, come to maturity. The vine grows all over Italy, but the best wines are made in the south. The high Apennine regions however are bleak and cold even in the south, and as they are hardly anywhere much farther than a day's journey from the coast, there is great variety of climate in the peninsula. The staple products of Italy are corn, rice, wine, oil, silk, and fruits of every kind, and the mountains afford summer pasture for the cattle. In the north a careful system of irrigation prevails, especially in Piedmont and Lombardy, but the southern parts are subject to droughts in summer. The rivers which have their sources in the Alps or in the higher Apennines are perennial, whilst the other streams are mostly dry in summer. The atmosphere is remarkably clear, especially all along the coast of the Mediterranean, and the tints of the mountains and of the clouds are beautifully warm. Italy is emphatically the land of painting, of melody, and of poetry. The scenery of the Bay of Naples, of the Straits of Messina, and of the Riviera of Genoa, is unrivalled in the world.

History.—The name 'Italia' appears to have been limited in remote times to the most southern part of the peninsula as determined by a line drawn from Tarentum to Posidonia (Herodotus, i. 24; Dionysius, i. 73); and indeed its boundaries were once even more contracted. In the age of Timæus (about B.C. 264) it stretched as far north as the Tiber, and beyond Picenum. Until the time of Augustus, Italia Proper was understood to extend only as far as the Rubicon on one side and the Macra on the other; the rest was called Cisalpine Gaul, the country of the Veneti, and Liguria.

The history of ancient Italy, as a whole, is a part of the history of Rome; and sketches of the history of the several ancient divisions, such as Etruria and others, requiring a separate consideration, are given in the articles APULLA, CAMPANIA, ETRURIA, &c. The period that elapsed after the fall of the Western Empire is noticed in the articles BELLSARIVS, LONGOBARDS, and THEODORIC, in the Historical and Biographical division of the ENGLISH CYCLOPEDIA.

The modern history of Italy begins properly with the reign of Charlemagne, who was crowned king of the Romans and emperor of the West in the year 800. Under the weak rule of his successors, the counts, marquises, and other great feudatories of the new Western empire became, de facto, independent, and Italy was parcelled out into numerous principalities or states. As the principal towns rose in population and wealth they made themselves independent of the feudatories, and formed so many commonwealths. Then came innumerable quarrels between the towns and the great lords; of the towns among themselves; of the lords with one another; and last of all,

of part of both towns and lords against the kings of Germany, who styled themselves the successors of Charlemagne, and assumed the often merely nominal title of kings of Italy and emperors of the West. In the midst of all this confusion some considerable states were formed, such as the Papal State, the kingdom of Sicily and Apulia under the Normans, the republics of Venice, Florence, and Genoa, and lastly the duchy of Milan. The dukes of Savoy, originally a transalpine dynasty, also acquired large possessions on the south side of the Alps. Here we have the origin of the present Italian states. A general history of modern Italy is a most intricate and unmanageable subject; sketches of the history of the various states are given in the articles FLORENCE, GENOA, SICILY, VENICE, &c.

At the beginning of the 16th century Charles V. established by conquest the dominion of the house of Austria over the duchy of Milan and over the kingdoms of Naples and Sicily, which dominion on his abdication he gave up to his son Philip II. and his successors of the Spanish branch of the house of Austria. Spain continued to rule these fine territories till the beginning of the 18th century, when by the extinction of the Spanish branch of the house of Austria, Lombardy was transferred to the German branch of the same house, and Naples and Sicily were formed into an independent kingdom under a Spanish infant. The duke of Savoy at the same time assumed the title of king of Sardinia. The work of amalgamation, consolidation, and national independence in Italy made great progress during the 18th century. Venice, Tuscany, Genoa, the Sardinian monarchy, Naples and Sicily, figured among the sovereign states of Europe, while the only part possessed by a foreign power was Lombardy. The French revolution and subsequent invasion of Italy deranged this order of things. Under the pretence of establishing republics the French exercised a military sway over Italy, whilst Venice disappeared from the list of sovereign states and became an Austrian province. Napoleon, having become emperor, formed a kingdom of Italy, which however did not include one-third of Italy: he annexed another third to the French empire, and gave Naples to his brother-in-law Murat. In 1814 the French evacuated Italy, and the former states were restored, with the exception of Venice, which remained under Austria. Genoa was annexed to the Sardinian monarchy, which kingdom and that of the Two Sicilies are now the two principal Italian powers: the Papal States and Tuscany are the two next in importance. Several little territories and jurisdictions on the coast and the island of Elba were annexed to Tuscany; and it was also stipulated that on the demise of Maria Louisa, duchess of Parma, the duke of Lucca should succeed to her states, and Lucca should be annexed to Tuscany. Upon the whole, therefore, the work of amalgamation made progress in the earlier part of the present century.

The desire for still greater unity however continued to gain strength among educated Italians, particularly the younger ones, and the feeling was kept alive and stimulated by patriotic appeals, both in verse and prose, of remarkable eloquence and fervour. Secret societies were organised, with branches in almost every city, and all was carefully prepared for a general rising, with a view in the first place to effect the expulsion of the Austrians, but also directed against the more despotic of the native princes. Partial risings occurred in some of the larger cities about the close of 1847 and commencement of 1848. At the end of January 1848 Palermo and the other principal towns of Sicily were in open insurrection against the king of Naples. The Italian rulers showed an inclination to conciliate their subjects. The Sicilians obtained a renewal of their constitution; the grand duke of Tuscany granted a representative government to his states; and the king of Sardinia issued a proclamation containing the basis of a liberal constitution. But the news of the successful revolution in France, followed immediately by an insurrection in Milan, and the flight from that city of the Austrian viceroy and his troops, produced a general ferment, which was not a little increased when Carlo Alberto, the 'liberal' king of Sardinia issued a proclamation (March 23rd) in which he openly espoused the cause of Italian nationality; and followed it up by sending his army across the boundary of Lombardy. This was of course a declaration of war against Austria, in which all Italy may be said to have joined. In the first encounter at Goito on the 29th of May, the Austrians, after a battle which lasted two days, were entirely defeated by the Sardinian army commanded by king Carlo Alberto, and forced to retreat hastily. But the Italian successes were soon checked. Field-marshal Radetsky, the commander-in-chief of the Austrian army in Italy, after bombarding Vienna for 18 hours, forced it to capitulate, and quickly regained possession of the whole of the Venetian territory, except the city of Venice, which he closely blockaded. He then with the main body of his forces followed the Sardinian troops, whom after a protracted resistance he forced to capitulate. Meanwhile the struggle between the rulers and their subjects had been fiercely fought in Naples and Rome: and when the year 1848 closed, all Italy was in a state of open or concealed revolt. Between Austria and Sardinia an armistice had indeed been concluded, but by both parties it was regarded as one of those hollow truces useful only as a means of preparing without molestation for a future campaign: Austria however held possession of only a portion of her Italian territories, but the Imperial troops were being brought into a condition of the highest efficiency. In Naples the struggle had so far proved on the whole favourable to the king. In Rome the popular

party had been as yet successful: the Pope was a fugitive, and the state was governed by a provincial council, to be soon succeeded by a triumvirate at the head of which was Mazzini, the acknowledged leader of the cause of Italian regeneration and unity. Hostilities recommenced in earnest among the several parties early in the new year; and everywhere with similar results. So long as the rallying cry had been freedom from the foreign yoke there had been success on the popular side. But the patriot leaders were too much under the influence of personal and local jealousies, too much divided by political differences, to keep that before them as their first object. Before independence was secured, they disputed as to the supremacy of particular cities and provinces, and individuals. While the foreign yoke was still unbroken they quarrelled whether republicanism or monarchy should be the rule of the future. The other side was perplexed by no divided councils or political theories. The Austrian commander, Radetky, was a man of iron nerve and great military genius, and he was now waiting with a large and well organised force to bring matters to an issue. There could be little doubt that on the fate of this campaign the final result would depend. Rome and Naples were subordinate actors in the drama.

Hostilities were resumed by Sardinia early in March. On the 21st of that month the two armies met: the Sardinians were defeated on that day; and again and thoroughly on the 23rd, at Novara. As far as Sardinia was concerned the struggle was at an end. Poor Carlo Alberto abdicated his throne in favour of his son, and retired to Oporto, where he died four months after. His son concluded a peace with Austria; and Radetky turned towards the cities which had ejected the Austrian garrisons, and reduced them in succession, though sometimes only after a severe bombardment.

In Naples there had been an active resumption of hostilities, but the British and French governments offered their mediation, advising the king to yield assent to the principal claims of his subjects and grant an amnesty. The king at first refused to comply, and when he was willing, the Sicilians in their turn rejected the ultimatum of the allied powers. The Neapolitan troops then bombarded and captured Catania and Syracuse; and the king of Naples was able to turn his attention to Papal affairs. We need not follow the outbreaks in Genoa and elsewhere, as they were soon suppressed.

In Rome a national assembly was called, which (February 8th) declared the Pope divested of all temporal power, and Rome a republic. The Pope, who was at Gaëta, published a protest against the proceedings of the assembly, and called upon the Catholic powers to interfere by an armed intervention in his behalf. The French government responded to his appeal; and the French National Assembly resolved by a large majority in favour of the proposition of the government to send an army to restore the papal authority in Rome. The first army was repulsed in its attack on the city; but a second and much larger force under General Oudinot commenced a formal siege of Rome on the 3rd of June. The defence was conducted under Garibaldi with eminent but unavailing skill and bravery; and the French having made practicable breaches in the walls, sent storming parties through them on the 21st. On the 3rd of July the city surrendered unconditionally: and the Austrians having been everywhere successful, the Italian rising was at an end. What might be called the official declaration of its suppression was made by the publication, by the Austrian authorities, of the amnesty for all political offences at Milan on the 18th of August 1849. There have been occasional and disconnected popular outbreaks in some of the Austro-Italian cities since then, but they have been always easily suppressed, and have only been the occasion of calling forth additional confiscations and military severities. The only apparent gain to the popular party from the revolt of 1848-9 is the retention by Sardinia of her liberal constitution. On the other side is a terrible account of confiscation, banishment, and loss of life; while the governments have relapsed into the old hard and depressing despotism.

Italian Language and Literature.—The language called Italian is the written language of Italy, and bears the same analogy to the spoken language of Tuscany and Rome as the written languages of France and England bear to the oral language spoken in the towns and provinces of those respective kingdoms in which dialects do not prevail. But while in France and England the use of dialects is confined in great measure to the peasantry of districts remote from the capitals or to mountainous parts, most of the Italian states have each a living dialect, which is the oral language of the people, and spoken even by educated people among themselves, although all educated people speak also the Italian or common written language, which they learn as a branch of education. The dialects of Italy are numerous, and most of them contain written and printed works, especially plays and other poems. The principal dialects are the following:—1. The Milanese is spoken at Milan and its territory, with some variations according to the different districts. It has been cultivated by several writers of real poetical genius, such as Maggi, Parini, and in our times by Grossi and Porta. 2. The Venetian is one of the most graceful of the Italian dialects, and under the republic was the language of the senate and of the courts of justice. There are numerous writers in this dialect; among others, Gritti, Lamberti, Goldoni, and, in our time, Buratti. 3. The Mantuan dialect has been illustrated by the writings of the eccentric wayward monk Folengo.

4. The Piedmontese has considerable affinity with the Languedocian and other Romance dialects. Calvo has written in the Piedmontese, and Alfieri has given a short vocabulary of it, with the corresponding words in Tuscan. 5. Genoese: Foglietta and Cavalli are two of the best writers in this dialect. 6. The Bolognese is one of the most uncouth dialects of Italy, but it has some poets, among others Giulio Cesare Croce. These are the principal dialects of North Italy, besides which there are many other local ones, such as Bresciano, Bergamasco, that of Padua, which resembles the Venetian, and that of the Friuli. In South Italy the principal dialects are the following:—7. The Neapolitan, or Apulian, was the language spoken at the court of Frederick II. in the 13th century, and in which the history of that prince by the contemporary chronicler Matteo Spinello is written. It was afterwards spoken at the court of the Anjou and Aragonese kings of Naples, and has been in fact used within our own times by King Ferdinand and his courtiers. It is very copious, abounds with diminutives and vituperative terms, and is well suited for broad humour and for the purpose of imitative harmony. The Neapolitan among all other Italian dialects has been perhaps the most cultivated by writers. The other South Italian dialect is, 8. The Sicilian, which can boast of Giovanni Meli, who ranks among the first lyric poets of Italy. Between the Neapolitan and Sicilian is the Calabrian dialect, which participates more of the latter, and in which there is a spirited version of Tasso's 'Gerusalemme.' Lastly, 9. The dialect of the Island of Sardinia has a great resemblance to the Catalanian and Valencian and other dialects of the Romance or Provençal language. The Sardinian is also a written dialect.

The Italian dialects must not be considered as corruptions of the written Italian, but as languages which have an affinity to and are anterior to it, and derived from the corrupt dialects of the familiar Latin or Roman which were spoken in the provinces of Italy remote from Rome, and perhaps also in part from the older languages of Italy existing previous to the Roman conquest. The influx of the northern nations effected a total corruption of the spoken Latin; articles and auxiliaries were introduced; terminations were altered or neglected; some, though not a great many, words of Teutonic origin were introduced; and various dialects resulted from these various combinations, which were called by the general name of Romance, Romanic, or Romance language, like those spoken in the south of France. The dialects spoken in Central Italy retained a greater affinity to one another, as well as to their common Latin parent. If we look at the old chronicles and other documents of the 13th century, written in a familiar style, whether at Naples, Rome, Bologna, or Tuscany, we see a great similarity in their syntax and etymology. The oral dialect of Tuscany seems to have attained a considerable degree of polish and grammatical regularity sooner than the others; probably it had never been so corrupt as the rest, owing to the local position of Tuscany, which was not extensively or permanently colonised by the northern tribes, and also owing to the early independence of the Tuscan cities, and their prosperity and civilisation. In the rest of Italy a few men of education used also an oral language more refined than the generality of the people, which was called *Lingua Aulica*, or *Cortigiana*, and thus the early versifiers, including princes and courtiers, Frederick II. and his chancellor Pietro delle Vigne at Naples, Guido Guinicelli and Frà Guidotto at Bologna, Guido delle Colonne, a Sicilian, Can della Scala at Verona, Guido da Polenta, prince of Ravenna, wrote in a language which differs little from that of Brunetto Latini, Guitton d'Arezzo, Guido Cavalcanti, and other Tuscan poets of the same age. But Tuscany had this advantage over the rest, that its familiar spoken language was more generally polished, so as to resemble the poetical and select language of the other Italians, and the Tuscan poets had the benefit of writing in a living dialect, '*lingua volgare*,' and their poems were understood by the generality of their countrymen. The writers of the 14th century, Dante, Dino Compagni, Petrarch, Boccaccio, Cino da Pistoja, Sacchetti, Villani, Pandolfini, were all Tuscans, and they permanently impressed on the written language of Italy the stamp of Tuscan spirit and idiom. As people of education in every part of Italy applied themselves to write in the '*lingua volgare*,' the use of writing in Latin being gradually dropped, this '*lingua volgare*,' or written Italian, began to form an essential part of education, and all those who received school instruction learned to speak it more or less correctly. It came afterwards to be adopted in many places as the language of the government, of the courts of justice, of the pulpit, and of the stage, and thus it has been styled emphatically the Italian language, because it is used as the general medium of communication, written and oral, all over the peninsula. But it is nowhere, except in Tuscany and in part of the Roman states, the language of the lower orders, the language of the nursery, of the markets, of convivial familiarity, of every-day life. Its general adoption is however strongly urged of late years by the various governments, and particularly attended to in all elementary schools.

The writers of the 14th century are called by the Tuscans the '*Trecentisti*,' and they are considered by many as the purest models of Italian composition. In the 15th century there was a retrograde movement in the cultivation of the Italian language. The Latin again resumed the ascendancy as a written language, and the '*lingua volgare*' was left to the vulgar, or employed merely for familiar purposes. The discovery of the ancient classics, the revival of the

study of the Roman law, the arrival of many learned Greek refugees flying from the Ottoman conqueror, the influence of the Roman hierarchy, whose language was the Latin—all these circumstances gave a general impulse towards classical learning, and the Italian literati disdained to write except in the language of their presumed forefathers. Alberti, Bracciolini, Bruni, Filelfo, Panormita, Platina, Pontano, Valla, Ficino, and other learned men and also women of that age wrote in Latin. But Lorenzo de' Medici at Florence, the Este at Ferrara, the Gonzaga at Mantua, countenanced Italian poetry; and Pulci, Bello, and Bojardo gave the first specimens of the Italian epic, while Poliziano and Lorenzo himself excelled in lyrics. In this same century Cennino Cennini wrote an Italian treatise upon painting, and the illustrious Leonardo da Vinci, painter, architect, and engineer, composed his precepts on the same art, which were published long after his death, 'Trattato della Pittura,' 1651.

The 16th century was the second era of Italian literature. It has been styled the age of Leo X., because that pontiff, in the early part of the century, surrounded himself with some of the most learned men of his time. But the two great historians and statesmen, Machiavelli and Guicciardini, the 'Divino Ariosto,' and Michelangelo Buonarroti, who was sculptor, painter, architect, and poet, are four names sufficient of themselves to adorn any age or country; and there were numerous other excellent writers in almost every branch of learning. The learned Sigonio, Baronius, Panvinio, Vida, the jurists Alciati and Turamini, the mathematicians Maurolico and Cardano, and many other men of science, wrote in Latin. The authors of the 16th century are called by the Italians 'Cinquecentisti,' and are considered as models of Italian writing, though some critics observe in most of them a falling off from the freshness and raciness of the great Florentine writers of the 14th century.

The 17th century, called by the Italians the age of the 'Scientisti,' exhibited a degeneracy of taste, both in literature and the arts. The leaden yoke of Spanish viceroys, armed with all the terrors of delegated absolutism and of clerical inquisition, ignorant or careless of the very elements of government and administration, weighed heavily over the finest regions of Italy. The Italian writers, and especially the poets, adopted a turgid hyperbolic style, replete with false conceptions and all the tinsel of rhetorical adulation. The school of Marini and of his worse disciples has become proverbial as the school of depraved taste in composition. However the same causes of mental degradation and corruption did not operate equally over all the peninsula. Tuscany, Venice, Genoa, Piedmont, retained their independence and with it their national spirit. Accordingly we meet here and there with writers distinguished by their sentiments as well as by their language, such as the celebrated Sarpi, the learned prelates Bentivoglio, Pallavicino, and Bellarmino; the historian Davila; the Jesuits Segneri and Bartoli; the poets Guidi, Chiabrera, Filicaja, Tassoni, Rinuccini, Menzini; the painter and poet Salvator Rosa; the philologist Salvini; while Italian science can boast in the same age of Galileo, Cassini, Torricelli, Malpighi, Borelli, Marsigli, Redi, Viviani, and Guglielmini. Antonio Serra, one of the earliest, if not the earliest, writer on political economy, published in 1613 a treatise showing the various causes through which countries may become enriched; a work neglected and forgotten for ages after. The historian Noris, the learned antiquarian Bianchini, and the jurist Gravina, wrote in Latin.

In the 18th century Italian literature assumed a new character. The historians Maffei, Muratori, and Giannone, and the philosophic writers Vico, Stellini, and Genovesi, brought a new light into their respective departments. The spirit of investigation and deep reflection was now busy at work. Goldoni effected a revolution on the Italian stage, and Metastasio imparted a new vigour and poetical freshness to the melodrama or opera. In the department of criticism there were Zeno, Baretti, Gozzi, Mazzuchelli, and Cesarotti; Milizia, Lanzi, and Bottari wrote eloquently on the fine arts; Martini and Tartini on music; Verri, Carli, Galiani, Neri, on political economy; Bettinelli, Tiraboschi, and Corniani, on the history of Italian literature; Buonafede on the history of philosophy; Beccaria, Filangieri, and Mario Pagano on legislation; Vallianieri and Spallanzani on natural history; Volta and Galvani on physics; Denina on the history of Italy; Passeroni, Varano, and Parini wrote moral poetry; and lastly Alfieri created the Italian tragedy.

The invasion of Italy by the French in 1796 and the political revolution which followed, whilst they served to stimulate the minds of the Italians to exertion, had an unfavourable influence upon the language. French was the language of the conquerors, and it became the fashionable language of the conquered. Those Italians, and they formed an immense majority, who did not know French, intermixed French idioms with their already imperfect and dialectic Italian, and a spurious compound was thus formed which was neither French nor Italian, and which found its way into the political essays, the newspapers, the pleadings, and even the acts of government. A few writers, formed in a better school, opposed the torrent; among these are Alfieri, Monti, Foscolo, Ippolito Pindemonte, Napione, Cesari, and Giordani. The reaction against French style has been continued by later writers; and Italy has in our own days produced eminent authors in almost every branch of literature, science, and art.

Italy, which has been for ages the nurse of the fine arts, has still,

since the death of Canova, many respectable artists, but hardly a first-rate sculptor or painter. With architects and engineers she is better provided; and the art of engraving is in a highly flourishing state.

Religion.—The religion of Italy is the Roman Catholic, with the exception of a few valleys among the Alps of Piedmont, inhabited by the Valdenses, and of the Jews, who live in most of the principal towns, and have synagogues. At Leghorn, Florence, Venice, and other mercantile places, chapels for foreign Protestants and Greeks are tolerated.

ITAPARICA. [BRAZIL.]

ITHACA. [IONIAN ISLANDS.]

ITHOME. [MESSENIA.]

ITZEHOE. [HOLSTEIN.]

IVES, ST., Cornwall, a market-town, sea-port, and municipal and parliamentary borough in the parish of St. Ives, is situated in 50° 12' N. lat., 5° 28' W. long., distant 39 miles S.W. from Bodmin, and 277 miles S.W. by W. from London. The population of the municipal borough in 1851 was 6525; that of the parliamentary borough was 9872. The borough is governed by 4 aldermen and 12 councillors, of whom one is mayor; and returns one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry of Cornwall and diocese of Exeter.

The town of St. Ives is finely situated at the north-eastern extremity of the spacious St. Ives Bay, near the entrance of the Bristol Channel. St. Ives is a town of great antiquity, and has a picturesque appearance. The church, a large low granite building of the time of Henry V., stands close to the sea-shore. There are several chapels for Dissenters, and a National school. The harbour accommodates vessels of 200 tons burden. It is the principal station of the pilchard fishery. The number and tonnage of sailing-vessels registered as belonging to the port on 31st December 1853 were:—Under 50 tons 63, tonnage 1380; above 50 tons 93, tonnage 11,038; and 4 steamers, with a tonnage of 726. The number and tonnage of vessels that entered and cleared coastwise during 1853 were:—Sailing-vessels, inwards 1704, tonnage 127,151; outwards 939, tonnage 72,173; steam-vessels, inwards 180, tonnage 32,471; outwards 178, tonnage 32,242. In the colonial and foreign trade there entered 56 vessels of 7928 tons, and cleared 63 vessels of 9050 tons. In the vicinity of St. Ives are extensive tin- and copper-mines. Markets are held on Wednesday and Saturday; fairs on May 29th, and the Saturday before Advent. About a mile from the town is Tregony, or Tregenna Castle, a large castellated mansion. The coast here is bounded by cliffs and rugged rocks, and is somewhat dangerous to shipping.

IVES, ST., Huntingdonshire, a market-town and the seat of a Poor-Law Union in the parish of St. Ives, is situated on the left bank of the river Ouse, in 52° 20' N. lat., 0° 4' W. long., distant 7 miles E. by S. from Huntingdon, 59 miles N. from London by road, and 72½ miles by the Eastern Counties railway. The population of the town in 1851 was 3522. The town is governed by town commissioners. The living is a vicarage in the archdeaconry of Huntingdon and diocese of Ely. St. Ives Poor-Law Union contains 24 parishes, with an area of 64,136 acres, and a population in 1851 of 20,267.

St. Ives is so called from Ivo, or St. Ives, a Persian ecclesiastic, said to have visited England as a missionary about A.D. 600, and whose supposed remains were discovered here some centuries afterwards. On the spot where they were found the abbots of Ramsey, to whom the manor belonged, built a church and a priory. The dove-house and barn, and some fragments of the priory, are still standing. The town stands on a slope; the lower part is exposed to inundations of the Ouse. A stone bridge of six arches forms the entrance to the town on the London side; an ancient building stands over one of the piers. The approach to the bridge on the south is by a causeway raised on arches, to admit the passage of the waters in the time of floods. The streets are well paved and lighted. Brewing and malting are carried on. The market is on Monday, and is one of the largest provincial markets in the kingdom for sheep and cattle; there are two large yearly fairs on Lady-day and Michaelmas; at the Michaelmas fair much cheese is sold. The church is a neat building, chiefly late perpendicular. It has a handsome tower and spire at the west end. There are chapels for Wesleyan and Primitive Methodists, Independents, and Baptists, and National and British schools. Slepe Hall was for some time the residence of Oliver Cromwell.

IVINGHOE. [See Ivinghoe, in SUPPLEMENT.]

IVIZA, IVIÇA, or IBIZA, the *Ebusus* of the ancient geographers, one of the Balearic Islands, lies 50 miles S.W. from Majorca, and is about 23 miles long from north-east to south-west, and about 15 miles in its greatest breadth. It is divided by a channel four miles wide from the island of Formentera, which lies due south of it. The south-west point of Iviza is 60 miles E.N.E. from the Cabo San Martin, on the coast of Valencia on the mainland of Spain. The coast is indented by many small bays, the largest of which are those of Iviza and San Antonio. The island is hilly and stony in many parts, but in others very fertile. It produces oil and wine, oorn, fruits of every kind, has a large stock of sheep, and the sea near the coast abounds with fish. The manufacture of salt in salt-pans constitutes a great branch of industry. The mountains are covered with timber-trees. Salt and timber are almost the only exports. The inhabitants are indolent and uninformed: their mode of agriculture is slovenly. They speak a dialect of the Limosain, the language of Catalonia, which

is a branch of the Romance language once spoken all over the south of Europe. The capital, *Ivrea*, built on a peninsula on the south-west coast of the island, is fortified, has a good harbour, and contains about 6000 inhabitants: it has a cathedral and six other churches, two hospitals, and a public school or gymnasium. San Antonio and San Miguel are two small towns.

IVREA, a province of Piedmont, stretches from the foot of the Alps, which divide it from Savoy and the Val-d'Aosta, southward to the Po, and is watered in its length, which is about 20 miles, by the Dora Baltea. The Orca, another affluent of the Po, having its source on Mount Iseran, one of the high Graian Alps, waters the western parts of the province of Ivrea, where it borders upon that of Turin. On the E. Ivrea is bounded by the province of Vercelli, and N. by that of Aosta, which with Ivrea now forms an administrative district of Piedmont. The country consists in great part of hills, being the lowest offsets of the Alpine chain, and some fine valleys between; the southern part of it merges into the great plain of the Po. The soil produces abundantly corn, good wine, hemp, and pasture on which a great number of cattle are fed. The system of irrigation by water drawn from the Dora and other streams is here in full operation. Silk is an important product of the province. The mountains produce plenty of chestnuts. This province was a marquiseate in the middle ages, when Berengarius, marquis of Ivrea, became king of Italy. It is called 'Il Canavese,' from the quantity of hemp ('canapa') which it produces, and the inhabitants are noticed in the 'History of Piedmont' as quarrelsome and warlike. The area of the province is 561 square miles, and the population in 1848 numbered 168,561.

The chief town, *Ivrea*, stands in a fine situation on the slope of

a hill on the left bank of the Dora, across which is a Roman bridge of a single arch, at the entrance of the lowland of Italy for travellers coming by the St. Bernard Pass. Ivrea is an old-looking town, with walls and a castle; it is a bishop's see, has six churches, besides the cathedral and several convents, a seminary for clerical students, a royal college, an hospital, and about 8000 inhabitants. There are some remains of antiquity at Ivrea. The cathedral is built on the ruins of a temple of the Sun. Ivrea, called anciently Eporedia, was a town of the Salassi, and afterwards was colonised by the Romans. The town has some important silk manufactures, and a good trade in rice, hemp, cheese, and cattle.

The other towns of the province are the following, the population in each case is that of the commune:—*Castellamonte*, with 5100 inhabitants; *Caluso*, with a college, and 5500 inhabitants; *Cuorgne*, with a grammar-school, copper-works, and 5600 inhabitants; *Agliè*, with a castle, a handsome park, and 4500 inhabitants; *San Giorgio Canavese*, with a college, and 3700 inhabitants; *Locana*, with brass-works, and 5400 inhabitants; *Valperga*, with 3500 inhabitants; *Ponte*, in a delightful valley watered by the Orca and its affluent the Saona, with 4200 inhabitants. In this valley are many natural curiosities, and the traces of silver and gold mines, said to have been once worked by the Romans. Copper is found in the Val-d'Orca, and iron in the Val-Brozzo, where are several iron-works. There are several other small towns of above 3000 inhabitants.

IVRY. [EUROPE.]

IXWORTH. [SUFFOLK.]

IZALCO, or YZALCO. [SAN SALVADOR.]

IZERNORE. [AIN.]

J

JACA. [ARAGON.]

JACKSON, PORT. [SYDNEY.]

JACKSONVILLE. [FLORIDA; ILLINOIS.]

JAEN, a province of Spain, included in the territorial division of Andalusia, is bounded N. by Castilla-la-Nueva, S. by the province of Granada, E. by the provinces of Murcia and Granada, and W. by the province of Cordova. It is situated between 37° 27' and 38° 35' N. lat., 2° 52' and 4° 20' W. long. The greatest length from north to south is about 75 miles, from east to west about 80 miles, the average width being about 60 miles. The area is 4446 square miles. The population in 1849 was 307,410.

A general description of the provinces comprised in Andalusia is given under that head. [ANDALUCIA.] The northern part of this province is entirely filled with the ridges of the mountain range of the Sierra-Morena, the summit-level of which forms the division between the province of Jaen and the modern province of Ciudad Real, or La-Mancha, in Castilla-la-Nueva. The southern part of the province is occupied by the offsets of the Montes de Granada, which separate the province of Jaen from that of Granada. The central part of the province is an irregular valley in which several rivers and numerous small streams unite to form the Guadalquivir, the slope of the ground being generally from east to west.

Towns.—The capital of the province is the ancient city of *Jaen*. [JAEN.] *Alcala-la-Real*, 32 miles S.W. from Jaen, stands on a conical hill. It is a picturesque town, with bold towers and steep streets. It was the stronghold of the Alcaide Ibn Zaida. In 1340 it was taken by Alonzo XI. in person, and from him received the epithet *Real* (Royal). The beacon tower called *La Mota* was erected by the Conde de Tendilla, the first governor of the Alhambra. Population, 6648. *Andujar*, 22 miles N.W. from Jaen, is situated on the north bank of the Guadalquivir, which is here crossed by a bridge. It stands in a fertile plain, and is surrounded by gardens and orange-groves. It contains a large church in what has been called the plateresco style of architecture, which is peculiar to Spain. This town is distinguished for the manufacture of the porous earthenware vessels called *alcarrasas*, which are used for cooling water. Population, 9353. *Baza*, 25 miles N.E. from Jaen, is a handsome town situated on an eminence overlooking a fertile plain between the rivers Guadalquivir and Guadalimar. It is the see of a bishop united with Jaen, and contains a cathedral, the halls and courts of a university, the oratorio of San Felipe Neri, and a handsome fountain with caryatides in the principal plaza. The population in 1845 was 10,851. *Baylen*, 23 miles N. from Jaen, stands on the main road from Andalusia to the Castiles over the Sierra Morena by the pass of the Despeña Perros. It is a poor town, with old walls, a ruined castle, and a machicolated tower. Population, 4976. The French army, under General Dupont, was defeated here, July 20, 1808. *Carolina*, 18 miles N. from Baylen, a thriving town, with a population of about 2000, is situated on the same road, near the foot of the pass. It would form a strong military position. *Linares*, 25 miles N.N.E. from Jaen, stands at the foot of the Sierra Morena, in a plain abundantly watered. There are mines of copper and lead in the vicinity, which were wrought by the Romans, and are still productive.

Population, 6567. *Martos*, 16 miles W.S.W. from Jaen, stands on the slope of a steep hill which is surmounted by a ruined castle. It contains several churches. It is resorted to for its mineral waters. Population, 11,000. *Ubeda*, 28 miles N.W. from Jaen, was originally built by the Moors with the materials of the Roman *Betula*, now *Ubeda la Vieja*. It was taken by Alonzo VIII., and destroyed, but was afterwards rebuilt. It contains a cathedral, which was originally a mosque, a fine hospital, and other good specimens of architecture. The vicinity is very fertile, and the inhabitants are mostly employed in agricultural labour. The population in 1845 was 13,809.

JAEN, a city of Spain, capital of the province of Jaen, formerly a Moorish kingdom [ANDALUCIA], is situated in 37° 44' N. lat., 3° 43' W. long. The population in 1845 was 17,327. It is built at the foot of a hill, which is crowned by a castle, and overlooks an extensive vega, or plain, through which the Rio de Jaen, passing the city on the eastern side, flows northward to the Guadalquivir. The hill is rugged and steep, and appears to be the termination of the Sierra de Jaen, but is in fact cut off by a ravine, which converts it into an isolated and very strong military post. A wall extends round the brow of the hill inclosing an area of many acres, while the city wall, flanked by towers, is carried up the irregular slopes of the hill, and connected with the fortifications of the castle above. The principal street of the city encircles the base of the hill, and has other streets, narrow and crooked, on each side. The houses, built of a dark-coloured limestone, are massive and gloomy, with low doorways and small windows, and the whole city has more appearance of antiquity and of Moorish construction than either Cordova or Sevilla. Jaen, conjointly with Baza, is the see of a bishop. The cathedral occupies the site of the Moorish mosque, which was pulled down in 1492, and replaced by the present structure about 1525, when the Greco-Roman style in which it is built had been introduced into Spain by Pedro de Valdelviro. It has four entrances, the western façade being flanked by two fine towers. The interior is Corinthian. The city has another cathedral, several hospitals, public fountains, and a beautiful promenade. A new road from Jaen to Granada was opened in 1823. Part of it passes through a tunnel under the Puerto de Arenas, a part of the Montes de Granada. The vicinity is very fertile.

JAEN DE BRACAMOROS. [ECUADOR.]

JAFFA, a sea-port town in Syria, is situated on an eminence which projects into the Mediterranean, in 32° 3' 25" N. lat., 34° 46' 18" E. long., 33 miles N.W. from Jerusalem, and has a fixed population of about 4000. The town is built on a hill, the top of which is crowned with an old citadel; on the land side it is surrounded by high walls. The houses are built of stone, but the streets are narrow and irregular. There are three mosques in the town, and the Catholics, Greeks, and Armenians have each a convent. The sea near Jaffa is shallow and strewed with rocks, so that vessels discharge and load about a mile from the shore, by means of small lighters which land at the quay, the approach to which is defended by two small forts. The trade of the place is inconsiderable; but Jaffa has always been celebrated as the landing-place for European pilgrims to Jerusalem, in consequence most probably of its proximity to that

city; for as to its claims to be a haven, few places could have less. European consuls reside in Jaffa. The adjacent country produces excellent melons, oranges, citrons, and other fruits; some oil and soap are exported; wheat, rice, linen, and piece-goods are imported from Egypt and Beyrut. Coral is found along the coast.

Jaffa is a European corruption of the Arabic *Yāfa*, which preserves the Hebrew name *Japho*, the representative of the Phœnician name *Joppa*, which is descriptive, and means 'an eminence.' Ancient legends give Joppa an antediluvian existence, and near it Andromeda was said to be rescued from the monster by Perseus. In the distribution of Canaan, Joppa fell to the tribe of Dan, and it was the only port (so-called) which the Jews possessed on the Levant, till Herod constructed the harbour of CÆSARĒA. Timber from Lebanon for the building of the first and second temple was landed at Joppa, and here Jonah embarked for Tarshish. The town suffered much, and was often taken in the Maccabean wars. It was annexed to the Roman province of Syria by Pompey, and was afterwards given by Julius Cæsar to Herod. In the New Testament it is celebrated by Tabitha's restoration to life by St. Peter. During and after the Jewish war Joppa became a receptacle for pirates, was taken by Cestius, who put 8400 of the inhabitants to death, and it was totally demolished by Vespasian. The town gave title to a bishop from an early age of the church; a bishop resided here in the time of Constantine the Great, and also when the city was taken by the Arabs in A.D. 636. In the time of the Crusades when the name Jaffa came into vogue, the town was alternately held by Christians and infidels. After its sack by Malek Adel, it was rebuilt by Frederick II. and St. Louis. It was finally taken from the Christians by the Sultan Bibars in the 13th century. In 1799 the French, under Bonaparte, took Jaffa, and suffered terribly here from an attack of the plague.

(Pomponius Mela; Pliny; Strabo; Josephus; Wilken, *Die Kreuzu; Géographie Universelle; Dictionary of Greek and Roman Geography.*)

JAFFNAPATAM. [CEYLON.]

JAICZA. [BOGNIA.]

JALAPA, or XALAPA. [MEXICO.]

JALIGNY. [ALLIER.]

JALISCO, or XALISCO. [MEXICO.]

JALPUCH, RIVER. [BESSARABIA.]

JAMAICA, one of the Greater Antilles, and the most important possession of the British in the West Indies, extends from 76° 15' to 78° 25' W. long., and from 17° 40' to 18° 30' N. lat. Its length from east to west is nearly 150 miles, and its width may on an average be 40 miles. It contains 2,724,262 acres, or 4256 square miles. About two-fifths of the soil is under cultivation.

The surface of this island is very uneven, but it is only the eastern part that can properly be called mountainous. This part is almost entirely filled up by the Blue Mountains, whose principal ridge varies from 5000 to 6000 feet in elevation. One peak has an elevation of 7150 feet above the sea. The western boundary of this mountain-region is formed by a ridge which runs across the whole island from south-east to north-west, beginning on the south at Yallah Point, and terminating to the north-east of the mouth of the Agua Alta, or Wagwater. It rises in several parts to 2500 and 3000 feet; and St. Catherine's Peak, at the point where it is united to the range of the Blue Mountains, is 4500 feet above the sea-level. The declivities of the Blue Mountains are only partially wooded, but the level summits are generally overgrown with trees. The principal level ground is the Vale of Bath, which extends about 8 miles from the town of Bath to the mouth of the Plantain Garden River, near the promontory of Morant Point, the most eastern cape of the island. This vale is about one mile and a half wide, and is covered with sugar plantations.

West of the range in which St. Catherine's Peak stands the mountains subside, and are divided from those farther west by a depression which extends across the island over the plain of Liguanea and the hilly country which incloses the banks of the Wagwater. The plain of Liguanea begins a few miles east of Kingston, and extends westward to a point west of Old Harbour, a distance of about 30 miles; its average breadth is about 5 miles. A part of this plain consists of savannahs, or natural pasture ground, covered with grass. West of Port Henderson a range of low hills called Healthshire Hills lies between the plain and the sea.

The plain of Liguanea is divided from the plain of Vere by a narrow range of low hills, which approach the sea west of Old Harbour, near Salt River Bay. The plain of Vere extends from south-east to north-west about 18 miles, with an average breadth of 7 or 8 miles. On the south-east of this plain is the Portland Ridge, which terminates in Portland Point, the most southern cape of Jamaica. On the north-west it is joined by the Mile Gully, a picturesque valley, several miles in length, traversed by the upper course of the Rio Minho. The soil of the plain of Vere is of moderate fertility, and mostly used as pasture ground. The mountains which inclose the plains on the north rise with a steep and abrupt ascent, but they do not attain a great elevation. They inclose valleys of considerable extent and fertility, especially that of St. Thomas-in-the-Vale, about 9 miles long and 2½ miles across, which is covered with sugar plantations, and is very fertile. Towards the northern coast the mountains sink down into low and well-wooded hills.

The mountains which cover nearly the whole of the island west of

St. Thomas-in-the-Vale, have their highest summit in the peak near Blewfields, not far from the southern coast, which rises to 2560 feet. Near the central line of the island, the hills present the characteristics of the limestone formation, of which they consist. Caverns occur in several places, and some of them are very extensive. Except during the rains, running water is scarce, and the inhabitants collect the rain in tanks. In the western part of the island the largest plains are the Pedro Plains, near Great Pedro Point, and the Savannah la Mar, towards South Negril Point, the most western cape of the island. A considerable portion of these plains is covered with swamps. The country between Montego Bay on the west and St. Ann's Bay on the east consists only of low though abrupt and precipitous hills; the valleys between them are covered with high forest-trees, which exhibit a very luxuriant vegetation.

Except in the districts which lie within the limestone formation above mentioned, Jamaica has the benefit of numerous rivers, rivulets, and springs. The Black River, north-west of Great Pedro Point is navigable, and goods are conveyed by it about 30 miles in flat-bottomed boats and canoes. The other rivers are of importance for the irrigation of plantations, the service of numerous mills, and the beauty and interest they impart to the aspect of the country. Some of them form beautiful cascades.

Jamaica has a coast-line of more than 500 miles, hardly any place is more than 30 miles from the sea, and along its shores are about 30 harbours for shipping, besides more than double that number of bays, creeks, and coves, capable of affording more or less shelter to vessels. The safest and most capacious of the harbours are those of Port Morant, Kingston, and Old Harbour on the southern coast, and those of Lucia and St. Antonio on the northern coast.

The climate is exceedingly hot in the lower plains along the southern coast of Jamaica. For the whole island the mean heat of the summer months (from June to November) is about 80°, whilst the mean heat of the other six months does not exceed 75°. In summer the thermometer sometimes rises to 96°, and occasionally, though rarely, to 100°. In winter it sinks to 60°. But the changes of the temperature are very slow and gradual; the difference between noon and midnight rarely exceeds 5 or 6 degrees. Snow has never been observed, even on the most elevated peaks; hail sometimes falls, but it melts as soon as it reaches the ground. The climate is cooler and more salubrious on the north side of the island than on the south. The heat of the low coast is considerably diminished by the daily sea-breeze, which sets in generally about nine o'clock in the morning and ceases only towards sunset. Its salubrious effects have obtained for it from the seamen the name of the 'Doctor.' During the hottest part of the day, and in the most sultry months, a succession of light flying clouds continually pass over the sun, and have the effect of moderating the heat of its rays.

In Jamaica there are two rainy and two dry seasons. The spring rains, which are generally partial and light, begin in the middle of April or beginning of May. The heavy rains commence in June or even later, and last about two months; at this time the air is intolerably sultry, presaging approaching torrents, which frequently come on with little previous warning. In such cases, while the rain pours down in torrents, there are incessant peals of thunder, and quick and vivid flashes of lightning. The rains set in regularly every day, and continue from two to three hours, sometimes for the space of several weeks. Occasionally very heavy rain descends for several days and nights with little intermission. The autumnal rains come in October and November; they are not so heavy as those already referred to, nor are they usually accompanied by thunder and lightning, but they are often attended by heavy gusts of wind from the north. Jamaica is from time to time visited by hurricanes, which generally set in from the north or north-west. They occur however only in the summer months between the two rainy seasons, which months are therefore called the hurricane months in the West Indies.

The low tracts along the coast are unhealthy, but the hilly and mountainous country is much less so. The most common diseases are the yellow fever, common bilious fever, and the typhus fever; the first is by far the most destructive, especially to new comers. From October 1850 till the early part of 1852 cholera carried off about 30,000 of the inhabitants, or nearly one in twelve of the whole population. It was followed by small-pox which also proved fatal in numerous instances.

Sugar, rum, and molasses form the most important articles of export from the island. The sugar plantations are numerous and extensive, especially in the lower and warmer tracts of the island. On the hills and their declivities coffee is cultivated to a great extent. Next to these in importance are the pimento plantations. Arrow-root, indigo, ginger, turmeric, and cacao are also cultivated. A considerable quantity of castor-oil is produced. Tobacco is cultivated by the negroes for their own use; maize is universally cultivated, and yields an abundant produce; two and even three crops of it can be raised within the year. Guinea-corn is raised extensively in some districts on the south side of the island. A variety of nutritious roots cultivated in this island are called by the name of 'Ground provisions;' such as the yam (*Dioscorea alata*), cassava (*Jatropha Manihot*), the sweet potato (*Convolvulus Batatas*), and some other roots.

None of the European fruits arrive at perfection except grapes. Apples are of very inferior quality, and peaches rarely produce fruit. The pine-apple, the orange, the shaddock, the pomegranate, the fig, the granadilla, the sapodilla, the star-apple, the sweet-sop, the sweet-lemon, the citron, the avocado-pear, &c., are reared in great variety and abundance. Several exotics have been introduced, as the mango, the cherimoyer, the bread-fruit, &c.; the most important is the plantain, or banana, which is extensively cultivated on every plantation.

The forests of Jamaica abound with a great variety of the most valuable woods. The most beautiful woods for cabinet-work are the mahogany, the bread-nut tree, and the satin-wood. The cedar-tree attains a great size, but it is not of so fine a grain as that of the Levant. Other trees produce dye-woods, as fustic, logwood, &c. The cotton-tree is the largest of all; its wood is used for making canoes, which are hollowed out from the trunks: its cotton is employed for stuffing beds. The bamboo grows wild, and is also cultivated. The cabbage-palm (*Areca oleracea*) and the cocoa-nut tree are the most useful trees of the palm tribe. Notwithstanding this abundance of useful trees white oak is imported for rum-punches, and a considerable quantity of pine of all dimensions from the United States, this wood being sold at a lower price than the native timber.

The horned cattle are very numerous, oxen being employed in the waggons which bring down the produce to the wharfs, and also in carts and in the plough. The horses are of a middle size, hardy and active, but only fitted for the saddle and harness. Mules are numerous, and employed in the sugar-mills and in conveying the sugar-canes to the works. Sheep and goats abound; many of the sheep have no fleece, and are covered with hair like goats. Hogs are very plentiful: they are of a smaller size than the English hog, but their flesh is superior in delicacy to the British or American pork. All kinds of poultry, except geese and the common duck, are raised in great abundance. The Muscovy-duck, the turkey, the Guinea-fowl, and the common fowl thrive very well. Domestic pigeons likewise abound. Rats exist in incredible numbers, and commit extensive ravages on the sugar-canes.

No metal except lead is known to exist in the island. There are some salt-springs.

Jamaica is politically divided into three counties, Surrey, Middlesex, and Cornwall, and contains one city, Kingston, and 33 towns and villages. The counties are subdivided into 21 parishes.

The county of *Surrey* extends over the eastern portion of the island, comprehending the whole of the region of the Blue Mountains and the eastern portion of the plain of Liguanea. In this division are Port Antonio, Morant Bay, and the harbour of Kingston. *Kingston* is a considerable city and a place of great trade, with a population of more than 35,000. It is regularly built, and contains many good houses, two churches, five schools, and some charitable institutions. The harbour is protected by the narrow slip of land on whose western extremity Port Royal is built. The greatest part of the produce of the southern districts is sent to Kingston, and thence exported to Europe or America. *Port Royal*, once the capital of the island, has been repeatedly destroyed by earthquakes, hurricanes, and fire, but is still a considerable place, as its harbour is the station for the ships of war, and it contains the naval arsenal and good fortifications. The bulk of its inhabitants are people of colour. *Morant Bay*, nearly at an equal distance between Port Royal and Morant Point, carries on a considerable trade and is a thriving place. The population is between 6000 and 7000. *Antonio* possesses a good harbour, but has little trade.

The county of *Middlesex* occupies the central part of the island, comprehending on the south the western portion of the plain of Liguanea. On its southern coast are Port Henderson and Old Harbour; but they are only visited by small vessels, which carry the produce of the country to Kingston. On the northern shores are Annotto Bay, Maria, and St. Ann's Bay, which carry on some commerce by sea. On the shore of Annotto Bay is a small but thriving town. On St. Catherine's Plain is built the town of *San Jago de la Vega*, commonly called *Spanish Town*, which is usually considered the capital of the island. It is a small town with about 6000 inhabitants, but embellished by the king's house (a residence of the governor), and the public offices. The superior court sits here. It has a Free school and some charitable institutions. A railway from Kingston to Spanish Town was opened in 1845.

The county of *Cornwall* extends over the western part of the island, comprehending the plains of Pedro and Savannah la Mar and the hilly country lying between them and north of them. The two most frequented harbours on the southern shores, Black River and Savannah la Mar, have little trade; but on the northern coast are three thriving towns, *San Lucia*, *Montego Bay*, and *Falmouth*, each containing a population of between 5000 and 8000. *Montego Bay* is the chief town of the county, and the assize-courts are held here. The harbour is exposed to a heavy swell; but a breakwater has been erected as a protection against the sea. Fifty years ago *Falmouth* was an inconsiderable village, but it is now nearly as large and populous as *Montego Bay*, and has a considerable commerce. A handsome suspension-bridge has been lately erected across the *Martha Brae River*, 2 miles E. from *Falmouth*.

The population of Jamaica was 377,432 in 1844; in 1849 Governor Sir C. Grey estimated it at more than 400,000, probably not more than 15,000 or 16,000 being Europeans, or of unmixed European descent; about 70,000 of the mixed or coloured race, and the rest negroes and coolies. In 1834 there were 297,186 negro slaves, all of whom were made free in 1838, by separate acts of the legislatures of Great Britain and of Jamaica.

The Maroons were originally runaway slaves, partly from Jamaica itself, partly from Cuba, who lived in the forests on the northern side of the island. In 1738 a tract of land was granted to them in those parts, which they cultivated, and on which they built two small towns; and though a portion of them forfeited their privileges by a rebellion, others have preserved them to this day. The other inhabitants are either whites or people of colour. The people of colour are the offspring of Europeans and negro women. They are subdivided into 'mulattoes,' the offspring of a white and a black; 'samboes,' the offspring of a black and a mulatto; 'quadroons,' the offspring of a white and a mulatto; and 'mestees,' the offspring of a white and a quadroon. No traces of a native population of the island existed when it was taken by the English from the Spaniards.

Some trade in British manufactures is carried on with Mexico, Central America, New Granada, and Venezuela. Dyewoods, hardwoods, indigo, and other articles are sent to Jamaica in return. From the United States and the British North American colonies lumber and provisions are obtained. The most important commerce of Jamaica however is that with the mother-country. Ships arrive from Great Britain from October to May, and they continue to depart as they get freighted, from April to the 1st day of August, after which and until the hurricane months are over, ships and their cargoes sailing for Great Britain pay double insurance. The estimated value of the imports into Jamaica in the year 1850 was 1,287,297*l.*, being more than one-third of the value of imports into all the British West Indies for that year. The amount of the imports has considerably fallen off during the last two or three years. The estimated value of the exports from Jamaica in the year 1850 was 1,211,915*l.*; in 1852 it was 818,757*l.* The quantities of sugar, rum, cotton, coffee, pimento, and arrow-root exported in the years ending October 10th, 1851, 1852, and 1853, are shown in the following table:—

Years.	Sugar.	Rum.	Cotton.	Coffee.	Pimento.	Arrow-root.
	hhds.	punchns.	lbs.	lbs.	lbs.	lbs.
1851	40,270	18,481	5516	5,595,273	4,524,072	259,863
1852	34,449	15,703	7675	7,127,780	5,447,203	195,999
1853	29,199	10,484	2966	5,017,689	4,679,106	146,718

The financial position of the island has been for some time past in a very unsatisfactory condition. The pecuniary embarrassments of proprietors of estates, on the one hand, and the differences between the legislative and executive authorities on the other, together with the increased expenses occasioned by the visitation of cholera and its extensive ravages, have tended to paralyse the resources of the public revenue. It is expected that some measures which have been recently adopted will help to relieve the undue pressure, and stimulate agricultural improvement and general prosperity. The revenue for the year ending October 10th 1851 was 299,546*l.* 8*s.* 10*d.*; the expenditure for the same period was 282,161*l.* 8*s.* 6*d.*

Shipping.—The number of vessels registered as belonging to the island on December 31st 1853 was 84, namely:—75 under 50 tons, tonnage 1798, and 9 above 50 tons, tonnage 1054. The amount of tonnage which entered inwards during nine months, from October 5th 1850 till July 5th 1851 was 81,550; during the period from October 5th 1851 to July 5th 1852, the amount was 82,075 tons.

Religion and Education.—There is a bishop of Jamaica, whose see comprises the Bahamas and British Honduras, and includes 116 clergy, of whom about 100 hold appointments to parishes or districts in Jamaica. The see is divided into the archdeaconries of Surrey, Cornwall, and Middlesex, in Jamaica, and the archdeaconry of Bahamas or Nassau. The United Presbyterian Church of Scotland has upwards of 20 ministers and catechists, and there are ministers of the Wesleyan Methodist, Baptist, and Moravian connexions. A Theological Academy, intended for the training of natives for the office of the ministry is supported by the United Presbyterian Church. At Wallin on the north side of the island is an Endowed school, which affords a classical education to about 50 pupils. Several educational endowments in many of the parishes have suffered much from mismanagement. From returns furnished to the governor in 1853, it appears that besides Presbyterian, Baptist, and London Missionary schools, and some Church of England schools, from which returns were not received, there were then at Church of England schools 6709 scholars; at Moravian schools 3054; at Wesleyan schools 1874; at Hebrew schools 53; and at Free and other schools 1102. The amount of the grant to the Board of Education in 1851 was 2388*l.*

History and Government.—Jamaica was discovered by Christopher Columbus on his second voyage, the 3rd of May 1494, but was not settled by the Spaniards before 1510. In 1655 it was taken from the Spaniards by the English, who for some time did not appreciate its value. Since 1655 it has remained in the undisputed possession of

the British, and its internal peace has only been disturbed by the rebellion of the Maroons in 1795. Though Jamaica has had an assembly since 1663, its present constitution was only completed in 1728. The executive is in the hands of a governor, who is styled Captain-General and Governor-in-Chief, and has a salary of 5000*l.* a year. The governor, as well as the council, consisting of twelve persons, is appointed by the sovereign of Great Britain. The governor has the chief civil and military authority. The council constitutes the Upper House. The Lower House, or the Assembly, is composed of 45 members chosen by the freeholders: two members are sent from each of the 21 parishes; Spanish Town, Kingston, and Port Royal send one member each. The present governor, Sir Henry Barkly, resides at Kingston. [See SUPPLEMENT.]

JAMES RIVER. [VIRGINIA.]
 JAMES TOWN. [HELENA, ST.]
 JAMMA RIVER. [ABYSSINIA.]

JANEIRO, RIO DE (San Sebastião de Rio de Janeiro), commonly called Rio, the capital of the empire of Brazil in South America, is situated in 22° 54' S. lat., 43° 15' W. long., on the western shore of the Bay of Rio de Janeiro, which is 24 miles in length from north to south, from 4 to 15 miles wide, and, being inclosed by high hills, forms perhaps the finest, safest, and most capacious harbour in the world. The entrance to the bay is formed by two rocky and projecting tongues of land, whose extremities are hardly a mile distant from one another. On the extreme point of the eastern tongue is built the fortress of Santa Cruz, and on the western promontory are the batteries of San José and San Theodosia; to the south of the latter, at the distance of about half a mile, is the remarkable eminence called Sugar-loaf Hill, rising 900 feet from the water's edge. At no great distance from, and opposite to the entrance, but within the bay, is a low rocky island, Ilha da Lagem, on which also a fortress is built, so that the entrance of the bay is very well defended. The average depth of the entrance is 14 fathoms: good anchoring ground is found everywhere within the bay, in which the tide rises 18 feet at full and change. The bay is diversified by numerous islands and rocks, but only one of them is of considerable extent, the Ilha do Governador, situated in the northern and wider portion of the bay. Numerous rivers fall into the bay. Though all of them have a short course, most of them are navigable for a few miles from their mouth, and facilitate the transport of the produce to Rio de Janeiro. An amphitheatre of hills and mountains springing up one behind another and separated by fertile valleys which enjoy a perpetual spring and yield the choicest fruits and flowers, rises up all round the bay.

Near the entrance of the bay, and where it is only from four to eight miles wide, the town is built on its western shore, as already observed. It extends along the shore about three miles on an undulating plain, which contains a high hill with the church of Nossa Senhora da Gloria on it. To the west of the plain rises a range of high hills called Corcovado, containing many picturesque valleys, among which that of Laranjeiras, or of 'the oranges,' is distinguished by its beauty. The substance of the mass of the hills round the town is gneiss, in which numerous quarries are opened near the city. That part of the town which is south of the hill Da Gloria is very narrow, consisting only of one or two streets which extend south as far as the small bay of Botafogo. The city or principal town is built a little north of the hill Da Gloria, and on a rocky shore opposite the small island called Ilha das Cobras. A fine pier of stone projects a short distance into the bay, and is ascended by a flight of steps. It leads immediately to the Praça de San José, two sides of which square are occupied by the Imperial palace. The northern side of the square is occupied by a row of houses two stories high. The chapels of the emperor and empress in the square are splendid churches. The street called Diretta, the most crowded and business-like street in the city, abuts on the square of San José; and out of it runs the street of Ouveador, which is lined with fancy stores and with shops of French goods, and is a very busy and fashionable street. Another street near this, called Ourives, is entirely occupied by silversmiths, jewellers, and lapidaries. The city itself stands on a low level plain, and extends in the form of a rectangular oblong from north-west to south-east; on its northern border are five low hills. It consists of straight and parallel but narrow streets, intersected by many still narrower streets at right angles. A large square, called Campo de Santa Anna, which joins it on the north-west, divides the city from the Cidade Nova, or New Town, which extends westward to the neighbourhood of the royal villa of San Christovão. The museum at the corner of the Campo de Santa Anna, or Aclamação, contains fine collections of minerals and precious stones, American ornithology, and native Indian curiosities, besides many foreign curiosities, specimens of natural history, some good pictures, and a few sarcophagi.

The streets are paved, and they also have foot-pavements, which however are narrow and dirty, for the streets are hollow in the middle, serving the purpose of open drains. In time of rain the whole street is overflowed. The houses, generally built of stone and two stories high, are white-washed or rough-cast, with red-tiled roofs and projecting eaves, and without chimneys, as fires are needless in the climate of Rio. The lower story is generally a coach-house or stable. The windows of the second story reach the floor, and open upon iron

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verandahs, guarded by trellis-work shutters. The entrance is properly a large gate, which is guarded by a black slave in livery. The market-places are well supplied, but are not kept clean.

The most distinguished buildings are the cathedral and the churches De Candelaria and San Francisco de Paula. There are 39 churches in the city: some of them are splendidly decorated. The church of San Francisco de Paula, just mentioned, is one of the largest; it is lighted through stained-glass windows, and has catacombs beneath. The college, which once belonged to the Jesuits, is a fine building. An exchange in a good style has been erected. To the rear of the emperor's chapel is the public library of above 60,000 volumes. The Carcalada, or prison, in which both debtors and felons are confined, is ill regulated, dirty, and very unhealthy. The principal theatre is the Italian Opera, which is large and well arranged.

From the Corcovado Mountain (which is 2307 feet above the sea, and on the summit of which is an observatory and watch-tower) the city is supplied with good water, which rushing down the mountain is collected into the Casa de Agua, or reservoir, about 4 miles from the city. From this the water is conveyed by an aqueduct (the greatest work in Rio), which enters the city across a valley 200 yards wide, supported on two rows of arches one above another, and reaching a total height of about 90 feet. The water thus brought to the town is distributed into several fountains.

The Botanic Garden of Rio, which is admirably laid out and very rich in exotics, lies about two miles beyond a lake which is separated from the head of the bay by a narrow strip of land. It covers a space of about four acres. The tea-plant and spice-shrubs have been successfully cultivated here. In the climate of Rio the operations of nature in the seasons of spring, summer, and autumn, may be witnessed every day in the year, the bud, the bloom, and the fruit in every plantation.

Rio de Janeiro contains a population of more than 200,000. The number of whites and blacks seems to be nearly equal; the people of colour are comparatively few in number. Most of the inhabitants are engaged in the different branches of commerce. The trade of Rio is extensive, and increasing rapidly. It exports as much, if not more coffee than all the ports in the world. In 1830 the shipments of coffee amounted to 396,785 bags of 154 lbs. each; in the year ending June 30th 1843 there were shipped 1,176,138 bags (or 181,125,262 lbs.); and in the first six months of 1849 the quantity shipped was 780,764 bags. The production of sugar in this part of Brazil has been long decreasing: in 1844 about 10,000 cases (of 10 cwt. each) were exported; in the first six months of 1849 only 3048 cases were shipped. Other great articles of export from Rio are hides, rice, tobacco, rum, tapioca, ipocuanha, manioc-flour, &c. Cotton, gold, and diamonds have now almost disappeared from the list of exports. The imports comprise chiefly cotton goods; next are linen, woollen, and silk manufactures, port wine, jewellery, ironmongery, flour, meat, fish, butter, provisions, spirits, salt, earthenware, paper, &c. The value of the cotton goods (supplied almost entirely by Great Britain) is full one-third of the total value of the imports. About 1000 vessels from foreign ports arrive in the harbour yearly. The railway lately opened from a point of the bay opposite Rio to Petropolis is likely to increase the export trade of Rio.

There are several manufactories, sugar-houses, tanneries, cotton-factories, rum-distilleries, and train-oil factories. Several persons are occupied with cutting diamonds and other precious stones. Charitable institutions are scanty in proportion to the population. There is an academy of arts, a military academy, and several other educational establishments.

A more efficient police, and the abolition of the slave trade, have of late years rendered Rio less unhealthy than it used to be. The harbour is a stopping-place for foreign men-of-war and for merchantmen trading to the Pacific. The neat village of Praya Grande on the eastern shore of the bay, opposite Rio, is a place of great resort with the citizens; it contains several potteries, and is famous for its sweetmeats. White châteaux, numerous country-houses, and two or three large convents are seen high up on the hills and rocks to the northward.

(Casal, *Cronographa Brasílica*; Henderson, *History of Brasil*; Spix and Martius; M'Culloch; *Three Years in the Pacific*.) [See SUPP.]

JAN-MAYEN ISLAND is an island in the Arctic Sea, lying between 70° 49' and 71° 9' N. lat., 7° 28' and 8° 44' W. long. It extends from south-west to north-east about thirty miles, and is in no place above nine miles in breadth; at some places it is less than two miles wide. On the northern extremity, where the island is widest, stands Beeren Mountain, a snowy peak flanked with glaciers, and rising to 6870 feet above the sea-level. In other parts the rocky masses appear to attain an elevation of between 1500 and 2000 feet. A large portion of the island is composed of lava and other volcanic matter, and two craters have been discovered on the eastern side; smoke and fire have been observed in these parts. Even in the beginning of August all the high lands are found covered with snow and ice, and the lowlands retain part of their covering to the very border of the sea. The coast has several roadsteads with good anchorage in five to ten fathoms water, but no harbour. The whole island is generally surrounded with ice in spring; but in autumn, and even in summer, the ice sometimes sets so far to the westward that it is not visible from any part of the land.

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There are foxes and white bears. Water-fowl are numerous, especially burgomasters, fulmars, puffins, guillemots, little auks, kittywakes, and terns. Cetaceous animals abound. The vegetation is very scanty, and limited to a few species scattered widely about among the volcanic minerals. Iron has been observed at several places.

The island was discovered in 1611 by a Dutch navigator called Jan Mayen, and was much visited up to about 1640 on account of the great number of whales, which however afterwards retreated to other parts of the Arctic Sea. In 1633-1634 seven Dutch seamen wintered here, probably for the purpose of establishing a permanent colony, and they kept a regular journal; but on the arrival of the Dutch fleet in the following June all were found dead in their huts from scurvy. Their journal terminated on the 31st of April.

(Scoresby, *Account of the Arctic Regions*.)

JAPAN is an empire in Asia, which consists of an unknown number of islands of different dimensions. These islands may be considered as constituting the western boundary of the Pacific, between 31° and 45° N. lat.; but the Japanese settlements on the island Tshoka, or Tarakai, better known by the name of Sakhalia, seem to extend as far north as 47° or 48° N. lat. Between these islands and the continent of Asia is a closed sea, called the Sea of Japan, which at its southern extremity is united to the Tong-Hai, or Eastern Sea of the Chinese, by the Strait of Corea, and at its northern with the Sea of Okhotak, or Tarakai, by the strait which divides the island of Tarakai from Manchuria. The Sea of Japan is united to the Pacific by several straits, which divide the Japanese Islands from one another. The most remarkable is the Strait of Sangar between the large islands of Nipon and Yeso. Japan is situated between 129° and 150° E. long. It is divided into Japan proper and the dependant islands.

Japan proper consists of three large islands, Kioosioo, Sitkokf, and Nipon, or Nifon, which are surrounded by a great number of smaller islands. Kioosioo, the most western, may be about 200 miles long, with an average breadth of 80 miles, which would give it a surface of 16,000 miles. On its western coast are two deep bays, that of Simabara, in the middle, which is by far the largest, and that of Omooora, north of it: at its southern extremity is the Bay of Kangosima. Kioosioo is separated from Sitkokf by the Boongo Channel, and from Nipon by the Suwo Sound and the Strait of Simonosaki. Sitkokf may be 150 miles long, with an average breadth of 70 miles; it probably contains more than 10,000 square miles. The long strait which divides it from Nipon on the north is in some places hardly more than a mile wide; but about the middle a large bay enters deeply into the island of Sitkokf. The eastern extremity of this island is separated from Nipon by the Kino Channel and the Bay of Osacca, which contains the island of Avasi. Nipon, the largest and the principal of the Japanese Islands, has a curved form. Its length, measured along the middle of the island, exceeds 900 miles, and its average width may be estimated at more than 100 miles; its surface may therefore cover an area of about 100,000 square miles. Its largest bays are along the southern coast, as Osacca Bay, Mia Bay, and Yedo Bay.

The dependant countries are the large island of Yeso, with some of the Kurile Islands and the southern districts of Tarakai. Yeso has a very irregular form. Its length, from south-west to north-east, is about 300 miles, and its average width does not fall short of 100 miles. This gives a surface of 30,000 square miles. Only the two southernmost of the larger Kurile Islands, Kunashir and Uturup, are occupied by the Japanese: the others belong to the Russian empire. The island of Tarakai, whose southern portion is called Tahoka, is divided from Yeso by the Strait of Perousa. It is certain that the Japanese have formed some settlements here, but it is not known how far they extend northward. According to this rough estimate, and excluding the settlements on the island of Tarakai, the Japanese empire contains about 160,000 square miles. According to some statements however the area of the Japanese empire is carried much higher, so as to make a total of above 260,000 square miles. Nor of the population is there any certain knowledge, some estimating it at about 25 millions, and others carrying it to double that amount.

All these islands are very imperfectly known: not even the coasts are laid down with any degree of correctness. This arises partly from natural and partly from political causes. Nearly all the coasts are very difficult of access, being surrounded by numerous rocks and islands, and by a very shallow sea. This latter circumstance accounts for the smallness of all Japanese vessels, and their unfitness to keep the open sea in a gale. They can only be employed in the coasting trade. The sea, besides containing numerous rocks, has some very dangerous whirlpools, two of which especially have been noticed by navigators, one near the island of Amakoosa, at the entrance of the Bay of Simabara, and the other near the southern extremity of Nipon, between the bays of Osacca and of Mia. To this must be added, that no part of the ocean is subject to heavier gales than the sea which surrounds Japan: they frequently blow with the fury of hurricanes. The government also and the laws of the Japanese are less favourable to intercourse with foreigners than those of any other country on the globe. If foreigners who arrive at the ports, after a delay of many days and even weeks, are at last permitted to set foot on shore, a small spot of ground is assigned to them, which has

previously been inclosed with strong palisades. The Dutch alone are permitted to trade in the harbour of Nagasaki, and are obliged to send annually an embassy to Yedo, which gives them an opportunity of examining, though very imperfectly, the southern coast of Nipon between Simonosaki and Yedo. But by the treaties recently concluded by the emperor of Japan with Russia and the United States of America, several ports are to be opened to foreign traders in the course of three years. Meanwhile all our knowledge of the country is derived from the accounts of the Dutch.

Some of these travellers assert that the whole surface of the islands is only a succession of mountains, hills, and valleys; but Kämpfer expressly says that he passed through several plains of considerable extent, as that which runs from the town of Osacca to Meaco, a distance of about twenty miles, and a similar plain west of Yedo, and extending to that town. A large plain occurs also along the northern shores of the Bay of Mia, and numerous smaller plains are noticed by Kämpfer. But generally the hills run down close to the sea, or leave only a narrow strip of level ground between them and the sea-shore. Though Japan is doubtless a very hilly country, it can hardly be said to be mountainous, as by far the greatest number of the eminences are cultivated to the very top, and those few which are not cultivated are left in their natural state on account of the sterility of the soil. The Dutch have observed only one single peak of great elevation, the Fudai Jamma, not far from the Bay of Tomina, west of the Bay of Yedo. They compare it in shape with the Peak of Teneriffe, and observe that the snow seldom melts on its top. According to the accounts of navigators however, it would seem that the northern part of Nipon is traversed by a continuous chain of mountains with several peaks. Volcanoes, some active, some extinct, are numerous; to the latter class the Fudai Jamma seems to belong. Some active volcanoes occur on the islands scattered in the Strait of Corea, as the Sulphur Island, noticed by Captain B. Hall.

From the peculiar form of these islands it may be presumed that they have no large rivers; and the rapidity with which they run down shows that the country in the interior rises to a considerable height. Many of them are so rapid that no bridges can be built over them, and they are not passed without danger. Several others are less rapid, and though they cannot be navigated, timber and wood are floated down them. A considerable number however seem to be navigable for small river-boats to a distance of some miles from the sea. The most considerable and important of those which are known is the river Yedogawa, in Nipon, which rises in the lake of Oita, a sheet of water 60 miles in length, but of inconsiderable width. After leaving this lake it traverses the fine plain which extends from its shores to the harbour of Osacca, and in all this course it is navigated by river barges.

The southern part of the empire about Nagasaki (the only part of which we have a meteorological account) seems to resemble in many points the climate of England. In winter it does not freeze and snow every year, though this is generally the case: the frost and snow, when there is any, last only a few days. In January the thermometer descends at Nagasaki in mild winters to 35° Fahr.; in August it rises to 98°. The heat would consequently be great but for the refreshing breeze which blows during the day from the south, and during the night from the east. The weather is extremely changeable, and rains are abundant all the year round; but they are more heavy and frequent during the 'satkasi,' or rainy season, which occurs in June and July. Storms and hurricanes seem to occur frequently. Thunder-storms and earthquakes are also common. It is observed that water-spouts are nowhere of such frequent occurrence as in the seas inclosing Japan.

In no part of the world is agriculture carried to a higher degree of perfection than in Japan. All the declivities of the hills to the top, except those which are too steep, are formed into terraces or beds of different width, according to the slope, and these terraces are cultivated with the utmost care. Here, as in China, the greatest attention is paid to the collection of manure. The raising of rice is the principal object, but wheat, barley, and rye are also cultivated. As the Japanese use no butter nor tallow, they cultivate numerous oleaginous plants, from which they obtain oil for dressing victuals and for their lamps. The seeds of panic, millet, and dog's-tail grass (*Cynosurus Coracanus*) are much used as food for man and beast. Of esculent roots chiefly batatas and potatoes are raised. Other vegetables are turnips, cabbages, carrots, radishes, lettuces, melons, pumpkins, cucumbers, and gourds. Different kinds of beans and peas are raised in astonishing abundance, and several provinces have obtained a name from producing them in superior quality. Among the beans are the daidsu beans (*Dolichos Soja*), from which the Japanese make the liquid which is known in England under the name of Soy. The plantations of the tea shrub are extensive in some districts, but their produce is inferior to that of China, and does not constitute an article for exportation. Ginger is cultivated, and the pepper shrub is planted for the consumption of the country. The orchards are stocked with the fruit-trees of southern Europe, as oranges, lemons, medlars, figs, grapes, pomegranates; and they produce also chestnuts, walnuts, pears, peaches, and cherries. The raising of cotton and silk are objects of great importance, and the paper mulberry is planted extensively, its bark being used for making cloth and paper. Hemp is also much

cultivated, but only employed in making cloth; the cordage is made from different kinds of nettles. Besides the different trees mentioned they plant the varnish-tree (from which they make excellent varnish for furniture), the cedar, the bamboo-cane, and the camphor-tree, though all these trees are also found in a wild state. They extract a blue dye-stuff as a substitute for indigo from several kinds of polygonum.

The horses are of a middling size, but strong. The number is small, as horses are used only for the saddle and by the princes. Horned cattle are still less numerous. The Japanese do not use either their flesh or their milk, and they are kept only for drawing carts or for ploughing such fields as lie almost constantly under water. Buffaloes are found only in some districts. Sheep and goats are not kept. Swine are found only at Nagasaki, where they have probably been introduced by the Chinese, as the Japanese do not eat them. Fowls, ducks, and geese are plentiful, but principally valued for their eggs, of which the Japanese are very fond. Of wild animals hares, deer, bears, and other animals are met with. Fish is extremely plentiful, and numerous villages are inhabited by fishermen only. Their rocky coasts are covered with oysters and several other kinds of shell-fish, and many families live exclusively on them. Even the flesh of the whale, of which some kinds are rather numerous along these coasts, is eaten.

Japan abounds in mineral wealth. Gold seems to be very plentiful in several provinces, but is not worked everywhere. The government seems to use corrective means to prevent such undertakings. Silver is not abundant; but copper, which contains a good deal of gold, is extensively worked, and supplies the most important article of export. Iron is said not to be common, but still there is enough for the consumption of the country. Some tin-mines are also stated to be worked. Salt in great quantity is made in several districts along the southern coast, where there exist salt-lagunes. Of other minerals only fine clay is mentioned, which is used in the manufacture of china; the porcelain is equal, if not superior, to that of China. The sea gives pearls and ambergris.

All travellers speak of the populousness of the country and the extent of the villages, which frequently occupy two English miles and more in length. In some more fertile districts they are so close to one another as to form nearly one continuous street; as, for instance, in the plain which extends from the harbour of Osacca to Meaco. The smaller towns commonly contain five hundred houses, and the larger two thousand and upwards, and though they have generally only two stories they are occupied by a comparatively large number of persons.

I. The Island of Kioosioo is extremely well cultivated, and generally fertile, with the exception of its eastern coast bordering on the Boongo Channel, which is mountainous, barren, and, comparatively speaking, thinly inhabited. In several places there are considerable manufactures of cotton-cloth, silk goods, and paper. The best known towns of importance are Nagasaki, Sanga, and Kokoora.

Nagasaki, the only place as yet open to foreigners, lies on a peninsula formed by the deep bay of Omcoora, in 32° 45' N. lat., 129° 51' E. long. Its harbour is spacious and deep, extending in length about four miles, with an average width of more than a mile. At its entrance is the small island of Popenberg, where the water is 22 fathoms deep, but it grows shallower as it proceeds inward, so that opposite to the town it has only a depth of 4 fathoms; so far it runs north-east, it then turns north, and has less depth. The town is built on its eastern shores, in a narrow valley which runs eastward, and on the inclining slopes. It is well-built and clean. The houses generally are only one story high, timber framed, the interstices being filled with clay, and the whole coated with cement. Each house is furnished with verandahs; oiled silk is used for glass. There are some good buildings in the town, as the palaces of the two governors, and those of some princes and noblemen of the empire, but especially the temples (above 60 in number), within and without the town. There are some manufactures of gold and silver. The population is variously estimated; some make it amount to 18,000, others to 60,000. Nagasaki is one of the five imperial towns of the empire.

Sanga, situated on a fine and well-watered plain at the northern extremity of the large bay of Simabarra, the capital of the fertile province of Fisen, is a very large and populous town, with canals and rivers running through its wide and regular streets. It has considerable porcelain manufactures. Sanga is fortified; it is 60 miles N.E. from Nagasaki.

Kokoora, built near the entrance of the Strait of Simonoski, has a shallow harbour, but carries on a considerable trade. The town was found in a thriving state in 1775 when visited by Thunberg.

II. The Island of Sitkoff has not been visited by Europeans. According to a Japanese geographer, cited by Kämpfer, it contains many mountainous and barren districts, and less fertile tracts than the other large islands.

III. Nipon, or Nifon, which constitutes the main part of the Japanese empire, is stated to be well cultivated and fertile, with the exception of a few barren tracts of moderate extent. It contains the largest towns, and the manufactured articles produced in this island are considered the best. The most important towns visited by Europeans, along its southern side, are:—

Simonoski, built at the foot of a mountain, on the shore of the narrow strait which bears its name, and which is only one mile and a half wide. It is not very large, but it carries on a very active coasting trade with all the districts to the east of it.

Osacca, one of the five imperial towns, and the most commercial place in the empire, is situated in the northern angle of the Gulf of Osacca, on the banks of the river Yedogawa, which, near the town, divides into three branches, and, before it falls into the sea, into several more. The middle or principal branch of the river, though narrow, is deep and navigable. From its mouths, as far up as the town and higher, there are seldom less than a thousand barges going up and down. Several navigable canals, which derive their water from the river, traverse the principal streets of the town, and serve as means for conveyance of goods. The banks of the river and of the canals are of freestone, coarsely hewn, and formed into ten or more steps, so as to resemble one continued staircase. Numerous bridges, built of cedar-wood, are laid over the rivers and canals; some of them are of large dimensions, and beautifully ornamented. The streets are narrow but regular, and intersect at right angles; though not paved, they are very clean. A narrow pavement of flat stones runs along the houses for the convenience of foot-passengers. The houses are not above two stories high, and are built of wood, lime, and clay. At the north-eastern extremity of the city is a large castle. The population is very great. According to the exaggerated accounts of the Japanese an army of 80,000 men may be raised from among its inhabitants. Many of the residents are very wealthy men, especially the merchants, artists, and manufacturers. The Japanese themselves call Osacca the universal theatre of pleasure and diversion; and plays are daily exhibited in public and private houses. In its neighbourhood the best saki, a kind of strong beer obtained from rice, is made, and exported into the other provinces.

South of Osacca, on the shores of the same gulf, is the town of *Sakas*, an imperial town, which however has never been visited by Europeans.

Meaco, or *Kio*, the residence of the ecclesiastical emperor, or Dairi, is about 20 miles N. from Osacca, and contains more than 500,000 inhabitants, besides the numerous court of the Dairi. It stands in a plain surrounded by mountains, the slopes of which are laid out in gardens and dotted with temples. The city is nearly four miles long and three miles wide. The Dairi resides on the northern side of the city, in a particular ward, consisting of 12 or 13 streets, and separated from the city by walls and ditches. On the western part of the town is a strong castle, built of freestone, where the Kubo, or secular emperor, resides when he comes to visit the Dairi. The streets are narrow, but regular, and always greatly crowded. The houses are like those at Osacca. Meaco is the principal manufacturing town of the empire: here every kind of manufacture is carried to great perfection. Nearly every house has a shop, and the quantity of goods which they contain is astonishing. At the same time Meaco is the centre of science and literature, and the principal place where books are printed; it is also the residence of the lord-chief-justice of the empire, who is invested by the emperor with supreme authority over all officers of government. The town is united by a wide canal to the river Yedogawa, which flows not far from its walls.

Kvano and *Mia* are two very considerable and thriving towns on the Gulf of Mia, each containing 2000 or 3000 houses, and carrying on a considerable trade with the neighbouring districts.

Yedo, *Yeddo*, or *Jeddo*, the capital of the empire, is situated at the northern extremity of the gulf of the same name, in an extensive plain. According to the Japanese it is about 10 miles long, 7 miles wide, and is nearly 30 miles in circuit. All travellers agree that it is the largest and most populous town in the empire, but none of them venture to state the probable number of its inhabitants. The population is stated by some to be only 700,000, by others it is carried to 1,200,000; but it is clear from what has been already stated that nothing certain is known by foreigners on this subject. A large river runs through the town and sends off a considerable arm, which incloses the Imperial palace, that of the Kubo, or secular emperor. There are several good bridges over the river. The principal is called Niponbas, or the Bridge of Japan, and from it the mile-stones are counted, which are erected along the principal roads that traverse the empire. Yedo is not so regularly built as Meaco, and the private houses are constructed like those of Osacca; but as the families of all the hereditary princes, lords, and noblemen are obliged to reside at the court the whole year round, the town contains a great number of fine palaces, though they are not above one story high. Rows of trees are planted along the numerous canals which traverse the town, to prevent the fires from spreading, which are very common. Yedo is not less famous for its manufactured goods than Meaco. The palace of the Kubo is built in the middle of the town. It consists of five palaces or castles, and some large gardens behind it, and is more than 8 miles in circumference.

IV. The Island of Yeso is very imperfectly known. On its western coast are high mountains which rise at several parts into high peaks. The island contains many extinct and active volcanoes. Its eastern and southern coasts seem to be very thickly inhabited. The southern extremity of the island presents a deeply indented peninsula, the narrowest part of which, between Volcano Bay on the south coast,

and Soukhtelen Bay on the west coast, is only 20 miles wide; but the actual isthmus which joins the peninsular part to the main body of the island between Strogonor Bay on the west, and the head of Edermo Bay on the south, is 35 miles across. The northern part of Yesso is said to be very fertile, its products comprising wheat, rice, hemp, tobacco, and fruits. Timber is abundant. Dried fish are exchanged with the Japanese for clothing. Near the Strait of Sangar are two considerable towns, Kokodade and Matsmai. The latter is the capital, and the residence of the governor. Yesso was occupied by the Japanese in consequence of the encroachments of Russia in the Kurile Islands. Its inhabitants retain their own religion and laws; their officers are chosen subject to approval by the emperor.

The Japanese are not so strong as Europeans; but they are well made and have stout limbs. They are of Mongol origin, and seem to have derived their civilisation from China. In manufacturing industry and in scientific knowledge they seem to be equal to the Chinese, and in some articles the Japanese are superior. Their manufactures in metals, silk, cotton, china, glass, paper, lacerated ware, and cabinet-work are highly esteemed. They also make excellent watches and clocks, telescopes, and thermometers. The fine arts are much admired, but the Japanese taste differs from ours, and is like that of the Chinese. The most ancient religion is that of the Sinto, who was the offspring of the sun, the founder of the ancient royal family and of the empire. But the greater part of the inhabitants have embraced Buddhism, which seems to have been introduced from Corea at a very remote epoch. Besides these two religions, a considerable number adhere to the doctrines of Confucius, the Chinese philosopher, and are called Syooto. In the 17th century the Roman Catholic religion was introduced by the Portuguese, and made great progress, but it was eradicated by a civil war and great persecutions, and entirely forbidden. All travellers who have been acquainted with both nations prefer the Japanese to the Chinese. They find them of a more manly and open character. The Japanese show a great desire for knowledge, and their institutions for instructing the lower classes seem to be not inferior to any on the globe. Indigence and pauperism are said to be almost unknown.

The government is despotic, but the emperor himself is considered as subject to the laws, which are of long standing, and cannot easily be changed. Formerly, the Dairi Soma, the head of the Sinto religion, was the only sovereign of the empire; but as the public offices are hereditary, the chief general (or siogun) acquired gradually such an authority, that in 1535 he deprived the Dairi of his influence, leaving him only the supreme administration of ecclesiastical affairs; still however no enactment has legal force without having been previously sanctioned by the signature of the Dairi. The descendants of the chief general now govern the empire under the title of Kubo Soma. The constitution of the Japanese empire is materially different from that of the Chinese in its hereditary nobility, dignitaries, and officers. The government of the provinces resembles in some respect the ancient feudal system of Europe. The nobility, or hereditary governors of the provinces and districts are called Daimio (High-named), and hold their offices from the Dairi emperor, and Saimio (Well-named), who derive their authority from the military emperor. The first-mentioned govern the provinces, and the Saimio govern the districts. Six months of the year these noblemen are in their provinces to watch over their government, and six others they must pass at Yedo, but their families must remain in that town the whole year round as a security for the loyal conduct of the governors. According to Meylan, the population of the country is divided into eight classes—the princes or governors, the nobility, priests, military, civil officers, merchants, artisans, and labourers. All these dignities, offices, and employments are hereditary.

The Japanese females have almost as much liberty as European females; most of them can play on a musical instrument which is like a guitar.

The inland trade is very considerable. The coasting trade is much favoured by the great number of small harbours, and the interior communication by well-planned and well-maintained roads, which are always thronged with carriages and people. Most of the roads are wide, and ornamented with lines of trees. The foreign commerce is limited to the Dutch and Chinese. The Dutch have a factory on the island of Desima, which is connected with the town of Nagasaki by a bridge. To prevent all communication with the inhabitants it is planked on all sides, and has only two gates, one towards the town and the other towards the harbour. These gates are strictly guarded during the day, and locked at night. In this inclosure are the store-houses, the hospital, and some houses built of wood and clay, and covered with tiles. The Japanese export principally copper, camphor, and lacquered wood-work; with some china, silk-stuffs, rice, saki, and soy. The principal articles of importation are sugar, elephants'-tusks, tin and lead, bar-iron, fine chintzes, Dutch cloths, shalloons, silks, cloves, and tortoiseshell; with some saffron, treacle, Spanish liquorice, watches, spectacles, and looking-glasses. The Japanese copper does not reach the European market, being disposed of on the coast of Coromandel to great advantage.

The Chinese, like the Dutch, are shut up in a small island, but they are permitted to visit a temple in the town of Nagasaki; their trade is much more extensive. About seventy junks arrive annually from

the ports of Amoy, Ningpo, and Shanghai; but as the Chinese have no factory they cannot remain during the winter in the harbour of Nagasaki. The Chinese junks arrive at three different times in summer. [See SUPPLEMENT.]

(*Ambassades Memorables, &c.*, by Jacob van Meurs; Kämpfer, *History of Japan*; Charlevoix, *Histoire et Description Générale du Japon*; Thunberg, *Travels in Europe, Africa, and Asia*; *Adventures of Captain Golownin*; Siebold, *Japan*; *Journal of Education*, vols. vi., x.)

JAROSLAV. [YAROSLAW.]

JARROW. [DURHAM.]

JASSY. [MOLDAVIA.]

JAVA, one of the Greater Sunda Islands, the third in extent, but the first in importance, is situated between 5° 52' and 8° 4' S. lat., 105° 11' and 114° 13' E. long. The Java Sea and the Indian Ocean form respectively the northern and southern boundaries of the island; and their connecting straits, Sunda and Bali, respectively separate Java from Sumatra on the west and from Bali on the east. The Strait of Sunda, where narrowest, is only 14 miles across, and the Strait of Bali only 2 miles. The length of Java from Java Head on the west to East Point (Oost Hoek) is 666 miles; its breadth varies from 56 to 135 miles. The area is about 50,000 square miles; including the adjacent island of Madura and some smaller dependencies, the area is stated officially to be 51,728 square miles. The population in November 1849 was estimated at 9,560,380. Those of European descent do not exceed 20,000.

The island of Madura lies to the north-east of Java, from which it is divided by the Strait of Madura, which in one part is only between 80 and 90 fathoms broad. Madura is 91 miles long, and 31 miles wide in the widest part. The area is about 1300 square miles, and the population about 300,000. It is in parts mountainous and covered with forests; the soil is moderately fertile, the chief products being cotton, cocones, and ornamental woods. The island is nominally subject to a sultan, who resides in Bankhalan, near the west coast. The principal town however is Sumanap, on the east coast. There is another town, Pamakasan, near the south coast.

Surface and Soil.—The southern coast of Java in its whole extent is high and steep, rising in many places perpendicularly to an elevation of 80 or 100 feet, and in some places much higher. It runs in a continuous line, with few indentations, and those not deep. Still a few good harbours occur; the best are Chelachap, about 109° E. long., and Pachitan, about 111° E. long.

The hilly country which is contiguous to the southern coast rises rapidly towards the interior, where it attains a mean elevation of more than 1000 feet, and extends in elevated undulating plains. This elevated region is traversed by numerous ridges of hills, probably rising to 2000 or 2500 feet above the sea-level, running mostly in the direction of the island's length, and crowned in many places with conical peaks. It is stated that there are 38 of these peaks. They are all volcanic. Indications and products of their former eruptions are numerous and unequivocal. The craters of several are completely obliterated; those of others contain small apertures which continually discharge vapours and smoke. Many of them have had eruptions during the present century.

The highest and most remarkable of these volcanic peaks are the Pangerango, south of Buitenzorg, more than 8000 feet high; Mount Gede, south-east of the former, rising to 9388 feet; the Dahirmai, south-south-west of Cheribon, more than 8000 feet high; the Gede Tegal, near 109° E. long., 10,650 feet; and Mounts Sindoro and Sumbing, called the Two Brothers, near 110° E. long. Three large volcanoes, called Ung'arang, Merbidu, and Merápá, lie in a direction almost south and north across the hilly region near 110° 30' E. long. Near the eastern peninsula is the Arjuna, 10,614 feet high, and south-east of it, not far from the Indian Ocean, the Smeero, or Semiru, probably the most elevated of these peaks. At the north-eastern extremity of the island near Cape Sedano is the elevated volcano of Telágawurung.

The hilly region contains some extensive plains and valleys of great fertility, inclosed by the ridges of hills which connect the peaks. The largest of these elevated plains is that of Bandung, which seems to occupy nearly the whole tract from Mount Gede on the west to Mount Gede Tegal on the east. It is of great fertility, though somewhat inferior to the two valleys which lie contiguous to it on the east—the Vale of Banyumas, traversed by the beautiful river of Serayu, and the Vale of Kediri, on the banks of the river Elo. East of the last-mentioned vale is the elevated plain of Solo, which extends round the town of Sura-kerta, and exhibits a great degree of fertility. The elevated plain of Kediri, traversed by 112° E. long., is equally extensive and fertile. The eastern peninsula, whose surface is mostly occupied by peaks and high ridges connecting them, has only narrow and close valleys.

The elevated and hilly region terminates to the north in rather a steep slope, and between it and the Java Sea extends a flat country which descends imperceptibly from the foot of the hills to the very shores, where it terminates in some places in swamps. This low tract, which is mostly alluvial, is widest towards the west, where it is about 40 miles wide between Bantam and Cheribon. Between Cheribon and Samárang it is hardly more than 10 miles wide. This portion of the low lands is not equal in fertility to the inland districts. In Samárang are the flats of Demák, which extend between the elevated

region and the mountains of Japára; they were once an extensive swamp, and are hardly inferior in fertility to any part of the island. East of these flats and between the same mountains are the low lands of Jipang and Surabáya, which terminate on the strait and gulf of Madura with the delta of the Surabáya River; the delta is also distinguished by its fertility. The low lands of Demák, Jipang, and Surabáya divide the mountains of Japára and some lower ridges from the elevated regions. The mountains of Japára, which contain a peak of considerable elevation, occupy the peninsula of Japára, on which the low coast-tract is very narrow. This isolated mountain system is separated by a deep valley, covered with alluvial soil, from a low ridge which occupies the whole tract of the coast between Cape Lerang and Cape Panha, and perhaps 10 or 15 miles inland.

The northern coast is lined by numerous small islands, and is marked by many projecting points and headlands. Accordingly the harbours are numerous. But the whole coast line affords anchorage at nearly all seasons of the year, and vessels of any burden can approach all the principal stations at a convenient distance for the exchange of their merchandise. The sea being generally smooth and the weather moderate, the native vessels and small craft always find sufficient shelter at the change of the monsoon by running under some island, or passing up the rivers, which though in general difficult of entrance on account of their bars, are for the most part navigable for such vessels as far up as the maritime towns.

The soil of Java is generally deep and rich. The best soils are the alluvial soils along the beds of the rivers, and on the slopes of the largest mountains; the worst are on the declivities of the lower ranges. But though there are these varieties, the general character of the soil is that of extraordinary fertility. The eastern districts however are superior to the western. The neighbouring countries, especially Sumatra and the Malayan peninsula, cannot be compared with Java in this respect. The best soils annually produce two crops without manure, and even the poorest remunerate the labour of the husbandman.

Rivers.—Java is watered by numerous rivers, but few of them have a considerable course, on account of the comparative narrowness of the island. There may probably be fifty streams, which in the wet season bear down rafts loaded with timber and other rough produce of the country. Five or six are navigable at all times to a distance of some miles from the coast. The rest, in number many hundreds, if not thousands, are used to irrigate the fields.

The *Solo* rises with many branches near the southern coast in the mountains of Damong, and runs northward to Sura-kerta, where it is a stream of considerable depth and breadth; it afterwards turns to the east, and at Awi it is joined by the Madion. From this point to its mouth its course is regular and steady. It enters the Strait of Madura by two mouths at Gresek and Sidayu. From Sura-kerta to Gresek it is stated to run 356 miles, measured along the windings of the river, though in a straight line the distance is only 140 miles. In this part of its course there is no impediment to navigation. During the rainy season it is navigated by boats of considerable size, and, except in the height of the dry season, it floats down boats of middling size from a considerable distance above Sura-kerta.

The *Kediri*, or *Surabáya*, forms nearly a circle, and its source and mouth are situated almost in the same latitude. It rises at the base of the volcano Arjuna, winds round Mount Kawi, and is a large river at Kediri. From this place its course is no longer interrupted by any impediment, and it bears boats of a very considerable size to its outlets in the Strait of Madura. Its mouths are five in number, and they include a pretty extensive and very fertile delta.

There are no lakes in Java, but some low lands are converted into temporary swamps during the rains. Two of these swamps are of considerable extent; one, called the Binnen See, is at the foot of the Japára Mountains, and the other is not far from Samárang.

Climate.—In Java, as in other countries between the tropics, the year is divided into a wet and a dry season, and these seasons depend on the periodical winds. The westerly winds, which are always attended with rain, commence in October, become more steady in November and December, and gradually abate, till in March or April they are succeeded by the easterly winds and fair weather, which continue for the remaining half year. The heaviest rains fall in December and January, and the driest weather is in July and August. During the rainy season there are many days without showers; and in July and August the atmosphere is refreshed by occasional showers. The degree of heat varies considerably in the low lands and the hilly region. On the low northern shores at Batavia, Samárang, and Surabáya, the mean annual heat is 78°; but in the dry season the thermometer rises above 90°. The elevation of the interior offers the rare advantage that, from the sea-shore to the top of the mountains, there is almost from one end of the island to the other a regular diminution of temperature, at the rate of two or three degrees of Fahrenheit for every ten miles. The mean temperature on the elevated plains probably does not exceed 66° or 68°, and the thermometer rarely rises there to 72°. On the summits of the peaks it sinks below the freezing-point: ice as thick as a Spanish dollar has been found, and hoar-frost, called by the natives 'the poisonous dew,' has been observed on the trees and vegetation of the higher regions.

Hurricanes are unknown. With the exception of a few days at the change of the monsoons, or when the westerly winds are at their height, vessels of any description may ride with safety in most of the bays along the northern coast; and on shore the wind is never so violent as to do damage. Thunder-storms are frequent and destructive. Earthquakes are common in the vicinity of the volcanoes. Java was formerly considered one of the most unhealthy countries of the globe, and this character is certainly due to the greatest portion of the low coast along the Java Sea; but by far the greatest part of the island, in point of salubrity, is equal, if not superior, to any other tropical country.

Productions; Vegetables.—The Javanese cultivate rice and other grains on the slopes of the mountains and hills, which are formed into terraces. They practise irrigation, and in some parts they grow in the wet season a crop of rice, and in the dry season some pulse, farinaceous roots, or cotton. In the richer lands however, it is usual to take from them without interruption a double harvest during every twelve months. Rice is here, as in India, the principal object of the husbandman, and its produce determines the value of the land. Maize also is grown, yielding in rich lands four or five hundred-fold; and even in poor lands it yields sixty- or seventy-fold. Wheat has been introduced by the Dutch, and is cultivated on the more elevated lands, but its produce is in small quantity and of inferior quality. Millet is grown in some places on a limited scale. Among the many esculent roots cultivated the principal are the yam, the sweet potato, the Java potato, arrow-root, and the common potato. The last is only grown in the more elevated and colder districts, where also artichokes, cabbages, and peas succeed, but carrots not so well. The Javanese also cultivate cucumbers, onions, and capicums. As they do not use butter they consume a great quantity of different kinds of oil, made from the fruit of the cocoa-nut tree, the ground-nut, the *Palma Christi*, and the sesamum, all of which are cultivated with considerable care. They also plant the areca palm, on account of its nuts, and the Gomuto palm, partly on account of the toddy, or palm-wine, obtained from it, and partly on account of a fibrous substance resembling black horse-hair, which forms between the trunk and branches, and is used for making cordage. There are also extensive plantations of the betel and of tobacco. Among the fruit-trees are the plantain or banana, the bread-fruit tree, the mangustin, the durian, the mango, the shaddock, the pine-apple, the guava, the papaya, the custard-apple, the cashew-nut, &c. Besides these the pomegranate and the tamarind are grown. European fruit-trees have not succeeded: the grape is cultivated in several places, but it is seldom of a good quality.

The plants which afford articles for foreign exportation are the coffee-tree, the sugar-cane, the pepper-vine, the cardamom, the ginger, the sandal-tree, and the cotton-plant. Java is the greatest coffee exporting country in the world next to Brazil. The cultivation of cinnamon has greatly extended since 1839; 3000 bales of it were exported in 1852. The forests, which cover a part of the elevated region, contain a great number of teak-trees. Ebony-wood is also found; and among their creeping plants are the rattan and two species of caoutchouc-trees. The mulberry thrives, and silk-worms have been introduced. As dye-stuffs there are cultivated indigo, safflower, arnotto, and turmeric. Several fruit-trees produce dye-woods, as the sappan, the mangkuda, and the ubar, similar to the logwood of Honduras.

There are two trees in this island from which poison is extracted, the antjar and the chetik. The antjar, also called the bopon upas (or the poisonous tree), is a high forest-tree, from whose outer bark poison is extracted in the form of a milk-white sap. But its exhalations are not poisonous, nor is it, as was formerly supposed, hurtful to plants around it, creepers and parasitical plants being found winding in abundance about its trunks and branches.

Animals.—Under this head are horses of small breed, but strong, fleet, and well made; buffaloes, which are very numerous, and used in agriculture; and black cattle. Goats are abundant, but sheep are scarce; both are of small size. The hog is reared chiefly by the Chinese. Among beasts of prey are the tiger, the leopard, the tiger-cat, and the jackal. Other wild animals are the rhinoceros, the wild Java ox, the wild hog, and the stag or axis deer. Of domestic birds there are turkeys, geese, ducks, fowls, and pigeons. Among the wild birds the most remarkable is the *Hirundo eculeuta*, whose nests are edible, and exported in large quantities to the Chinese market. They are called Salanga-nests. Crocodiles, turtles, and fish abound in the rivers. Of serpents there are said to be several poisonous varieties. Honey and wax are obtained.

Minerals.—Few minerals are known to exist in Java. Iron is said to be found in small quantity, and indications of gold have been observed at several places. Salt is made of sea-water in some parts of the northern coast. Saltpetre is extracted from the earth of some caves, and sulphur is found near the volcanoes.

Political Divisions, Towns, &c.—The greatest part of the island is in possession of the Dutch. The districts situated on both extremities of the island, as well as the whole of the northern coast, are immediately subject to them; but the southern coast and the adjacent countries, between 108° 30' and 112° 20' E. long., with the exception of the small district of Pachitan, is subject to two native princes, the

Susuhunan, or emperor, and the sultan. Their dominions extend more than 250 miles along the southern coast, and form about one-fourth of the whole island.

I. The Dutch possessions are administered by a governor-general, who has authority over all the Dutch possessions in the East, and is assisted by a secretary-general and a council of four members, all of Dutch descent. The island is divided into residencies, or provinces, each administered by a European governor, and divided into sub-residencies, and these again into communes, in each of which there is a justice of peace. The supreme court for the whole island has its seat in Batavia. There are district courts with superior jurisdiction in Batavia, Samaráng, and Surabáya. The inhabitants enjoy perfect religious toleration. A good road runs along the northern coast from Bantam nearly to Bali Strait. From Batavia a branch road runs into the interior through Buitenzorg (the capital of a sub-residency), and joins the main road again near Cheribon. Another important branch runs south from Samaráng to Djokjo-Kerta, near the south coast, and then runs north-east past the magnificent ruins of Brambanan (where about seven acres are covered with the remains of massive Hindoo temples to Siva and Buddha), and down to Sura-Kerta, in the valley of the Solo. The Dutch have many commercial stations on the south of the island. Steamers ply regularly from Batavia to Singapore.

The country west of 108° 30' comprehends the five residencies of Bantam, Batavia, Buitenzorg, the Preanger districts (which are governed by native princes tributary to the Dutch), and Cheribon. The most considerable and remarkable towns in this country are on or near the northern shores. *Sirang*, or *Ceram*, where the governor of Bantam resides, is a thriving place some miles inland. BANTAM and BATAVIA are noticed in separate articles. *Cheribon* is a thriving sea-port town, with a good roadstead and 12,000 inhabitants. It contains a beautiful mosque and a Christian church. In the interior of the country is *Buitenzorg*, a thriving and well-built town, 40 miles from Batavia, and at the foot of the volcano of Pangerango. It contains the summer palace of the governor-general and many fine country houses. A navigable canal unites it to the harbour of Batavia. The most considerable town in the Preanger districts is Chanjur.

The Dutch possessions east of 108° 30' to the Strait of Madura contain the nine provinces of Tegal and Brebes, Pakalongan, Kedú, Samaráng, Japára, Rembang, Gresek, and Surabáya. The chief towns from west to east are the following:—*Samaráng*, with more than 30,000 inhabitants, has an extensive commerce in coffee, pepper, and rice. Foreign vessels are permitted to trade to it. The town is well built, and has a church, a military academy, theatre, hospital, and observatory. It is an unhealthy place, but stands in a district of surprising fertility. *Rembang* has 8000 inhabitants and some trade. *Surabáya* is situated on the Strait of Madura, which forms an excellent and spacious harbour with good anchorage, and secure against the violence of the sea and wind. It is one of the most populous and thriving towns of Java; its population exceeded 80,000 in 1815. Its harbour is open to foreign vessels. *Surabáya* has a handsome government house, a mint, and large storehouses, ship-building docks, a naval arsenal, and a cannon foundry. The harbour is defended by many forts and batteries. In the interior, in the vale of Kedú, are the extensive and admired ruins of the temples of Boro Bodor, and of Majapahit, once the capital of Java.

The eastern peninsula, which extends to the Strait of Bali, is less fertile than any part of the island, being almost entirely occupied by mountains. It contains three provinces, Passaruan, Besuki, and Banyuwangi, of which the last is noted for its coffee, which is stated to be superior to that of Mocha, and for the great quantity of sulphur which abounds there. [BANTUWANG.] Passaruan is a small town on the sea-coast.

II. The dominions of the Susuhunan, which contain a population of nearly one million, consist of two separate tracts. The largest lies between 108° 30' and 110° E. long., and contains the fertile vale of Banyumas, with the town of the same name, which has 8000 inhabitants. From this the smaller portion is separated by the Vale of Kedú and some territories of the Sultan. It lies in the interior of the island, between 110° 30' and 111° 20' E. long., and contains the residence of the Susuhunan, called Sura-Kerta, or Soer-Karta, on the Solo River, which has a population of 105,000. This town is now the capital of a Dutch residency, and has a Dutch garrison and fort.

III. The territories of the Sultan extend between 110° and 112° 20' E. long., and contain nearly 700,000 inhabitants. In their eastern districts is the fertile plain of Kediri. The capital is *Yugya-Kerta*, or *Djokjo-Kerta*, a town with 90,000 inhabitants. In its vicinity are the ruins of Brambanan, called Chandi Sewu, or the Thousand Temples.

Inhabitants.—The natives of Java belong to the widely spread race of the Malays. They profess Mohammedanism, which was introduced among them in the 14th century, and is modified by the doctrines and ceremonies of Buddhism. Three different dialects of the Malay language are spoken on the island, but they have also an ancient sacred language called Kawi, which contains a great number of Sanscrit words. The Javanese have a native literature, which however is not rich. They have also translations from the Sanscrit and Arabic; the latter are few in number and solely on subjects of religion and jurisprudence. In civilisation the Javanese are much superior to all other

nations who inhabit the Indian Archipelago. This is evidently shown by the state of their agriculture, though it cannot be compared with that of the Hindoos or Chinese. In the art of fishing they are very expert. The Javanese are distinguished in working gold. Their cotton cloth is coarse but durable. The raw-silk, imported from China, is manufactured into a rich thick tissue. The Javanese show also considerable skill in the construction of their vessels and boats, of which there is a great variety. The fishing-boats, according to the description given of them by Captain Keppel, are justly entitled to be called 'flying canoes.'

Besides the native population of Java many foreigners are settled on the island, comprising Chinese, Malays, Hindoos, Bugis, Arabian merchants, and slaves brought by the Europeans and Chinese from Bali and Celebes.

Commerce.—Java is extremely well adapted for an extensive commerce. Batavia is the centre of all the trade which Holland carries on with its extensive settlements in the Indian Archipelago. The exports of these countries, intended for the European and American markets, are likewise sent to Java and thence to Europe. The trade of the island was always open to the independent Asiatic nations, and since its re-occupation by the Dutch the vessels of all European nations are admitted into the ports of Batavia, Samaráng, and Surabáya.

The exports from Java to Europe and America are chiefly coffee, sugar, rice, pepper, and arrac; minor articles are, long pepper, cubeb pepper, ginger, turmeric, cajeput oil, tamarinds from Madura, specie, sapan, rattans, and some hides and horns of buffaloes and oxen; also vessels built of teak, and teak-timber. The imports are cotton fabrics, especially chintzes, white-cottons, handkerchiefs, and velvets; broad-cloth; iron, steel, some cutlery, nails, and small anchors; Banca tin, copper, some fire-arms and ammunition; glassware and earthenware; opium; Wenham Lake ice, &c.

The Chinese chiefly visit the harbours of Batavia and Samaráng, and import black tea, coarse porcelain, wrought iron (principally in the form of pans for the sugar-houses, and other culinary vessels), cotton-cloths, raw and wrought silk, especially satins of various colours, with a few velvets and brocades, brass-ware, paper, books, paint, shoes, fans, umbrellas, and toys. They take in return black pepper, long pepper, sandal-wood, mostly imported from the island of Timor, betel-nut, bees'-wax, cotton, edible birds'-nests, sharks' fins, rhinoceros horns and hides, ox and buffalo hides and horns, European woollens and cottons.

The inhabitants of the other islands of the Indian Archipelago carry on an active commerce with Java by means of the Bugis, or inhabitants of Boni, in Celebes. These active navigators and adventurers leave their country in the beginning of the eastern monsoon, and carry on a trading voyage as they proceed westward, until they reach the limit of their navigation at Malacca, Penang, and Achin, and prepare to return with the change of the monsoon. The commodities which they export from their own country and the islands which they visit before they arrive at Java are, the durable cotton-cloth of their native country, gold-dust, nutmegs, Spanish dollars, camphor, frankincense, and tortoiseshell. They take in return birds'-nests, European and Indian cotton goods, unwrought iron, salt, rice, different kinds of pulses, and tobacco.

The inhabitants of Coromandel and Malabar bring to Java blue cotton-cloth, cotton chintzes, and tobacco; and take in return betel-nut, bees'-wax, black pepper, nutmegs, and mace, brought from the Moluccas, ivory and damar from Borneo and Sumatra, and tin from Banca.

A few vessels from Mocha in Arabia annually visit Java. They first go to Malabar and import cotton-cloths, fruits, and bullion; and take in return cloves and nutmeg, black pepper, betel-nut, rice, and sugar.

In the year 1831 the total value of the imports into Java and Madura amounted to 1,206,533*l.*; in 1841 to 2,456,980*l.*; and in 1851 the imports by the Dutch alone are officially stated to amount to 1,207,967*l.* in value.

The total exports, which in 1831 amounted in value to 1,225,179*l.*, were officially valued at 5,482,817*l.* in 1841; and in 1851 the Dutch part alone of the export trade was estimated at 5,308,174*l.* The trade of Java was, and most probably still is, hampered by restrictive import and export duties; the revenue from these sources in 1840 amounted to 633,178*l.*

The colonial revenue of Java is involved in great obscurity. It is said that but half the duties imposed on goods imported by British and other foreign ships are paid by Dutch vessels, and that the ships of the Dutch East India Company (Maatschappij) pay no duty. The chief source of the revenue is the land-tax. Among the Javanese the proprietary right of the soil was vested in the sovereign, to whom the Dutch East India Company has succeeded. The land is lent or given in trust, not alienated to the subject. One-half the produce of wet lands and about one-third of the produce of dry lands, after deducting the cost of reaping, are the established shares of the government. There is a direct tax on the fisheries. Extensive tracts of marsh-land along the sea-shore, and small inlets of the sea, are formed into inclosures for breeding fish. The proprietary right in these preserves is claimed by the government, which derives a large revenue from them. Revenue is also raised on articles of consumption, and the

roads and rivers are infested with transit duties. The public revenue in all its departments is farmed chiefly by Chinese: the revenue farms are disposed of by public sale. The Dutch have assumed the right of levying the revenues even in the few states that still maintain a show of independence; but notwithstanding this all-grasping policy the colonial government has been in financial difficulties and in debt ever since 1825. The causes of these embarrassments are said to be an imprudent craving on the part of the colonial government to be traders as well as rulers, the loss of cargoes by sea, the occasional failure of crops and fatal diseases among the native population, the expense of maintaining a colonial marine, and the erection of military works. For as might be expected from the system just sketched, the Dutch have been unpopular among their subjects: insurrections of the natives have often taken place and been put down by force, but expensive military and naval forces have still to be maintained, the people being too numerous to be kept in subjection by any trifling demonstration. Under a generous system of policy which put down monopolies, abolished restrictions on trade, and gave the peasant some right in the soil he tilled, it is beyond question that an island like Java, teeming with fertility, would yield a great surplus over the expenditure and enrich its cultivators: as it is, a pernicious system, established to enrich a corporation of individuals, oppresses with its galling load the large native population, and weighs heavily also on the resources of the mother-country. All duties and taxes are paid into the colonial treasury, but except the import and export duties nothing is published, as far as we can find, regarding either their amount or disposal.

History.—Java was subject to Hindoo princes till 1478, when the island was conquered by the Mohammedan Arabs. The Portuguese reached Java in 1511, and soon after began to form small settlements. The Dutch established themselves at Bantam in 1595, and in 1602 the English erected a factory at the same place, which was the first possession of the English in the East Indies. But the English as well as the Portuguese were soon obliged to give way to the Dutch, who built the town of Batavia, and by degrees enlarged their dominion, until they succeeded, about the middle of the last century, in dividing the empire of the Susuhunan into two parts and appropriating the greater portion of it to themselves. This system of gradual encroachment has been continued, so that the Dutch now actually possess the sovereignty of the whole island. When Holland was united to the empire of Bonaparte, the British took possession of the island in 1811, but restored it to the Dutch after the fall of Bonaparte in 1816.

(Stavorinus; Raffles; Crawford; Hogendorp, *Coup d'Œil sur Java*, &c.; W. von Humboldt, *Über die Kawi Sprache*; Captain Keppel, *Indian Archipelago*; Macgregor, *Commercial Statistics*.)

JAVA, LITTLE. [BALL.]

JAXT, LA. [ALFES, BASSER.]

JAXT, or IAXT, one of the four circles into which the kingdom of Würtemberg is divided, is bounded N.W. by Baden, N. and E. by Bavaria, S. by the circle of the Danube, and W. by the circle of the Neckar. Its greatest length from the point where the Tauber enters Baden on the north-west to the Brenze, a small feeder of the Danube in the south-eastern angle of the circle, is 74 miles. Its greatest breadth is 44 miles; but the most northern part of the province is in parts not more than 20 miles broad. The area is stated to be 1974 square miles, and the population, according to the census of Dec. 3, 1852, amounted to 374,193.

The southern and south-western part of the circle is covered with offsets of the Raube-Alb, or Suabian Alps, which here form the watershed between the Danube and the Rhine. The rest of the circle is pretty level. Only a small portion of the circle belongs to the basin of the Danube, small feeders of which, the Eger, the Egge, and the Brenze, drain the south-eastern districts. The principal rivers on the Rhine slope are—the Tauber, a feeder of the Mayn, and the Jaxt, the Koher, and the Rems, feeders of the Neckar.

The *Tauber* rises near the eastern boundary, and runs first towards the south-east into Bavaria, where, being met by a branch of the Steigerwald, it turns northward, passing Rothenburg, below which, turning more to the west, it flows near the boundary, sometimes in Würtemberg, sometimes in Bavaria, until it leaves the former kingdom at the most north-western point of the circle of Jaxt. It then enters the grand-duchy of Baden, through which its course is generally towards the north-west to its junction with the Mayn below Wertheim. Its whole length is about 70 miles.

The *Jaxt*, from which the circle is named, rises east of Ellwangen, and sweeping round first to northward and then to the north-west it reaches the Baden frontier at Krautheim; thence it runs with a very winding course, partly in Baden partly in Würtemberg, to its mouth in the Neckar opposite Wimpfen. The length of the Jaxt is about 90 miles.

The *Koher* rises in the Raube-Alb, a little south of the village of Aalen, and runs north-north-west past Hall to Kunselsau, where it turns west, and enters the circle of the Neckar, and joins the river Neckar about five miles below Heilbron, and about a mile above the mouth of the Jaxt. Its whole length is about 70 miles.

The *Rems* rises near the source of the Koher, and flows in a general western direction through a valley celebrated for beautiful scenery past Gmünd and Schorndorf, below which it leaves the circle of Jaxt

and enters that of Neckar, where it passes Waiblingen, and joins the Neckar on the right bank near Ludwigsburg, after a course of about 50 miles.

None of these rivers is navigable; but some of them are available for floating timber from the mountain forests.

The soil, in parts sandy and stony in others, consists chiefly of a fertile loam, and is generally well cultivated. The chief crops are the common cereals, hemp, flax, colza, and other oleaginous plants, together with wine, the best sorts of which are produced in the valleys of the Tauber, the Jaxt, and the Koher. Cattle, sheep, and pigs are numerous; poultry, fish, game, and honey are plentiful. The hills in the east of the circle, and the ridges that separate the river valleys in the south and west, are clothed with forest timber, or with good pastures. The highlands of the circle are composed of calcareous rocks which in many places contain caverns and grottoes; the muschelkalk rock is very prevalent, and contains rich brine-springs, the most productive of which are found in the district between the Koher and the Jaxt, a short distance above their mouths, in the neighbourhood of Hall, and at Weissbach, a village near Kunselsau. The muschelkalk is bored sometimes to the depth of 600 feet, and the brine is raised by hydraulic machinery into the evaporating houses. Iron-mines are worked in the south-east of the circle on both slopes of the Raube-Alb. The ores are smelted and manufactured into bars, &c., in the furnaces and foundries of Königsbrunn and Heidenheim in the valley of the Brenze, and of Wasseraffingen, on the Koher, between Aalen and Ellwangen. Other mineral products are—marble, gypsum, alum, potters'-earth, and porcelain-clay. Linen, various articles of utility or ornament in wood, leather, paper, &c., are among the industrial products. The chief exports are—cattle, corn, salt, iron and ironmongery, wool, and timber.

The circle is traversed by numerous common roads, but there is neither a railroad nor a navigable stream within its limits.

Among the towns the following are noticed as they give names to the 14 bailiwicks into which the circle of Jaxt is divided:—*Aalen*, on the right bank of the Koher, 9 miles S. from Ellwangen, stands in the iron district. It is surrounded by walls flanked with high towers, and pierced by two gates: the inhabitants number about 3000. *Craibheim*, a small place with a castle, a gunpowder factory, and only 800 inhabitants, stands on the right bank of the Jaxt, 13 miles N. from Ellwangen. *Ellwangen*, the chief town of the circle, is situated between two hills, on the right bank of the Jaxt, 44 miles E.N.E. from Stuttgart, and has about 8000 inhabitants. It is the residence of the governor and other administrative officers of the circle, and the seat of a superior court. One of the hills above it is crowned by a castle, the other with the church of Our Lady of Lorette. The town is well built; the gothic cathedral and the former church of the Jesuits, now occupied by the Lutherans, are the most noteworthy buildings. There are a gymnasium, an hospital, and several breweries in the town. The Catholic gymnasium, established in Ellwangen in 1813, has been united to the university of Tübingen since 1817. Ellwangen is famous for its horse-fairs. It was formerly the seat of a celebrated priory, which was founded about A.D. 764, and secularised with the consent of the Pope in 1460. The property belonging to the priory extended over 120 square miles; it conferred the title of Prince Prior on its possessors. It was seized by Würtemberg in 1796. The last prior, who was a Saxon prince, died in 1812. *Gaidorf*, a small town on the Koher, 14 miles W. by N. from Ellwangen, has two castles, vitriol- and alum-works, and about 1500 inhabitants. *Gerabronn*, a mere village, with a brine-spring and about 600 inhabitants: near it is *Kirchberg*, with 1600 inhabitants, and a castle, the seat of a branch of the Hohenlohe family. *Gmünd*, 18 miles S.W. from Ellwangen, on the left bank of the Rems, is an old town surrounded by turreted walls, and has about 6000 inhabitants. It is a place of considerable extent for its population. The streets are wide. The town possesses 8 churches, a handsome town-house, an hospital, a normal school, an institution for deaf-mutes, and an orphan asylum. The industrial products of the town are—jewellery, broadcloth, and cotton-hosiery. The valley of the Rems is very beautiful and well cultivated about Gmünd. *Hall*, a picturesque old town famous for its salt-works, is situated 20 miles N.W. from Ellwangen, on the right bank of the Koher, and has 6300 inhabitants. It is surrounded by a wet ditch and a thick wall flanked with towers. The most remarkable buildings are the town-hall, the fine gothic church of St. Michael (which contains a representation of the entombment of Christ beautifully carved in wood), and the gymnasium; there are five other churches, an hospital, and two public libraries in the town. The industrial products comprise woollen and cotton stuffs, sugar, starch, &c. The town is sometimes called the Suabian Hall, to distinguish it from other towns of the same name. *Heidenheim*, on the southern slope of the Raube-Alb, has a population of 2500. *Kunselsau*, N.W. of Ellwangen, on the Koher, has two castles and 2800 inhabitants. *Mergentheim*, a walled and well-built town of 2500 inhabitants, stands on the left bank of the Tauber, 42 miles N.N.W. from Ellwangen. It has an old palace, a gymnasium, a library, and some manufactures of hosiery and clock-work. *Neresheim*, in the south-east of the circle, on the Egge: population, 1100. *Oehriegen*, 32 miles N.W. from Ellwangen, near the Oehr, a feeder of the Koher, has a fine castle belonging to a prince of Hohenlohe, two churches, an hospital, a lyceum,

a normal school, and 3200 inhabitants, who manufacture carpets and cotton-stuffs, and trade in corn and cattle. *Schorndorf*, on the Rems, a few miles below Gmünd, is a walled town with an old castle and 3800 inhabitants, who manufacture tobacco and carpets. *Welzheim*, a small place of 1700 inhabitants in the south-west of the circle, has an important corn-market.

The greater part of the possessions of the princes of the house of Hohenlohe is situated in the centre and north of the circle of Jaxt.

JEAN-D'ANGELY, ST. [CHARENTE-INFÉRIEURE.]

JEAN-DU-GARD. [GARD.]

JEDBURGH, Roxburghshire, a market-town, royal and parliamentary burgh, and the chief town of the county, is situated in the parish of Jedburgh, in a narrow valley on the left bank of the river Jed, in 55° 28' N. lat., 2° 36' W. long., distant 51 miles S.E. by S. from Edinburgh by road. The population of the municipal burgh of Jedburgh was 2948 in 1851, that of the parliamentary burgh was 3615. The burgh is governed by a provost and 14 councillors, and conjointly with Haddington, North Berwick, Dunbar, and Lauder, returns one member to the Imperial Parliament.

Jedburgh parish was celebrated in ancient times for its woodland fastnesses, its castles and fortified dwellings, and the magnificence of its ecclesiastical establishments. On the south side of the present town are the remains of Jedburgh Abbey, which appears to have been founded early in the 12th century. It suffered much during the wars with the English; was pillaged and burned by the Earl of Surrey at the storming of Jedburgh in 1523, and again injured by the Earl of Hertford (afterwards Duke of Somerset) in 1545. The church alone remains: it is 230 feet long. The choir is much dilapidated, and the south transept has disappeared; but the nave, north transept, and central tower, 100 feet high, are in good preservation. The western part of the nave has been fitted up, and is used as the parish church. Some repairs have been recently made with a view to preserve what remains of this interesting structure. On the south side of the choir is a chapel, formerly used for the grammar-school. The United Presbyterians have three chapels, and the Free Church, the Episcopalians, and the Independents have each one chapel in the town. The mechanics institution had 169 members in 1851, and 900 volumes in its library. There is also a savings bank.

Jedburgh is said to have been a royal burgh as early as the reign of David I. The town consists chiefly of several streets converging in the market-place, and of a small suburb on the right bank of the river. Three bridges cross the Jed. The principal streets are tolerably wide; the houses have generally an air of antiquity. In the outskirts are several pleasant villas and extensive orchards. The county-hall is near the market-place; and at the southern end of the town is the county prison, including a jail, bridewell, and debtors' prison, with a house for the governor.

The principal manufactures in Jedburgh are of blankets, flannels, tartans, shawls, shepherd's plaidings, hosiery, lamb's-wool yarn, and carpets: there are an iron and a brass foundry, and a factory for patent printing-presses. Quarries of red and white sandstone are worked in the parish; and there are several corn-mills. The markets are on Tuesday and Saturday; the Tuesday market is a well-attended corn-market. There is a monthly cattle-market; four horse and cattle fairs are held in the year.

Jedburgh is the seat of the circuit Court of Justice, and of Justice of Peace, Sheriff, and Small Debt courts. Near the town is the castle of Ferniehurst, formerly the seat of the Kerr family, the ancestors of the Marquis of Lothian.

JEDDO, or YEDDO. [JAPAN.]

JEGUN. [GERS.]

JELLALABAD, Afghanistan, is situated in 34° 26' N. lat., 70° 36' E. long., in the valley of the Cabul River, on its right or southern bank, at a nearly equal distance from Cabul and Peshawur. Though the river begins to be navigated by rafts at this place, Jellalabad does not appear to be a commercial town. The ordinary population is between 2000 and 3000, but this is much increased in the winter season. The houses are low, and the streets narrow. The town was occupied by the British during the Afghan war, 1839-1842. General Sale held it under great disadvantages against Akbar Khan, who besieged the place with a large force in January 1842. At the conclusion of the war the British forces under General Pollock left Jellalabad in October 1842, first destroying its mud walls, and the fortifications which had been erected for its defence.

JEMMAPES. [HAINAUT.]

JENA, a town in the grand duchy of Saxe-Weimar, is situated in a romantic valley, partly surrounded by steep naked mountains, at the conflux of the Leutra with the Saale, over which there is a stone bridge of nine arches, in 50° 56' N. lat., 11° 37' E. long. It consists of the town, through which the Leutra flows, and several well-built suburbs. The town is also well built on a regular plan, and surrounded by ramparts. Jena is celebrated for its university, which was founded in 1558, and has faculties of Protestant theology, law, medicine, and philosophy, taught by 61 professors and teachers: the number of students in 1850 was 421. The university has a library containing 100,000 volumes; and there are in connection with it a botanic garden, a veterinary school, a school of midwifery, an anatomical theatre, a clinical institution, a collection of physical and mathe-

tical instruments, a cabinet of minerals, an observatory, &c. The principal edifices in Jena, besides the university buildings, are a ducal palace, a Roman Catholic church, three Lutheran churches, three hospitals, and a lunatic asylum. The population numbers about 6500. The industrial products comprise coarse linen, hats, tobacco-pipes, &c. The town is the seat of a court of appeal for the Saxon duchies. Jena has given name to the disastrous battle fought in its vicinity on the 14th of October, 1806, between the Prussian army under the Duke of Brunswick, and the French under Napoleon. The Prussians were totally defeated, and the duke mortally wounded. This victory effected the complete subjugation and humiliation of Prussia.

JENESEI, or YENESEI. [SIBERIA.]

JENI-BAZAR. [BOSNIA.]

JENISEISK, or YENESEISK. [SIBERIA.]

JERES (KERES) DE LOS CABALLEROS. [ESTREMADURA.]

JERICO. [SYRIA.]

JERM. [BADAKHSHAN.]

JERSEY, an island in the English Channel, about 18 miles S.E. from Guernsey; between 49° 9' and 49° 16' N. lat., 1° 58' and 2° 14' W. long. Its form approximates to a quadrangle, having its sides facing the cardinal points. Its greatest length from east to west is about 12 miles; its greatest breadth from north to south about 7 miles. The area of the island is about 40,000 acres. Its population in 1831 was 36,582; in 1841 it was 47,544; in 1851 it was 57,020.

The surface of the island has a gradual slope from north to south. On the north side the coast is abrupt, rising to the height sometimes of 200 feet, broken by a succession of small bays and coves. On the north side of the island is a very picturesque bay called Boulay, where, some years since, the States of the island of Jersey erected a pier on a limited scale. At St. Catherine's Bay, on the east side of the island, a harbour of refuge, commenced in 1847, is in process of construction. The works are extensive, including two piers and a breakwater. On the west side is the wide shallow bay of St. Ouen, with a shelving sandy beach, skirted in nearly all its extent by ledges of rocks. On the south side of the island the character of the coast is less uniform: at the bottom of the deep bays of St. Aubin and St. Brelade it is low and shelving, with a broad belt of sand nearly a mile wide in St. Aubin's Bay, and dry at low water. St. Helier Bay, on which stand the towns of St. Helier and St. Aubin, is the most frequented; but most of the bays afford anchorage. Groups of rocks surround the island at various distances from it.

The surface of the island is everywhere undulating. The valleys generally run from north to south; they are narrow at the north end, where the high ground forms an almost unbroken hill, and grow wider as they approach the southern coast, where they expand into several flats of good pasture land. At the base of the cliffs are numerous caverns, hollowed out by the beating of the sea and the rapid flow of the tide; they run a considerable depth into the rocks. The principal water courses flow from north to south. The valleys watered by these streams are often very lovely.

The high land in the northern part of the island consists for the most part of granite rocks; the southern part of a mass of schistose rocks incumbent upon them. The rocks along the northern coast consist for the most part of sienite; they present perpendicular faces to the sea, and are frequently intersected by perpendicular veins running north and south. The sienite is quarried on the northern coast: part is used on the island, part is exported to Guernsey and England, and also to France. Roads which are wide, and well constructed, traverse the island in all directions. The large hedges and deep fences formerly so common are fast disappearing, and giving place to neatly dressed banks and low walls.

The climate of Jersey, from its insular situation, is milder than that of other places under the same latitude, and the mean annual temperature is higher than that of any part of England. The temperature varies from 76° to 24°, mean temperature 52.5°. Snow and continued frost are rare, but there is a good deal of rain, and the dews are very heavy. High winds are prevalent and violent; gales frequently blow, especially from the west. The predominant diseases are rheumatism, chiefly chronic, indigestion, dropsy, and remittent and intermittent fevers.

The state of agriculture in Jersey has greatly improved, and is now good, though the minute subdivision of property, arising from the custom of gavelkind, has somewhat retarded its advancement. Wheat is the principal grain crop; barley is grown, and some oats; parsnips are extensively grown, and used for fattening hogs and bullocks. Potatoes for exportation are widely cultivated. Lucerne is one of the most valued crops. A considerable portion of the land is laid out in orchards: cider constituting the most important produce of the island. The principal manure is *vraic*, or sea-weed, either fresh or after it has been burnt for fuel. Fallows are seldom seen. The wheat harvest commences about the beginning of August. The common English fruits are raised in Jersey, and the melon and the grape grow in the open air. The fine Charmontel pears grow to great perfection in Jersey; they ripen late in the autumn, keep well all the winter, and are remarkably sweet, and of delicate flavour; they weigh from half a pound to one pound and a quarter. Great benefit has been conferred on the island by the Horticultural and Agricultural Society, which was established in 1836.

The dairy is an object of great attention in Jersey. The breed of cows is a variety of that known in England as the Alderney. Large quantities of butter are exported. A few sheep are kept by persons in humble circumstances who have right of common. The horses are small but hardy. The annual races and the prizes given for island bred horses, have induced attention to the breeding of cart, riding, and carriage horses.

Game is nearly extinct, a few rabbits and hares, with an occasional covey of red-legged partridges, being all that remain as indigenous to the soil. During the winter flocks of wild fowl from the north, with a few snipes and woodcocks from the French coast, make their appearance. La Chasse (the shooting season) commences on the 1st of October, and terminates on the 1st of February.

Jersey is divided into 12 parishes, the names of which, with their respective populations in 1851, we subjoin:—St. Clement, population 1553, St. Saviour, 3404, and St. Helier, 29,133 (with 511 military in barracks), to the east and south-east of St. Helier Bay; with St. Laurens, 2306, St. Peter, 2497, and St. Brelade, 2468, to the north-west, all terminating in the same bay; St. Ouen, 2458, to the west; St. Mary, 1086, St. John, 1021, and Trinity, 2610, to the north; St. Martin, 3711, and Grouville, 3262 (including 619 sailors on board the oyster fleet in Gorey harbour), to the east. All the parishes run from the interior to the coasts, except St. Clement and Grouville, which run nearly parallel to the coast. The parishes are subdivided into 'vingteines' ('scores'), supposed to be so called from having originally contained 20 houses. Of these vingteines there are from two to six in each parish, and in all 52. In the island there were 57 places of worship in 1851, of which 20 belonged to the Church of England, 24 to three sections of Methodists, 5 to Independents, 2 to Roman Catholics, and 1 to the Free Church of Scotland. The total number of sittings provided was 25,192. There were 42 Sunday schools with 2242 scholars, of which 16 schools belonged to the Church of England, 13 to Methodists, 10 to French Wesleyan Methodists, 2 to Independents, and 1 to French Independents. The number of day schools was 99, of which 14 were public schools with 1990 scholars, and 85 private schools with 2938 scholars.

There are three towns in the island, St. Helier and St. Aubin, both on the bay of St. Helier, and Gorey, on the east coast.

St. Helier is situated at the end of a low valley running down to the sea, at the south-east end of St. Helier Bay: the population of the town and parish in 1851 was 29,133. The streets in the lower or old portion of the town are narrow, but are generally well paved. St. Helier is perhaps superior in appearance to most English towns of the same size. It has usually a garrison of from 600 to 800 soldiers, with two permanent fortifications, and a military governor constantly resident. It is also the residence of many retired military and naval officers. The parish church, built in the beginning of the 14th century, is situated at the bottom of the town, near the old harbour. There are also several proprietary and district churches, namely, St. Paul, in the centre of the town; St. James, in the east; All Saints, on the parade at the west end; St. Mark, at the upper or north end of the town; and St. Luke, in the south-east or lower part of the town. There are several chapels for Wesleyan Methodists and other Dissenters, both French and English, and two Roman Catholic chapels. The theatre is a neat edifice, with a light portico; the court-house, situated in the Royal Square, an open-flagged space in the lower part of the town, is a plain structure, too small for the business furnished by the increased numbers of the population. The courts held in it are presided over by the bailiff, assisted by two or more of the jurats, or elected civil magistrates. The States of the island also hold their meetings in the same house. In Royal Square are reading-rooms, and a gallery of art. The market-place is a large and well-constructed flagged area in the centre of the town. The market days are Wednesday and Saturday.

Fort Regent, the principal fortification, at the south side of the town, commands the coast and the adjoining country. It is an irregular fort with outworks and flanking defences, and is remarkably strong; it was finished in 1812, and is said to have cost 1,000,000*l.* Elizabeth Castle, another fortification, is built on a ledge of rocks about a mile distant from the shore, to which it is accessible at low water by a bridge, or naturally formed causeway, consisting of shingle and sand. It is defended by bastions and curtains, with heavy guns on the lower or sea faces; and with ramps and revetments on the upper bastions, defended by caronades and long guns. It is capable of containing 600 men. Within the last ten years the town of St. Helier has nearly doubled its area. In the neighbourhood are numerous dwelling houses, with neatly laid-out grounds and gardens, the residences of the merchants and island visitors. The British residents amount to upwards of 5000, the greater number of whom reside in St. Helier and the adjoining parish of St. Saviour. The labourers are principally English, with some Scotch and French, and, since the commencement of the harbour of refuge, and other works, a large proportion of Irish. The harbour is very extensive; it consists of the inner or old harbour and the outer or new harbour. The outer harbour, commenced in 1841 and completed in 1846, is called Victoria Pier, the Queen having landed at it when she visited Jersey on the 2nd and 3rd of September, 1846. The western arm of the new harbour is near three quarters of a mile in length, with a broad and commodious quay, and

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a raised promenade, with landing steps, and a very broad slip at the southern end, where boats can easily land their passengers at all times of the tide when there is water within the harbour. The new North Pier is very commodious. The whole of the expense attending these works is defrayed by means of a duty levied on wines and spirits. St. Helier has regular stands of coaches, as in the large towns in England, which ply for very moderate fares; there are also omnibuses, which run to different parts of the island.

St. Aubin, in the parish of St. Brelade, situated at the western end of St. Helier Bay, is but thinly inhabited. The harbour is small but convenient. The little town has a very picturesque appearance; and the prospect from the adjoining height, called Noirmont, is very fine and extensive. St. Aubin has a pier, and is protected by a battery, known as St. Aubin's Castle. There are a chapel of ease, a Wesleyan Methodist, and an Independent chapel. In the town is a market-place.

Gorey, is in the parish of St. Martin, although hitherto returned with Grouville parish. It is situated on Grouville Bay, and is built partly close to the sea and partly on the height which rises towards Mont Orgueil Castle. The importance of Gorey depends on its oyster fishery. The larger oysters are sent to St. Helier for sale, the smaller are sold and transported to the English oyster-beds. In the neighbourhood of Gorey is Mont Orgueil Castle, once the principal fortress of the island. It stands on a head-land between St. Catherine and Grouville bays, and is a picturesque and striking object. It was the place of confinement of Prynne, and the residence of Charles II. during part of his exile.

Of the villages in the island may be named Beaumont in St. Peter's parish, Conuerie in St. Brelade's, Georgetown, a suburb of St. Helier, La Croiserie in Trinity parish, Le Bourg in St. Clement's parish, and Millbrook in the parish of St. Laurens.

Jersey contains several primeval antiquities, chiefly stone circles and cromlechs similar to those noticed in our account of GUERNSEY. Scattered over the island are the ancient manor-houses, and there are numerous modern villas, especially near the towns. Every house and cottage, not in a street, has its garden. Myrtles, hydrangeas, and various other plants, which in England commonly require shelter, grow luxuriantly in the open air.

Much of what has been said of the state of society and the constitution of the local government in GUERNSEY will apply to Jersey. The spirit of independence is very generally diffused; industry, the love of gain, and frugality are characteristics of the island character. Bacon is very generally used by labourers at their principal meal. With the liquor in which the bacon is boiled is made a soup peculiar to Jersey, adding to it some vegetable, usually cabbage, turnip, parsnip, or potato. The people are generally healthy, and many live to a great age.

The States of Jersey consist of the governor and the bailly of the royal court, both appointed by the crown: the 12 judges or 'jurats' of the royal court (the court of judicature for the island in civil and criminal cases), elected to office for life by the suffrage of the rate-payers; the rectors of the parishes, appointed to their livings by the governor; and the 12 constables elected every three years, one for each parish, by the inhabitants. The officers of the crown have seats, and can speak, but not vote. The 'viconte,' or high sheriff, and the two 'denonciateurs,' or under sheriffs, occupy seats in the assembly as its officers.

The dean of Jersey, who is appointed by the crown and is always rector of one of the 12 parishes, is at the head of the church of the island, and holds a spiritual court, from which there is an appeal to the see of Winchester. The livings are generally small (the great tithes going to the crown), and there are no pluralities. Some addition was made a few years since to some of the poorest of the livings by the ecclesiastical commissioners. There are two ancient chartered schools, those of St. Anastase, and St. Manelier. St. Manelier's, founded in 1497, has an income from endowment of about 100*l.* a year, and had 40 scholars in 1851. Victoria College, St. Heliers, founded in 1852, had 130 scholars in 1853. The foundation-stone of the building was laid on her Majesty's 30th birthday, May 24th, 1849. The cost of its erection (8000*l.*), has been defrayed from the proceeds of the duty on wines and spirits. The island hospital, or poor-house, is a large and handsome building, situated near the western extremity of the town; in it are placed the aged who are destitute, a great number of sick persons, and a large number of children, orphans, or foundlings. A good school for the children is attached to the hospital; a shoemaker's and tailor's shop is in the building; in a chapel adjoining week-day and Sunday services are held. The number of inmates in 1851 was 426.

There are several newspapers published in the island, some in French and others in English; they are for the most part devoted to the interests of the island; the English papers report more fully than those in French political matters connected with England.

The trade of Jersey, owing to the privileges possessed by the islanders, is very considerable. The agricultural produce of the island, potatoes, apples, cider, butter, cows, and other live stock, are sent to England; the articles required for the consumption of the island being in a considerable degree supplied from France.

The shipping returns furnished to Parliament give the figures for the Channel Islands without distinguishing the proportions belonging to each island. More than half of the ships and tonnage returned for

the Channel Islands may be considered as belonging to Jersey. The number and tonnage of vessels entered as belonging to the Channel Islands on December 31st, 1853, were as follows:—Sailing-vessels under 50 tons, 207, tonnage 5445; above 50 tons, 286, tonnage 43,743; with 1 steam-vessel of 21 tons, and 4 of 271 tons aggregate burden. The number and tonnage of vessels entered and cleared during 1853 in the colonial and foreign trade, were:—Sailing-vessels, inwards 1285, tonnage 62,993; outwards 1365, tonnage 63,031; steam-vessels, inwards 83, tonnage 9045; outwards 102, tonnage 10,705.

The general history of the Channel Islands has been noticed elsewhere. [GUERNSEY.] Jersey was the *Cæsarea* of the Romans. In the reign of Edward III. this island was unsuccessfully attacked by Du Guesclin, constable of France. In the war of the Roses it was attacked by a Norman baron, Pierre de Breze, who, after holding part of the island for a time, was forced to surrender. Henry VII., while Earl of Richmond and an exile; and Charles II., while an exile, both before and after his father's death, found refuge in Jersey, which was held for Charles by Sir George Carteret, until taken by the Parliamentarians under Admiral Blake and General Haines. During the first American war, Jersey was thrice attacked. The third attack was in December, 1780, when the Baron de Rullecourt landed with 700 men, took possession of St. Helier, made the lieutenant-governor, Major Corbet, prisoner, and induced him to sign a capitulation. The British troops and island militia, under Major Pierson, next in command, refused to recognise the capitulation; and attacking the French, killed Rullecourt, with the greater part of his men, and obliged the rest to surrender. Major Pierson fell in the beginning of the attack.

The island possesses a well organised and well drilled body of militia, divided into six regiments, for the defence of the island. They are called the North, East, North-West, South-West, St. Helier, and St. Laurens battalions. Each of these battalions has from four to eight companies, with competent officers; they are clothed at the expense of the crown, but receive no pay. Field batteries are attached to each regiment. All persons, between the ages of 16 and 60, are liable to serve in the Jersey militia, but those who do not wish to serve are excused on payment of one pound annually, which is appropriated to the maintenance of the horses used in the batteries.

(Communication from Jersey; Parliamentary Papers.)

JERSEY, NEW. [NEW JERSEY.]

JERUSALEM, the ancient capital of the Holy Land, the centre of the ancient Jewish religion and polity, is situated in 31° 46' 43" N. lat., 35° 13' E. long., at an elevation of 2000 feet above the level of the Mediterranean, 29 miles E. from the nearest point of the shore of that sea, and 21 miles W. from the mouth of the Jordan in the Dead Sea. It is identical with *Salem*, the city of Melchizedek, which appears in the latter half of the name; the first half is most probably a corruption of *Jebus*, a name which the city, or part of it, bore for nearly five centuries after the entrance of the Israelites into the Promised Land. As the city stood at the junction of the territories of the Amorites, the Jebusites, and the Hittites, it is highly probable (and the Egyptian monuments strongly confirm this supposition) that it was inhabited in pre-Israelitish times by all three in common, the ascendancy resting in the Amorites and the Jebusites successively. It is supposed also that there were originally two towns or strongholds corresponding to the upper and lower cities of after times, the upper city being identical with the Canaanitish *Jebus*, the stronghold of the Jebusites, who obtained the ascendancy on the extinction of the power of the Amorites in the person of Adonizedek. According to Josephus (*Antiq. v.*) the Israelites occupied the lower city for a time, but were expelled by the garrison of the upper city, which was held uninterruptedly by the Jebusites from about B.C. 1585 to B.C. 1049. About this latter date David drove the Jebusites from their stronghold, inclosed the upper and lower towns within one wall, and made the city thus formed the capital of his kingdom. The name *Jebusalem* thus naturally originating would be changed for the sake of euphony into Jerusalem; or it might be that the change was made in order to avoid a name of evil omen (which all ancient nations seem to have dreaded), *Jebusalem* in Hebrew meaning a 'trampling down of peace,' whereas Jerusalem signifies the 'abode of peace.' It is no objection to the derivation just given that the name Jerusalem occurs in the Scripture narrative before the time of David: it is not the only name that is used in the Old Testament by anticipation. The Rabbis, who are followed by Lightfoot and others, derive the first part of the name from *Jireh* in *Jehovah-jireh*, the title given by Abraham to Mount Moriah (*Gen. xxii.*).

From the name and office of Melchizedek ('righteous king') and Adonizedek ('righteous lord') the city seems to have been in Canaanitish times a religious as well as a political centre. The most ancient name of the city, discovered on the Egyptian monuments of Sethos and Sesostris favours this view. These monuments (as explained in Mr. Osburn's 'Egypt, her Testimony to the Truth') represent in succession the siege of a city, then a fortress of the Amorites, by Sethos II.; a joint embassy of Jebusites and Hittites to Sesostris entreating that king for aid against the Ammonites then laying siege to the city; the advance of the Egyptian army, and a great battle on a hill to the south of the city. From the pictorial representation of the site of the city showing its surrounding valleys and its river (Kedron) running into the north part of the Dead Sea, there can be no question

that the city thus indicated occupied the site of Jerusalem. The name of the city is written in hieroglyphs on one of the towers, and when translated into Coptic gives *Chadash*, in Hebrew *Kadash* or *Kadesh* 'the Holy.' The Syrian city of *Kadytis* in Palestine, described by Herodotus (*iii. 5*) as not much smaller than Sardis, and which he states (*ii. 159*) was taken by Pharaoh-Necho after his victory at Magdolum (an evident corruption of Megiddo), can be no other than Kadesh. This ancient name survived in the Syrian *Kadatha*, and still survives in the Arabic *El-Khuds* or *El-Kods*, all signifying the Holy (city), showing the wonderful tenacity with which these ancient races adhere to native names.

The Greek form of Jerusalem was *Hiero-solyma*, the first half of which means 'holy' but this is probably a mere accident, as in sound it is as near as possible an exact equivalent of the first half of the Hebrew name. The name *Sion* sometimes given to the city is merely an extension of a part to the whole. The name *Abia Capitolina* given to it after it was rebuilt and colonised by Hadrian never took hold on the native population, and was probably used only on coins and in state papers. Among the native races the city is now known only by the designation *El-Kods*.

The site of Jerusalem is an elevated piece of ground within a basin of inclosing hills. The separation between this spot and the outward borders of its inclosure is well marked by ravines and valleys, except towards the north. The inclosed platform extends about 1800 yards from north to south, and (in the widest part) 1100 yards from east to west: it has a general slope from west to east, so that the town is fully displayed, like a panorama, to those who view it from the east. The surface is uneven. The south-western part of the site is occupied by Mount Sion, on which stood the stronghold of the Jebusites. To the north-east of this, but separated from it by a ravine or valley called by Josephus Tyropoieon (or Cheese-makers), is Mount Acra, the site of the Lower City, or Salem; and east of this lies Mount Moriah, the site of the Temple, from which a spur called Ophel, or Ophla, extends to the southern wall, between the Tyropoieon and the Valley of Jehoshaphat. The Valley of Tyropoieon, though distinctly traceable, is now shallow, having been nearly filled up in the long course of ages. In the north and north-west of the city was the hill Bezetha, or New City, which was built upon as the population of the city increased, and was included in the wall of Agrippa; but a very small portion of it is included in the modern city, and it rises high above the deep external ravine which it overlooks. The other eminences of the platform, such as Mount Moriah (on which the Temple stood), and Mount Acra, are now scarcely distinguishable as elevations, from the filling up of the interjacent valleys. Except at Mount Sion the general level of the site is below that of the immediately surrounding country.

On the west and south of the site is the Valley of Hinnom; on the east the Valley of Jehoshaphat. The Valley of Hinnom originates in a depression containing an ancient pool, about 500 yards westward of the north-western angle of the modern wall; it thence runs south and east along the western and southern sides of Mount Sion, to the east of which the Tyropoieon opens into it. About 800 yards from the upper pool is another and a larger pond called the Lower Pool; and to the south of the valley, nearly opposite Mount Sion, is a high rocky hill called the Hill of Evil Council, from the tradition that Annas, father-in-law to Caiaphas the high-priest, had a residence upon it. (*St. John, xviii. 13, 14, 24.*) A little below some ruins on the hill is the Potters' Field, the white clay of which is still worked.

On the north-west side of the city is a broad swell of land extending in a north-east direction for about 1500 yards, between the upper pool of the Valley of Hinnom and the Tombs of the Kings, which are situated at the head of the Valley of Jehoshaphat. This valley then commences at the extreme north of the Wall of Agrippa, more than 800 yards beyond the precincts of the modern city, and runs first to the east, and then turning abruptly south it skirts the eastern wall and meets the Valley of Hinnom at the south-eastern angle of the city. From this junction a valley runs south-eastward to the Dead Sea. In ancient times the brook Kedron flowed through the Valley of Jehoshaphat. In this valley are many ancient tombs, among which may be mentioned those of Jehoshaphat, Absalom, and Zechariah. About the middle of its length, on the eastern side of the city, is the Garden of Gethsemane, with its venerable olive-trees; and near it is a subterranean church, which contains the reputed Tomb of the Virgin. Nearly opposite the Tomb of the Virgin, within the city, and about 300 yards from the north-eastern angle of the city wall, is the Pool of Bethesda. Lower down the valley is the Fountain of the Virgin; and a little to the west is the Pool of Siloam, near the junction of the Tyropoieon with the Valley of Hinnom. On the top of Mount Sion, about mid-way between the Pool of Siloam and the lower pool of the Valley of Hinnom (which is now called Birket-es-Sultan), is a mass of building supposed to be the tombs of David and the succeeding kings of Judah. The Pool of Siloam is now filled up and cultivated as a garden; a small tank however still fixes the site. On the eastern side of the Valley of Jehoshaphat is a group of hills called the Mount of Olives, on the highest point of which is built the church of the Ascension. On an eminence a little farther south are the tombs of the Prophets. South from Mount Olivet, and to the east of the junction of the three valleys, is the Mount of

Offence, on which Solomon erected altars for idolatrous worship; and in the southern valley, between the mounts of Offence and Evil Council, is a deep well, called the Well of Nehemiah, or Job, and supposed to be identical with Enrogel, or the Well of the Spies, situated on the border of Judah and Benjamin. (Josh. xv. 7.) There is scarcely any incident mentioned in Scripture, as connected with Jerusalem and its neighbourhood, of which the site is not pointed out.

"The houses," says Chateaubriand, "are massive squares, very low, without chimneys or windows; they terminate in flat terraces or in domes, and have all the appearance of prisons or sepulchres. The whole would present a perfect level to the eye, were it not for the belfries of the churches and the minarets of the mosques." The streets, narrow, unpaved, and gloomy, rise and fall with the inequalities of the site. In the dark vaulted bazaars are a few miserable shops.

The Moslems have appropriated the site of Solomon's Temple to their own worship. The renowned mosque built by the Khalif Omar is an octangular structure surmounted by a dome, and stands upon an elevated platform paved with polished marble. This is in the midst of a grand quadrangle called Haram-es-Sherif, or the Noble Sanctuary (1489 feet by 995 feet), which contains at its southern extremity another mosque, that of El-Aksa, which was originally a Christian church built by Justinian. The site of the ancient Acropolis, originally called Baris, but after its enlargement and embellishment by Herod the Great, Antonia, stood in the north-west angle of the Temple inclosure. It was at once a castle and a palace; a defence to the Temple, as the Temple was to the city itself. This building was the official residence of the Roman procurator of Judæa and his guards; and its site is now occupied by the Serayah, which comprises the official residence of the Turkish pasha who governs Jerusalem and the quarters of the garrison. But to the thousands of Christian pilgrims who yearly visit Jerusalem the great object of interest is the church that contains the sepulchre of Christ, to redeem which from infidel hands was the object of the Crusades. This church was one of the numerous foundations of the empress Helena. As a whole this extensive structure takes a prolonged oblong figure, with irregular extensions in particular parts for the sake of comprehending the various spots connected with the death and burial of Christ; for this church is not only supposed to contain the sepulchre, but the scene of the Crucifixion. Among other noteworthy objects are the monasteries of the several Catholic communities, the Greek convent of St. Constantine near the Holy Sepulchre, and the Armenian convent of St. James, on the highest point of Mount Sion; and the colleges or hospitals of the Moslems in the vicinity of the mosques. The other public buildings of Jerusalem are not of much importance.

Jerusalem is in shape an irregular square; it is surrounded by a high embattled wall, built of out-stone by the Sultan Suliman in 1542, and has four gates facing the cardinal points—the Jaffa Gate on the west, the Damascus Gate on the north, St. Stephen's or St. Mary's (Bab-Sitti-Miriam) Gate on the east, and Sion Gate on the south. A line drawn from the Damascus to the Sion Gate, and another drawn from the Jaffa Gate to the southern part of the Haram-es-Sherif, would divide the city into the four quarters by which it is usually distinguished. These are—the Christian quarter to the north-west; the Armenian quarter to the south-west; the Jewish quarter to the south-east; and the Moslem quarter, comprising all the rest of the city, west and north of the Temple inclosure. The city is about 2½ miles in circumference. The fixed population of the city has been variously estimated, some accounts stating it at 30,000, others at 10,000. About one-half of the population are Moslems, the other half are Christians and Jews in about equal numbers. The number of Christian pilgrims amounts to a few thousands.

Melchizedek, king of Salem, came forth to meet Abraham when he returned from the slaughter of the kings; and this Salem has been identified with Jerusalem, as before stated, and as demonstrated in an able article in the 'Christian Remembrancer' for October, 1849. When the Israelites entered Canaan they found the place in the occupation of the Jebusites. The lower city was taken and burnt by the children of Judah (Judges, i. 8); but the Jebusites had so strongly fortified themselves in the upper city, on Mount Zion, that they maintained themselves in possession of it till the time of David. That monarch expelled the Jebusites from Mount Zion, and made Jerusalem the metropolis of his kingdom, B.C. 1049. His son Solomon built the temple on Mount Moriah, and further embellished the city with palaces and public buildings. Jerusalem was sacked by the Philistines and Arabs in the reign of Jehoram, about B.C. 884, and subsequently by the Israelites about B.C. 808. When invested by the armies of Sennacherib, who encamped on the hill of Bezetha, afterwards the site of the new city, it was miraculously delivered B.C. 713. (2 Chron., xxii. 21.) From the carrying away of Manasseh to Babylon, it is probable that the Chaldeans captured Jerusalem about B.C. 650. It was taken by Pharaoh-Necho, king of Egypt, B.C. 600, after the battle of Megiddo, corrupted into Magdolom by Herodotus (ii. 159). The Egyptians held it two years; it then passed with the whole country under the sway of the Chaldeans, and Jehoiakim was carried away to Babylon. Restored, he tried to regain his independence, and lost his life. Three months after the accession of his son, Nebuchadnezzar again took the city (B.C. 598), and carried the king, royal family, and principal officers captives to Babylon. The revolt

of Zedekiah, appointed to the nominal dignity of king, brought Nebuchadnezzar a third time against the city, B.C. 587, when the Temple and all the buildings of Jerusalem were destroyed by fire, and the walls levelled to the ground. The first decree of Cyrus in favour of the Jews dates in B.C. 538; the decree contemplating the restoration of the Temple, which however was vexatiously delayed for about 120 years. The rebuilding of the city went on still more slowly, and it was not till B.C. 385 that the city and its walls were completely restored. The city came (B.C. 332) under the power of Alexander the Great, who, according to Josephus, visited Jerusalem after the capture of Gaza. After Alexander's death the city and the whole of Judæa fell successively under the Ptolemies of Egypt and the Seleucids of Syria, who conferred many favours on Jerusalem and the Jews. The city for a long period enjoyed peace and prosperity under these princes, until its internal dissensions subjected it to Antiochus Epiphanes, B.C. 175, through whose tyranny the Temple was stripped of its costly vessels, the city walls demolished, and an idol-altar erected in the Holy of Holies, whereon swine were offered in daily sacrifice. The Jews were massacred not only in Jerusalem but in many parts of Judæa, and the most strenuous measures were taken to extirpate the Jewish religion and to establish Greek paganism in its stead. An insurrection headed by Matathias and his five sons followed, and resulted in a national revolution which secured for the Jews a greater amount of independence than they had enjoyed since the captivity. This state of things continued under the Maccabees until the conquest of the country by the Romans with one short interval, about B.C. 135, when the city in the reign of John Hyrcanus was taken by Antiochus Sidetes, and the walls which had been restored by Judas Maccabeus were again demolished. Pompey captured Jerusalem B.C. 63, and levelled part of the fortifications. Crassus on his way to Parthia plundered the Temple, B.C. 54. The Parthians, who had been called in by Antigonus to aid him against Herod, son of Antipater, sacked Jerusalem B.C. 40. Herod, who had been appointed king by the senate, gained possession of his capital only after a long siege in which he was assisted by Roman soldiers. He built the fortress Antonia, which was so named in honour of his patron Mark Antony, and restored the Temple, but erected a theatre and circus, and instituted games in honour of the emperor, after the usual pagan fashion. On the death of Herod and the banishment of his son Archelaus, Judæa became a Roman province within the prefecture of Syria, and was governed by a subordinate officer called procurator, who however was invested with the power of life and death. Coponius was the first procurator, A.D. 7. Pontius Pilate, who was procurator (A.D. 26-36), and under whom the Jews crucified the Saviour of mankind on the hill of Calvary, which is now inclosed with the church of the Holy Sepulchre in the Christian quarter of the city, seized the sacred Corban, and constructed the aqueduct still existing, which crosses the valley of Hinnom on nine arches to the north of the Birket-es-Sultan, and conveys water from Etham, or the Pools of Solomon, two miles south of Bethlehem, to the great mosque. In A.D. 70 occurred the terrible siege and destruction of the city by the Roman army under Titus; the siege occupied 100,000 men from the 14th of April till the 8th of September, as the three walls, the fortress Antonia, and the Temple had to be taken in detail, so that the operation involved five distinct sieges. By force or fire the whole city was utterly demolished with the exception of the palace of Herod, which with its gardens occupied the north-western angle of Mount Sion, and the three adjacent towers of Hippicus, Phasaelus, and Mariamne, which stood on the northern wall of the upper city to the north of the palace. These buildings were spared to serve as barracks for a Roman legion which was left to crush any fresh insurrection of the Jews who soon returned to occupy the ruins. Sixty years after its destruction the site was visited by Hadrian (A.D. 130), who conceived the idea of rebuilding it; and this idea he carried out, though thwarted for some time by insurrectionary outbreaks. Palaces, a theatre, temples, and other public buildings required for a Roman population, were erected. A temple built to Jupiter Capitolinus occupied the once sacred inclosure on Mount Moriah, and over the site of the Holy Sepulchre rose a tetrastyle fane in honour of Venus. From the new city, which was styled *Ælia Capitolina*, part of Mount Sion was excluded as at present. Under Constantine the city, which had already been a place of pilgrimage for Christians, recovered its former name; and the empress Helena added new attractions to it by the erection of churches, and by the designation of other sacred sites. The church of the Holy Sepulchre was dedicated A.D. 336. The pagans again became interested in Jerusalem under the apostate Julian, who permitted the Jews to rebuild the temple: the defeat of their attempt is related by Ammianus Marcellinus (xxiii. 1.). The city was still further embellished with churches and hospitals by Justinian. In A.D. 614 the churches and all the sacred places of the city were desolated by the Persians under Chosroes and by the Jews, who to the number of 26,000 accompanied him from Galilee to gratify their hereditary hatred against the Christians, of whom they massacred 90,000 of all ages and of both sexes. The churches were soon after restored by Modestus. Heraclius visited Jerusalem in A.D. 629. In A.D. 634, after an investment of four months, the city capitulated to the Khalif Omar; and with the exception of a short interval, to be noticed presently, Jerusalem has since remained in the hands of the followers of Mohammed.

In 1076 the Khalif of Egypt lost Jerusalem, which then fell to the Turks, and the horrible cruelties practised by these new conquerors upon the Christians of the Holy Land, described in a letter to Pope Urban II. by Simeon, patriarch of Jerusalem, and more fully dwelt upon in the fiery harangues of Peter the Hermit, himself the bearer of the letter and an eye-witness of the sufferings of the Christians, led to the first Crusade, in which the flower of the chivalry of Europe took arms to rescue the Holy Places from the hands of the Infidels. An immense host, 700,000 strong, headed by Godefroi de Bouillon, laid siege to Nicæa, May 14, 1097: that city surrendered on the 20th of June following. On swept the host, conquering, but diminishing in numbers. June 3, 1098, Antioch fell by assault, and after having taken and garrisoned the principal towns of the coast and the interior, the siege of Jerusalem was opened June 7, 1099, with an effective force of only 21,000 infantry and 1500 cavalry; and at the end of thirty-nine days, on Wednesday the 15th of July, at three o'clock in the afternoon, they forced their way into the city, massacred the garrison and the inhabitants without distinction, and then—blood-stained, barefooted, shedding tears, and singing hymns—they prostrated themselves before the Holy Sepulchre, the object of their long labours and perils. Contrary to the advice of the bishops a king was chosen, and Jerusalem became the capital of a Christian kingdom.

We can here merely give the names and dates of the several kings. Godefroi de Bouillon, elected July 23, 1099; died July 18, 1100. Baudouin I., brother of Godefroi, reigned till April 1118. Baudouin II., a relation of the former king, and eldest son of Hugues, count of Rethel, was crowned on Easter Sunday, 1118; died August 21, 1131. He was succeeded by his son-in-law, Foulques, count of Anjou, who was crowned on the 14th of September 1131, and died in 1144. Baudouin III., son of Foulques, was crowned with his mother, Melisenda, on Christmas-day 1144, when he was only 13 years of age. He rebuilt and fortified Gaza, and took the city of Ascalon. Dying without issue, February 10, 1162, he was succeeded by his brother, Amauri I., who reigned till July 11, 1173. Baudouin IV., the Leper, son of Amauri, died March 16, 1186. Baudouin V., son of William of Montferat and Sibylla, sister of Baudouin IV., succeeded his uncle at the age of five years, under the regency of the Count of Tripoli, and died at St. Jean d'Acre within a year. Gui de Lusignan, second husband of Sibylla, the mother of the late king, was crowned king of Jerusalem in the middle of September 1186. In this reign the arms of Saladin prevailed against the Christians, who were defeated in a terrible battle, which lasted three days, near Tiberias, in 1187. Gui himself was taken prisoner, and Jerusalem again opened its gates to a Moslem conqueror, after fourteen days' siege, October 2, 1187. Antioch, Tyre, and Tripoli were the only considerable places left in the hands of the Christians, and the kingdom of Jerusalem may be said to have terminated; for notwithstanding the brilliant exploits of the third Crusade under Philippe Auguste and the English Cœur de Lion, the kings afterwards appointed—Conrad, 1192; Henri, 1192 (both appointed by Cœur de Lion); Amauri II., 1197; John de Brienne, 1210—enjoyed a barren title, and reigned at St. Jean d'Acre. John de Brienne went to France for aid against the Mussulmans in 1223, and whilst there married his daughter to the emperor Frederick II., who in consequence assumed the title of King of Jerusalem, and by treaty with Meledin, the sultan of Egypt, made his entry into the capital March 17, 1229, but he returned to Europe in May following, leaving Richard Felingher governor of the country, which soon fell into a state of anarchy. In 1239 Raoul, a brother of the count of Soissons, who had married Alice, widow of Hugh, king of Cyprus, claimed the kingdom in right of his wife, who was grand-daughter of Amauri I., but disgusted with the reception he met with from the Christian chiefs he left Palestine and his wife and returned to France. Jerusalem was then besieged by Nodgedmeddin, the sultan of Damascus, and taken in a few days. In 1241 however, Saleh-Ismaïl, sultan of Damascus, gave up to the Christians Ascalon, which he had just taken from the Knights Hospitallers, Jerusalem, and some other strong places, in order to have them for allies in a war which he meditated against the sultan of Egypt. The Chorasmanian Turks, driven from the country by the Tartars, swept over Palestine in 1244, and in October of that year took Jerusalem, where they exercised the greatest cruelties. Since then no Christian prince has possessed the city of Jerusalem.

(Josephus; Tacitus, *Hist. v.*; Eusebius; Procopius; Aristæus; Schultz, *Jerusalem*; Robinson, *Biblical Researches*; Osburn, *Egypt, her Testimony to the Truth*; Bartlett, *Walks about Jerusalem*; Lynch, *Expedition to the River Jordan*; Williams, *Holy City*; De Sauley, *Voyage en Syrie*; *Christian Remembrancer*, vol. xviii.; *Dictionary of Greek and Roman Geography*; *L'Art de Vérifier les Dates*, vols. iv. and v.; Chateaubriand, *Travels*.)

JESSULMEER. [HINDUSTAN.]
 JETHOU. [GUERNSEY.]
 JHANSI. [BUNDELOUND.]
 JIDDA. [ARABIA.]
 JIHUN, RIVER. [ANATOLIA; BADAKHSAN; KHIVA.]
 JOACHIMSTHAL. [EGYPT.]

JOANNINA, or JANINA, a city of Albania, situated in a valley in the heart of that province, on the south-western bank of a lake, from which a subterraneous stream flows into the Kalaini (the Thyamis of

the ancient Greeks), in 39° 47' N. lat., 20° 53' E. long.: its population is variously estimated, but perhaps does not exceed 12,000, although some state it at 30,000. Its site is about 1000 feet above the level of the sea.

The origin and early history of this town are very obscure. In the later period of the Byzantine empire it gradually rose to be the chief city of Greece west of Mount Pindus. It is probably not very far from the site of the ancient Dodona. In the 7th and following centuries to the 11th, the country around became a field of contention between the Byzantine Greeks and the Wallachians and Slavonians, large colonies of whom settled in the district; but Janina seems to have continued in the hands of the Greeks till the year 1082, when it was taken by the Normans under Bohemond (son of Robert Guiscard), who defeated the emperor Alexius Comnenus under the walls of the town. In 1432 it fell into the hands of the Turks. An unsuccessful attempt made by the Albanian Greeks in 1611, to shake off the Turkish yoke, led to their expulsion from the old or fortified part of the town, and to the extension of the city along the shores of the lake on each side of the fortress. Janina was the capital of the famous Ali Pasha, under whom it contained 40,000 inhabitants, including the garrison, 16 mosques, 8 Greek churches, the seraglio and palaces of the pasha, the fortress mentioned above, and two others named Coulia and Litharitsa. When Ali found himself no longer able to defend his capital against the Turks, he ordered it to be set on fire. So great was the destruction that followed, that the city has still a deserted and ruined appearance. The house situated on the small island opposite to the peninsula on which the fortress stands, still bears marks of the violence used in the murder of Ali. A British consular agent resides in Janina. The plain round Janina, which formed the territory of Dodona, yields fruit and grain of most kinds in abundance.

The *Lake of Janina* is in its greatest length 12 or 14 miles measured from north-west to south-east; the greatest breadth is about 5 miles, the least about half a mile to a mile. It is bounded on the north-east by the Mitsikéli Mountains (a branch of Pindus), which rise with very steep ascent to the height of 2500 feet above the lake; on the south-east by a rocky mountain of moderate height crowned with the extensive ruins of an Epirote city, which Colonel Leake considers to have been the ancient Dodona. On the south-west side of the lake is the plain of Janina, and beyond that a range of low vine-covered hills. Opposite the town of Janina is a small island on which is a fishing village, containing in Ali's time about 200 houses: on this island were several convents, frequently used as state prisons; Ali, who had a house on it, kept a herd of red deer. The lake abounds with fish; among them are pike, perch, carp, tench, and eels. Myriads of wild-fowl breed in the covert of the lofty reeds which surround the lake.

The lake is very commonly represented as divided into two parts, the north-western part being called the lake of Lapsista, the south-eastern that of Janina. But the middle part is rather a marsh than a lake, and is traversed by two long channels which connect the two portions of the lake. The lake of Lapsista is much reduced in its dimensions in summer, and maize is grown on the desiccated ground. The waters of both lakes are absorbed by subterranean channels; that which communicates with the river Kalaini is in the lake of Lapsista.

JOHANNA. [ANZUAN.]
 JOHANNISBERG. [NASSAU.]
 JOHN, ST. [ANTIGUA; NEW BRUNSWICK; NEWFOUNDLAND.]
 JOHN, ST., RIVER. [CANADA.]
 JOHNSTONE. [RENFREWSHIRE.]
 JOLIBA. [AFRICA.]
 JOLIET. [ILLINOIS.]
 JOPPA. [JAFFA.]
 JORDAN, RIVER. [SYRIA.]
 JOSÉ, SAN. [COSTA-RICA.]
 JOSSELIN. [MORBIHAN.]
 JOST VAN DYK. [VIRGIN ISLANDS.]
 JOUDPOOR. [HINDUSTAN.]
 JOUILLAC. [CORREZE.]
 JUAN DE LOS LAGOS. [MEXICO.]
 JUAN DEL RIO. [MEXICO.]
 JUAN FERNANDEZ. [CHILL.]
 JUBBULPOOR. [HINDUSTAN.]
 JUDÆA. [PALESTINE.]
 JULIAN ALPS. [ALPS; AUSTRIA.]

JÜLICH-CLEVE-BERG, a former sub-division of Rhenish Prussia, consisting of the three duchies of Jülich, Cleves, and Berg, which now form the governments of COLOGNE, DÜSSELDORF, and a part of that of Aachen in the Rhein-Province. BERG and CLEVES have been already noticed in this work. The town of *Jülich*, from which the duchy of Jülich or Jüliers was named, stands on the Roër, about 26 miles W. from Cologne, and has 3800 inhabitants, who manufacture soap, leather, and vinegar. It is fortified. Jülich is the ancient *Juliacum* which is mentioned in the 'Itinerary' of Antoninus. After the withdrawal of the Romans from this part of the empire the town gave title to imperial counts, one of whom, Girard I., assisted the emperor Henry the Fowler in his war against the

Huns in A.D. 933. The emperor Charles IV. in 1356 erected the county into a duchy in favour of Girard's descendants. On the extinction of this family in 1609, Maurice of Nassau seized the duchy, which was taken from him by the Spaniards under the Count of Berg in 1622. At the peace of the Pyrenees, the territory was made over to the Palatine house of Neuburg, in which it remained till 1794, when the French took possession of it, and incorporated it with the department of Roër. On the downfall of Napoleon I., the duchy came into the possession of Prussia.

JUMETZ. [HAINAULT.]

JUMILLAC-LE-GRAND. [DORDOGNE.]

JUMNA. [HINDUSTAN.]

JURA, Argyleshire, Scotland, an island of the Hebrides, in the district of Islay, is bounded E. by the Sound of Jura, and W. by that of Islay. The population of the island in 1851 was 1064. Its greatest length is 25 miles; its greatest breadth is 8 miles. The island is a continuous mountain range, elevated towards the south into five distinct points, of which the three principal are called the Paps, and rise to the height of 1083 feet. The proportion of cultivated land on the island is about 7 parts in 100. Besides the great inlet of Loch Tarbet, the coast-line is indented by several bays and harbours, the chief of which are Small Isles Bay, and Lowlandman's Bay. On the western shore are found large quantities of fine sand, which is used in the manufacture of glass. Large flocks of sheep and goats are fed upon the mountains. At the north end of the island, between Jura and Scarba, is the strait of Coryvrechan, in which is the dangerous whirlpool of that name. A pyramidal rock, rising to within 15 fathoms of the surface of the water, checks the flow of the tide stream, and occasions the violent eddy so fatal to inexperienced or incautious navigators.

JURA, a department in the east of France, is bounded N. by the departments of Haute-Saône and Doubs, E. by Switzerland, S. by the department of Ain, and W. by those of Saône-et-Loire and Côte-d'Or. Its greatest length from north to south is 72 miles, its greatest breadth at right angles to the length is about 40 miles. The department lies between 46° 17' and 47° 20' N. lat., 5° 13' and 6° 9' E. long. Its area is 1928 square miles. The population by the census of 1836 was 315,355; in 1846 it amounted to 316,150; and in 1851 to 313,299, which last gives 162.5 inhabitants to a square mile, being 12.0 below the average to the square mile for the whole of France. The department was formed out of the old province Franche-Comté, and is named from the Jura Mountains which traverse it.

Surface, Soil, and Produce.—The surface is diversified by mountains and plains. Two-thirds of its extent are covered with the JURA MOUNTAINS, of which the highest summits in the department are Reculet, La-Dôle, and Mont-Poupet, which rise to the respective heights of 5959, 5513, and 6000 feet above the sea. The surface presents throughout its whole length three very marked and distinct divisions:—1. The western part, which consists of a low plain about 7 miles wide; 2, the first mountain elevation, which rising suddenly from the plain forms a plateau nearly 10 miles wide; and 3, the high mountain district to the east of the other two, consisting of lofty summits and deep valleys, and extending in width as far as the other two divisions together. The soil of the plain, which consists of a marly clay resting on alternate beds of earth and shingle, is very productive in wheat, rye, maize, buckwheat, hemp, &c. On the plateau the soil is calcareous and shallow; it yields barley, oats, maize, nuts, &c. Among the mountains the soil is stony and thin, only in some parts a little barley and oats are produced; but there is abundant pasture, on which, during summer, from June to October, great numbers of cattle and horses are fed.

Dairy Farming on the Mountains.—During summer the chalets, or solidly-constructed huts, on the heights, serve as habitations for the herds, stores for the dairy produce, and as sheds for the cattle; in these the cows are milked, and butter and cheese made. There is one herdsman for every 20 cows, and one cheesemaker for every 80. The cows from the different communes pasture in separate inclosures, each about 300 or 400 acres in extent, and surrounded by a wall of dry stones; they come of their own accord to the chalet to be milked by the herdsman, and immediately after return to pasture, for they never lair in the chalet. In these annual migrations of the cattle, the milking of the cows and the making of the cheese and butter are entirely managed by men. An account is kept of the quantity of milk given by the cows of each owner, so as to apportion his just share of the butter and cheese made, or of their price when sold. On the 9th of October (St. Denis's Day) the little establishments are all broken up, for then or soon after the rigours of a boisterous winter set in; the herdsmen tie their wardrobe, no great burden, between the horns of the best cows, and the descent is commenced. But, as all the cattle do not come from the same village, the herdsman follows only his own; the others, led by some sage old cow, direct their steps to their own village, where finally separating each one repairs to the house of her own master.

The farm buildings in the mountain districts are in general solidly built of stone and lime, but only 7 feet high, and covered-in with lengths of rough deals, which are kept from being blown away by numerous stones laid on them. They include a dwelling-house, stable, barn, and hay-loft, all under the same roof, and communicating with each other. All the animals lair in the same stable,

which extends quite across the building, and in which they are arranged in two rows, head to head, and feed from a manger that runs from one end of the apartment to the other. The cattle are never littered; but the floor is covered with loose planks, and overhead there is a covering of the same; otherwise the cattle could not stand the cold of the winter, which generally lasts from six to eight months. In that part of the structure appropriated to the family the chief apartment is about 13 feet square; in the centre stands a stove, whence the smoke issues through a tube carried up a wide chimney, which by means of a trap-door is kept closed on the windy side, and serves for a window all the year, and during the deep snows for a door also, the ascent being made by means of a short ladder. Adjoining this apartment is a chamber containing beds for the father, mother, and the daughters of the family; the sons and men-servants, if any, sleep in the hay-loft.

Hydrography and Communication.—The department is drained by a great number of rivers, the principal of which are—the AIN: the DOUBS: the OIGNON, which bounds it on the north [DOUBS]; and the LOUE, which enters it from the department of Doubs, and running west enters the river Doubs, a few miles south of Dôle. Of these the Ain, the Loue, and the Doubs are navigable. Among the smaller rivers the most important is the Bienne, which rises near the eastern boundary, and passing Morez and St.-Claude it then turns westward and falls into the Ain on the left bank, just before that river touches the southern boundary. A large quantity of squared timber and deals is floated down the Bienne, the Ain, and some of the other streams in rafts, to the timber wharfs of Lyon. The north of the department is crossed by the Canal-du-Rhône-au-Rhin. There are numerous marshes and lakes in the department, which is traversed by 5 imperial, 24 departmental, and by 30 parish roads. As yet (1854) there is no railway in the department, but several have been projected, among which are a line from Dijon through Dôle to Salins; another from Châlon to Dôle and Besançon, with a branch from Dôle southward through Lons-le-Saulnier to Bourg in the department of Ain.

Climate.—The climate differs with the elevation of the surface; it is intensely cold in the mountains, where the snow lies frequently for six months; in the plain, which is cold enough in winter owing to the proximity of the snow in the highlands, the air is hot and close in summer, but on the plateau it is pure and healthy during that season. High winds are frequent at all seasons, and very impetuous during winter on the mountains; they are attended by heavy rains in spring, and oftentimes in summer also.

The department contains 1,234,091 acres. Of this area 452,498 acres are under cultivation; 124,909 are natural grass land; 51,961 are under vines; 859,289 are covered with woods and forests; and 195,242 acres consist of heaths and moors. The agricultural produce, which has been specified before, is barely enough for the consumption. Horned cattle are exceedingly numerous; there are but few sheep; poultry, bees, game, and fish are abundant. The produce of wine amounts to 7,864,000 gallons annually, the best growths being those of the districts about Arbois, Château-Chalon, and Lons-le-Saulnier. The forests abound with pine and oak timber.

Geology and Mineralogy.—The north-east of the department is occupied by the supercretaceous formations; the rest of the department consists of the strata that lie between the chalk and the new red-sandstone; the chalk itself we believe nowhere rises to the surface. The mineral treasures of the department are considerable. Several iron-mines are worked; gold, copper, lead, and coal are found; the peat beds are dug for fuel; marble, alabaster, and lithographic stone are quarried. There are important salt-works at Salins and Montmorot.

The manufacture of iron and iron wares, carried on in numerous smelting furnaces, forges, and foundries, is the most important object of industrial activity. The other manufactures are paper, watch and clock works; turnery in wood, bone, ivory, and horn; coarse woollens, linen, mineral acids, salt, casks, steel, scythes, nails of all kinds, tiles, and leather. There are 632 wind- and water-mills (the latter including saw-mills), and 345 factories of different sorts, besides the iron-works before mentioned; about 90 fairs are held in the year.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Lons-le-Saulnier . . .	11	212	108,214
2. Poligny	7	152	78,249
3. St.-Claude	5	82	51,486
4. Dôle	9	138	75,350
Total	32	584	313,299

1. In the first arrondissement the chief town, *Lons-le-Saulnier*, which is also the capital of the department, is situated at the foot of high vine-clad hills that surround it on every side, except the west, in 46° 40' 28" N. lat., 5° 33' 11" E. long., at a distance of 225 miles S.E. from Paris, 845 feet above the level of the sea, and has 8450 inhabitants in the commune. It is a pretty, well-built town, and lighted with gas; the principal street is lined with arcades; and there are

several handsome fountains. In the northern angle of the town are important salt-springs, from which the brine is constantly pumped up into a wooden canal that conveys it to the great salt-works at Montmorot, about a mile distant from the spring. The town is the seat of tribunals of first instance and of commerce, of communal and ecclesiastical colleges; it has also a public library, a museum, and a theatre. The manufactures consist of hosiery, potash, and leather; the commerce is considerable in salt, iron, timber, wine, brandy, cheese, &c. *St. Amour*, 18 miles S. from Lons-le-Saulnier, has marble-sawing-mills, naileries, tan-yards, and 2527 inhabitants in the commune. *Baume-les-Messieurs*, 6 miles from Lons-le-Saulnier, is a small place of 770 inhabitants, situated in a wild rocky gorge on the Seille, and is famous for its ancient Benedictine abbey, the church of which is in tolerable preservation, and contains tombs of the counts of Bourgogne.

2. In the second arrondissement the chief town, *Poligny*, is situated at the extremity of an extensive plain, and at the foot of a spur of the Jura chain, near the source of the Glantine, at a distance of 18 miles N.E. from Lons-le-Saulnier, 1064 feet above the level of the sea, and has a population of 5615. It consists chiefly of four well-built streets, parallel to each other, and to the direction of the mountain. It is well supplied with excellent water from the numerous fountains that adorn the town. *Poligny* has a college, manufactures of pottery, casks, saltpetre, and oil; iron-works, dye-houses, tan-yards, and hydraulic saw-mills. Marble and alabaster are quarried in the neighbourhood. The tribunal of first instance is at *Arbois*, a pretty town 5 miles to the northward, the birth-place of Pichegru. *Arbois* has a college and 7000 inhabitants, who manufacture paper, oil, and leather, and trade in the excellent white wines of the district. There are iron-works, hydraulic saw-mills, nitre-works, and nurseries at *Arbois*. *Champagnole*, a well-built town, with 3276 inhabitants, situated at the foot of Mont-Rivel, on the right bank of the Ain, and near the village and extensive iron-works of *Sirod*, is a place of some commercial activity. It has a large iron-wire factory, hydraulic saw-mills, naileries, &c. *Salins*, 8 miles N.E. from Poligny, situated on the slope of a hill above the little river Furieuse, a feeder of the Loue, and near a narrow gorge between two high mountains, has a college, a handsome church dedicated to St. Anatole, and 7481 inhabitants. In the centre of the town are numerous salt-springs, and one of the greatest salt-works in France, which are inclosed by thick walls, flanked with towers, and extending 306 yards in length by 100 yards in breadth. Sulphate of soda, brandy, and leather are also manufactured, and in the neighbourhood there are gypsum-quarries, paper-mills, and iron-works.

3. In the third arrondissement the chief town, *St. Claude*, situated between three wooded and rocky mountains, at the confluence of the Tacon with the Bienne, which is here crossed by a suspension-bridge, and at an elevation of 1432 feet above the level of the sea, 28 miles S. by E. from Lons-le-Saulnier, has tribunals of first instance and of commerce, a college, and 5835 inhabitants in the commune. The town, which is the residence of the Bishop of St. Claude, is well built, and ornamented with some pretty promenades and handsome fountains. The cathedral church of St. Pierre is the principal building. The town is famous for turnery in bone, ivory, horn, and wood; buttons, tobacco, and musical boxes, wind instruments, combs, hardware, pine, crape, cotton-yarn, leather, paper, tiles, and pottery are also manufactured. *Mores*, on the Bienne, is situated in a gorge formed by two mountains, which rise almost perpendicularly to the height of 1200 feet, and scarcely leave room between their naked sides for two rows of houses and the street that separates them. The population amounts to 2726, who maintain themselves by manufacturing iron, iron-wire, cotton-yarn, leather, and watch and clock movements.

4. In the fourth arrondissement the chief town is *Dôle*, which is described in a separate article. [DÔLE.] The other cantons of this arrondissement are named from mere villages.

The department forms the see of the Bishop of St. Claude, is included in the jurisdiction of the High Court of Besançon, and belongs to the 7th Military Division, of which Besançon is headquarters. To the Legislative Body of the French Empire it used to return two members.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

JURA MOUNTAINS, the name given to a mountain system which consists of several parallel chains extending along the frontiers of France, Savoy, and Switzerland, in a direction from south-south-west to north-north-east from the Rhône and the Lake of Geneva to the left bank of the Rhine, towards the north, where it is connected by some lower elevations with the Vosges. The length of the system is about 180 miles; the breadth varies from 30 to 50 miles. The highest summits of the Jura Mountains are found in the most eastern chain, which extends between France and Switzerland; the other chains diminish in height towards the west, and do not form continuous ranges, but rather consist of isolated elevations connected at their bases. Very few of the valleys among these mountains are transversal; most of them run in the direction of the length of the chains. The highest points in the crest of the eastern chain are those of Reculet, Tendre, La-Dôle, and Colombier, which rise respectively to 5959, 5543, 5513, and 5494 feet

above the sea-level; the mean height of this chain is about 4800 feet. The highest point in the second chain does not much exceed 4300 feet. The highest part of these mountains, which is full 3000 feet lower than the line of perpetual snow on the Alps, is covered with forests of pine and other resinous trees; farther down, the beech, the ash, the lime, and the oak flourish; and the lower slopes are occupied with vineyards or cultivated for the production of maize or barley. The mountains also abound in excellent pasture, on which great numbers of cattle are reared and fed, and a great quantity of cheese is made. [JURA, Department of.] Wolves are common; the brown bear and the wild cat are said to be met with, but rarely.

On the eastern side the chain of the Jura Mountains presents in general steep abrupt sides, but on the west they slope down by almost insensible degrees. They are composed of a hard gray limestone, mixed with alternate beds of marl and clay; in some places alabaster, gypsum, asphalt, coal, marble, and petrifications of various kinds, especially those called oolites, which are characteristic of the Jurassic system, are found. Iron-mines, sulphurous and salt springs abound; stalactitic grottoes and waterfalls are numerous; among the latter is the magnificent Saut-du-Doubs. [DOUBS.] An important and interesting feature of the Jura system is the number of erratic stone-blocks that are found high up the eastern slopes, at points opposite the opening of the great valleys which descend from the high Alps.

The region just described is that which is usually known as the Jura Mountains, but the name among geologists has a wider acceptation, the continuation of the same limestone country through Suabia and Franconia being distinguished as the German Jura, rising in the Rauhe-Alb, near Ulm, to 2400 feet above the sea. The general direction of all these calcareous mountains is north-eastward, but in Franconia it changes to northward; their boundaries are little sinuous: their breadth averages about 20 miles, and from the vicinity of Bamberg to the passage of the Rhône the length exceeds 400 miles.

Nearly parallel to the Swiss and German Jura on the south calcareous rocks, belonging to the same geological era, range in front of the primary rocks of the Alps, from Chambéry to Vienna, more than 500 miles; and similar ranges of the same strata occupy the right side of the Saône and the left of the Meurthe and Moselle, and connect themselves with the oolites which encircle the basin of Paris. Thus the Swiss Jura described above occupies a nearly central position with respect to an immense and ramified system of elevated limestone districts all belonging to one geological system; and hence it has become the almost universal practice of the continental geologists to designate that series of rocks by the title of the 'Jura formation,' a term exactly equivalent to the oolitic system of English geologists.

The mountains of the German, Swiss, and French Jura, regarded in a general point of view, may be described as inclosing between their ranges an immense basin, which contains the greater portion of Burgundy and Lorraine, the whole of Alsace, Suabia, Franconia, and Hesse. Against this inclosed region the oolitic ranges present bold and abrupt descents, while toward the exterior the slopes are gentle. The chalk formation partially surrounds the Jura ranges on the French and German sides, but in the interior of the basin not a trace of it is to be found.

In the Swiss Jura the strata are thrown up at high angles of elevation, and consequently form long extended ridges and chains; the Suabian region is formed of rocks which lie in regular and nearly horizontal layers, and constitute an extended and uniform plateau; in Franconia dolomite abounds, and crowns the heights with picturesque rocks resembling the towers and pinnacles of ruined castles. The mineral composition of the Jura ranges is everywhere similar, and form a series comparable to the larger divisions of the oolitic series of England and Normandy. The German Jura contains the subdivisions of the oolitic series from the lias upwards to the cornbrash. The dolomites and lithographic slates constitute a distinct upper band of the Jura formation, corresponding to the Portland oolites.

The determination of the geological epoch of the elevation of the Jura ranges to constitute dry land is important, especially in reference to two phenomena which are witnessed in these mountains, namely, the ossiferous caverns of Franconia, and the dispersion of erratic blocks from the High Alps. The opinion of John Hunter that the caverns of the district of Muggendorf were filled by bears which voluntarily retired thither, has been confirmed by the researches of Buckland and Von Meyer. The geological era of their existence is perhaps subsequent to the whole tertiary period; but Von Buch's view of the origin of the Jurassic limestones seems to imply their prominence as islands in the ancient European sea before the deposition of the chalk. The erratic blocks mentioned above as lying in vast abundance on the eastern slopes of the Jura, and ascending towards their summits even to the height of 1000 or 2000 feet above the Aar and the Lake of Geneva, which now interpose their waters between the Jura and the mountains whence the blocks were drifted, are disposed in such a manner that ordinarily those which came from a particular district are distinct from the others and seem to have been brought by a distinct channel. Blocks from the Grisons have descended the valley of the Rhine; those found on the shores of the Lake of Zürich and in the drainage of the Limmat are derived from the mountains of Glarus; while in the valley of the Aar and on the slopes of the Jura lie fragments from the Bernese Alps.

To account for these facts numerous speculations have been proposed. De Lue imagined a projectile force to have displaced the blocks when the Alps were raised; Saussure, Escher, Von Buch, De Beaumont, &c., speak of the effects of water thrown into violent agitation (as some think by the elevation of the mountains); Dolomieu attributed the inequalities of surface, which render the physical explanation of the phenomena by the ordinary agencies of nature almost desperate, to operations subsequent to the scattering of the blocks; Venturi introduced the consideration of floating ice-rafts; the very feasible theory of Agassiz is that they were deposited by glaciers; while others have attempted to master the difficulty of the problem by admitting great changes of level since the blocks were moved from their native sites.

JÜTLAND, or JYLLAND, a large province of the kingdom of Denmark. The name was formerly given to the whole of the peninsula, which constitutes the continental portion of the kingdom, but at present it is restricted to the northern half, which is sometimes called North Jütland, the duchy of Schleswig being considered as South Jütland. It is bounded W. and N. by the German Ocean, E. by the Cattegat and the Little Belt, and S. by Schleswig; and lies between 55° 20' and 57° 42' N. lat., and 8° 6' and 10° 50' E. long. Its form as far as 57° 12' is a pretty regular parallelogram lying nearly due north and south; the northern part is almost a right angled triangle. The extreme length is about 170 miles; the breadth of the parallelogram varies from 70 to 85 miles, but in the centre it is 100 miles, the district of Kalløe projecting towards the east. The area is 9696 square miles; the population was 604,525 in 1850.

Few countries have such an extensive line of coast in proportion to their area as the Danish peninsula, which, especially on the more elevated east coast, is indented with numerous bays and inlets, and no town is above 45 miles from the sea. The most considerable of these inlets, the Lüum-Fiord [DENMARK, vol. ii. col. 710], extends across and insulates the northern part of the peninsula. It is about 100 miles long, and contains numerous islands, the largest of which, called Mors, situated in the broad part, has an area of 136 square miles. In 1825 the North Sea broke through the narrow strip of land which separated it from the Lüum-Fiord, and the breach has since been gradually enlarged, but the openings are too shallow to admit vessels of much draught. The apparent advantage of the extensive line of coast possessed by Jütland is much diminished by the shallowness of the sea, and the innumerable little islands, sandbanks, and shoals which render access difficult. The north coast, besides an immense range of sandbanks rising almost to the surface of the water, is rendered dangerous to navigators by numerous currents and the shortness and rapidity of the waves. The west coast, facing the German Ocean for above 200 miles, is bordered by a narrow strip of moving sand and a chain of sandhills, within which there are many good pastures. The southern part of the west coast is alluvial soil, extremely fertile, but swampy and unhealthy, and requiring dykes to protect it from the inroads of the German Ocean, which however sometimes breaks through them, as happened in 1634, when 15,000 persons perished. The east coast is more elevated, rising in chalk-cliffs above the sea,

and to the south of Aarhus it presents a series of fertile and well-cultivated eminences. [BELT.]

The only elevations in Jütland are a range of low hills, seldom rising above a few hundred feet: they are the prolongation of the chain which runs through Mecklenburg and Holstein, and thence extends through the whole peninsula, terminating at its extreme northern point, the promontory of Skagen. Only the Himmelsberg attains the height of 1200 feet; no others attain more than 700 feet. The rivers are very small, and are all called 'aas;' the largest are—the Scholmæe, Widæe, Brædesæe, and Ribsæe.

The climate is comparatively temperate, but very variable, with frequent fogs and rains. The winters are not very rigorous, but the summers are often extremely hot. With respect to the soil, more than half is arable land, a quarter is heath, above 700 square miles are meadows and marshes, about 300 square miles are forests, and about 235 tracts of moving sand. The productions are corn (more than sufficient for the inhabitants), hemp, flax, tobacco, and some timber. In the 11th century the country was covered with vast forests, and there are still considerable woods of oak, fir, beech, &c., on the east coast, but on the west there are only willow, beech, and alder. The horses are large, but fitter for draught than for riding. The breed of black cattle is good, and numbers of them and of hogs are exported to Holstein. There is abundance of game, and some wild boars are still found in the forests. The lakes, gulfs, and bays afford an inexhaustible supply of fish.

The peninsula is divided into four large districts called 'stifts,' in this instance equivalent to diocese or bishopric. Aalborg in the north; Aarhus in the east; Wiborg in the centre; and Ribe in the south and west. AALBORG, including the capital, Aalborg, the towns of Hiörring, Thisted, and Nyekiöbing, with the islands of Mors and Lessöe, and AARHUUS, with its capital, Aarhus, and the town of Randers, have been already described. Wiborg has an area of about 1100 square miles, and about 95,000 inhabitants. Wiborg, the capital, is situated on a small lake nearly in the centre of the peninsula, and has about 5500 inhabitants. It is 2½ miles in circuit, is surrounded with ramparts, has six gates, and is pretty well built. There are a cathedral and two other churches, and a few manufactories. The bishopric of Ribe, or Ripen, the most extensive of the stifts, has an area of 3900 square miles, but is in proportion the least populous, having only 170,000 inhabitants. Ribe, the capital and seat of the bishop, is a small walled town with 3500 inhabitants. It is situated on a little river called the Ribsæe, 2 miles from the German Ocean. Only small vessels can come up to the town, which has some trade in corn, oxen, and horses. Besides the cathedral there are a church, and the oldest Latin school in Denmark (founded in 1248), with a library. Fredericia, the only fortress in Jütland, is in this diocese; it is situated on the Little Belt, has 5000 inhabitants, a Calvinist, a Roman Catholic, and two Lutheran churches, a synagogue, a custom-house for ships passing through the Little Belt, and other public buildings, and several manufactories.

JYNAGUR. [HINDUSTAN.]

JYPOOR. [HINDUSTAN.]

K

KAADEN. [EGER.]

KABYLES. [ALGÉRIE.]

KAFFA, *Caffa*, or *Theodosia*, a fortified sea-port town of Russia, is built on the south-eastern shores of the Crimea, in 45° 2' N. lat., 35° 20' E. long., on a wide open bay, which is more than twenty miles across. The town stands on the most western angle of this bay, and its harbour is protected by a projecting cape. In ancient times the town was called Theodosia, and was one of the towns of the Greek kingdom of the Bosphorus. According to the author of the 'Periplus of the Euxine,' it was a Milesian colony. Its importance appears to date from the time of Leucon, the contemporary of Demosthenes, who made it a port, and gave certain advantages to Athenian ships which came there for the purpose of carrying grain back to Athens. According to the author of the Periplus (who probably lived in the 2nd century of the Christian era), it was then called Ardauda in the Alan or Tauric dialect, which name signifies 'the seven gods.' It seems to have been a considerable place between the 12th and 14th centuries, when it was in possession of the Genoese, who carried on a considerable commerce with India through Persia from this town. In 1474 it was taken from the Genoese by the Turks, but still continued a considerable place, though its population had decreased from 80,000 to 20,000. The population now, exclusive of military, does not exceed 8000. The wars which the Russians, in the latter half of the last century, carried on in these parts, ruined Kaffa. The space inclosed by the walls, which are strengthened by numerous towers, is an oblong square more than a mile in perimeter. In 1806 Russia tried to restore the prosperity of Kaffa by declaring it a free harbour, and by establishing a quarantine, an assurance company, a botanic garden, a museum of antiquities (which are frequently found in the neigh-

bourhood), a library, &c.; the effect of these efforts was at first considerable. In 1817 the exports were valued at 4,000,000 rubles, but in 1830 the exports did not exceed 1,148,288 rubles, nor the imports 890,910 rubles; and now the exports hardly average 400,000 rubles. Fishing is the principal occupation of the inhabitants. In its neighbourhood are oyster beds. Caviar is made here, as well as a small quantity of tobacco. Kaffa exports wool, skins and hides, fish, and a great quantity of salt.

(Pallas; Lyall, *Travels in Russia*; Demosthenes, *Leptin.*, c. 9; Strabo, vii.; Steph. Byzant.)

KAFFA, a country in eastern Africa south of Abyssinia, is said to be of considerable extent. It contains several high mountains, which are separated from one another by wide valleys. Numerous water-courses drain the country, and all of them join the Goshop, or Gojeb, a large river originating in several branches to the south and west of Kaffa. On the north of Kaffa is Enarea, and on the west a wilderness, in which numerous herds of large quadrupeds (elephants, giraffes, &c.) are found. The country is fertile, and partly well cultivated. Cotton is grown to a great extent. The coffee-tree is there, as well as in the neighbouring country of Enarea, indigenous and a forest-tree. It is not stated that coffee is an article of export, but it is thought that the coffee called in these parts 'Gava,' has derived its name from this country, as the Arabs assert that it has been transplanted to Yemen from that part of Africa.

The capital is Soonee, a town which, according to the accounts of African travellers, has between 6000 and 7000 inhabitants. This place and some others are visited by the merchants of Enarea, who exchange their goods (rock-salt, copper, horses, cattle, and some India stuffs, brought from Gondar), for cotton, cotton-cloth, which is made in the

country, and slaves. The inhabitants, it is said, call themselves Christians.

(Krapf, in the *Monatsberichte der Berliner Gesellschaft für Erdkunde.*)

KAFFRARIA, is the name given by Europeans to the eastern part of South Africa, from the north-east frontiers of the Cape Colony to about 24° S. lat. The Kaffir race extend farther north, probably as far as the Zambesi River. At Sofala Bay, in 20° S. lat., Salt saw natives whom he considered to be nearly allied to the Kaffirs.

The complexion of the Kaffirs varies from a yellowish-brown or copper hue to that of deep black. The nose approaches to an arched form; they have thick lips and hair curly, but less woolly than the negroes. The Kaffir females are among the handsomest in Africa.

The Arabian and other Mussulman traders and conquerors who formed establishments on the Mozambique coast, bestowed the general appellation of Kafir, or 'Unbeliever,' on the native population. The name was adopted first by the Portuguese, and afterwards by the Dutch and the English.

Kaffraria, properly so called, extends for about 600 miles along the coast, from the Great Key River to Dalagoa Bay, and inland as far as the high land which divides the waters that flow into the Indian Ocean, from those which flow into the Orange River and the Atlantic. It runs in a north-east direction at an average distance of about 100 miles from the sea. The eastern or Kaffir side of the ridge is more abrupt than the western, which slopes in a sort of table-land towards the Atlantic. Kaffraria is a land of rugged hills and deep valleys.

In the Amaponda country Kaffir villages are scattered about, and numerous herds of cattle graze in the plains, while the lower sides of the hills exhibit patches of cultivated ground. Beasts of prey are not numerous: now and then a lion, and more frequently a tiger, or rather leopard, are met prowling in the more secluded ravines. The hippopotamus is found in most of the rivers, and its flesh is eaten by the natives. The country abounds in game, antelopes, hares, pheasants, and partridges. There are quantities of baboons and monkeys, and also serpents and other reptiles.

Four nations, originally of one stock, are the chief occupants of the country from the frontiers of the Cape Colony to Dalagoa Bay—the Amakosa, the Amatimba, called by the Dutch Tambookies, the Amaponda or Hambona, whom the Dutch have named Mambookies, and the Vavahs or Zoolahs, sometimes called Amozoolah.

The Vavahs or Zoolahs acquired considerable influence under their late chief Chaka. They were originally a small tribe who came not many years since from the north, somewhere about the mountains west of English River, which falls into Dalagoa Bay. Their language is different from that of the Amakosa and other southern Kaffirs, and is said to have more affinity to the Sichuans or Betchouana language. They are a fine athletic race; in war they carry large oval shields of bullock's hide, and an umkonto, or spear, besides a bundle of assegais. The country is represented as very fine, rich in pasture, and abounding with cattle.

The tribes who live in the low lands round Dalagoa Bay are said to be industrious, well-behaved, and favourably disposed to trade with strangers. Captain Owen mentions the arrival at Dalagoa Bay of a caravan from the interior, consisting of 1000 natives, with from 300 to 400 elephants' tusks, and a great quantity of cattle. He represents the people as honest in their manner of dealing; their prudence will not allow them to give their merchandise for the momentary gratification of rum or tobacco; but they have a great desire for cloth. Of the countries to the north of Dalagoa Bay we know very little.

Mr. Duncan in 1844, and Lieutenant Ruxton in 1845, travelled into the interior of those regions. The government of the Kaffirs is a sort of clanship system. The population of each Kaffir tribe is divided into kraals, or hamlets, containing from ten to twenty families, each family occupying a separate hut. There is a petty chief in each kraal, who exercises a kind of patriarchal authority over the people. A higher chief rules over a whole district, containing a certain number of kraals. These higher chiefs are hereditary and independent of each other, although they acknowledge to a certain extent the authority of the Umkumkani, or great chief of the whole tribe, who is supposed to be the original possessor of all the land and cattle within its territory. No individual is allowed to kill any of his cattle without permission of the chief, who claims part of the carcass as his right: likewise the first-fruits of the season are not allowed to be gathered without permission of the great chief of the tribe. All the land is held in common, except a small patch to each family. The Kaffirs have no written laws, but certain long-established principles and usages, any infraction of which by a chief would be opposed by his subjects at large. The Kaffirs acknowledge the existence of a supreme being, for whom they have several names in the language, but they have no form of worship, and their notions of a future life are very vague and unsettled. They have no idols, but have an abundance of superstitious usages.

The huts of the Kaffirs are hemispherical, and mostly from 18 to 20 feet in diameter, and from 6 to 7 feet high. They are made of flexible boughs covered with thatch, and plastered with clay or cow-dung. A few mats, coarse earthenware pots of native manufacture, a rush basket so closely woven as to contain liquids, a calabash, and a bundle of assegais—these constitute all the furniture of a common Kaffir hut.

The wars which have disturbed the south African territories of late years, and the effect of these wars on the relations of the Kaffir tribes with the British government, are noticed under BRITISH KAFFRARIA.

KAFFRARIA, BRITISH. [BRITISH KAFFRARIA.]

KAFFRISTAN. [KAFFRISTAN.]

KAHIRA, or CAIRO (*El Chahireh Musr*), the capital of modern Egypt, is situated in 30° 2' N. lat., 31° 15' E. long., in a plain midway between the right bank of the Nile and the ridge of Mokattam, near the apex of the Delta of the Nile, and has about 250,000 inhabitants, including the suburbs. The tract of land between the town and the river, which is above a mile in width, in the direction of Boolak, the northern harbour of Cairo, becomes narrower farther south, so as to be less than half a mile wide, in the direction of Musr el-Ateekah, or Old Cairo, the southern harbour or landing place. Cairo occupies about three square miles; it is surrounded by a wall, the gates of which are shut at night, and is commanded by a large citadel situated at an angle of the town, on one of the lower elevations of the contiguous ridge, in which is the residence of the Pasha. The streets of Cairo are unpaved, irregular, and narrow; they are more like lanes than streets. The great thoroughfare streets have generally a row of shops on each side. Above the shops are apartments which do not communicate with them, and which are inhabited by private families. Most of the by-streets have a wooden gate at each end, closed at night, and guarded by a porter within, who opens it to persons who require admittance. There are also many courts with several narrow lanes branching out of them, but no thoroughfare, and only one common entrance, with a gate, which is also closed at night. The external walls of the better sort of houses are raised to the height of the first floor with the soft calcareous stone of the neighbouring mountain. The superstructure, the front of which generally projects about two feet, is of burnt brick of a dull red colour, but often plastered. The roof is flat, and covered with a coat of plaster. The ground-floor apartments next the street have small wooden grated windows; but the windows of the upper apartments are mostly formed of turned wood lattice-work, which is so close that it shuts out much of the light and sun, but admits the air. In the better houses the windows are furnished with frames of glass in the inside, which are closed in the winter, for a penetrating cold is felt in Egypt when the thermometer is below 60°. The houses in general are two or three stories high, and most of them inclose an open unpaved court, into which the principal apartments look. In the court is a well of slightly brackish water, which filters through the soil from the Nile; and on its most shaded side are commonly two water-jars, which are daily replenished with water of the Nile, brought from the river in skins.

There are in the town three or four squares or open places of considerable extent, two of which are overflowed during the high floods of the Nile. Some of the squares are surrounded with good private houses. Among the mosques, which number between 300 and 400, four are distinguished for their size and architecture—that of Tooloon, which dates from the 9th century; that of El Hakim; that of El Azhar, which has a splendid dome, and a college attached to it; and lastly, the mosque of Hhasanayn, with its high dome, its two lofty minarets, and its marble and other ornaments. These buildings are considered master-pieces of Arabian architecture. Among the other remarkable buildings are the public baths, of which there are between 60 and 70 in the town, several of them very spacious, handsomely ornamented and painted externally and internally, the various apartments being paved with marble. The coffee-houses, which are very numerous, are extremely plain and unadorned. There are in Cairo numerous buildings called wekalehs, for the accommodation of merchants and their goods. These buildings are square or oblong, having an open court in the middle, with vaulted warehouses for merchandise on the ground floor opening into the court, and lodgings above them. The shops in the streets are small square recesses or cells, about 6 or 7 feet high and between 4 and 6 feet wide, in which there is just room enough for the seller and one or two customers. The public gardens consist of groves of orange- and lemon-trees and vines; and the cemeteries, both within and without the town, are also frequented as promenades.

Of the population of Cairo about 135,000 are native Mussulmans, 60,000 Copts, between 3000 and 4000 Jews, and the rest strangers from various countries. The police maintained in the metropolis is tolerably strict: punishments are arbitrary but lenient; convicted malefactors are mostly employed in the public works.

In the neighbourhood of Cairo are, Boolak, with the custom-house, the bazaar, the printing-press, a school or college, some silk manufactories, and about 18,000 inhabitants; Musr-el-Ateekah, where the town of Fostat, or Old Cairo, once stood, and where the vast granaries, consisting of seven square towers, and called 'the granaries of Joseph,' are now seen; Schoobra, with a country-house and fine gardens of the Pasha; Aboo Zabel, where is a school of medicine, anatomy, and surgery, and a large military hospital, all created by the Pasha Mehemet Ali; and between Boolak and Old Cairo are the palace and gardens of the late Ibrahim Pasha. Nearly opposite Cairo, on the left bank of the Nile, are the great pyramids of Jizeh; and in the island of Roda is the celebrated Nilometer, a graduated column, for marking the height of the inundations of the river.

Cairo still maintains the reputation of being the best school of Arabic literature; and for Mohammedan theology and jurisprudence the fame of its professors remains unrivalled. Schools for children are very numerous: almost every mosque has a koottab, or day-school, attached to it, in which children are instructed in reading the 'Koran,' and, if required, in writing and arithmetic. The schoolmasters are mostly persons of very little learning. Those youths who propose to devote themselves to religious employment or the learned professions pursue their studies in a great college attached to the mosque of El Azhar, which has a considerable library. The instruction is given gratuitously. The number of students is about 1500, from almost all parts of the Mohammedan world. Mehemet Ali having seized the lands of the mosques, the Azhar has scarcely any revenue; the professors therefore are obliged to subsist by teaching in private houses, by copying books, and on the presents which they receive from the wealthy. Besides this college or university, there are, an elementary school of arts and sciences at Casr-el-Ain, a school of administration to instruct those who are designed for civil offices, and a school of artillery and engineering. In the city there are also four primary schools, a magnetic observatory, a theatre, several hospitals, and a lunatic asylum.

Cairo was founded in the reign of Moez Ledinillah, fourth Mahadi, and first Fatimite Khalif of Egypt, about A.D. 970. It was called Masr-el-Kahirah, and became immediately the capital of Egypt and the residence of the khalifa. After the destruction of Fostat by the Crusaders the city increased rapidly in size and population. It was taken by Schirkouh, general of the Sultan of Damascus, in 1169, and soon after Saladin, who succeeded his uncle in the command in Egypt, surrounded Cairo with walls and built the citadel. Under Saladin and his successors Cairo became one of the finest and most commercial cities in the world, a sort of central mart for the products of the east and west. Its capture by the Turks in 1507, and the discovery of the way to India by the Cape of Good Hope, put an end to its prosperity. Under Mehemet Ali and his successors the city has recovered considerably in population and appearance; but its trade is comparatively insignificant, Alexandria being now the commercial capital of Egypt. Murzuk, Sennaar, and Darfur send a few kafilahs yearly to Cairo, exchanging slaves and raw produce for manufactured goods.

(Lane, *Account of the Manners and Customs of the Modern Egyptians*; Wilkinson; Minutoli; Planat, *Histoire de la Régénération de l'Egypte; L'Art de Vérifier les Dates.*) [See SUPPLEMENT.]

KAISARIYEH, a town in Asia Minor, is situated in a plain to the north of the Erjish-Dagh (the ancient Argæus) in about 38° 41' N. lat., 35° 25' E. long., and has a population variously estimated at 25,000, 40,000, and 50,000, consisting of Turks, Greeks, and Armenians. The plain is laid out in corn-fields, and screened on the east and west by low hills covered with gardens and vineyards, and the whole neighbourhood abounds with volcanic deposits. The town is surrounded by an old walled moat, and further defended by an old citadel partly in ruins. The houses, which are from 8000 to 10,000 in number, are built of stone and lime, but many of them have a cracked and dilapidated appearance caused by the frequent earthquakes. The streets are narrow and dirty, the squares and market-places also abound with filth; and the naturally healthy climate is poisoned by the absence of all sanitary arrangements. The bazaars are extensive and well supplied with European manufactured goods, woollens, silks, hardware, iron, &c. The Armenian merchants display their wares in a large place called the Vizir Khan; these consist of hardware, snuff-boxes, glass beads, Red Sea shells for ornamentation, paper, cards, padlocks, &c. Of native articles exposed for sale the chief are yellow berries, which are grown in the plains of Cæsarea, wool, gall nuts, goats'-hair, tragacanth, cotton, skins, furs, sultana raisins and other fruits, madder and other dyestuffs. Among the principal structures in the town are the mosques, the convent of Siddi-Battal, and some mausoleums. The Armenians have a bishop and two churches in Kaisariyeh; the Greeks also have a church. The manufactured products of the town are chiefly yellow marocoo leather, cotton-stuffs, and cotton-yarn.

Kaisariyeh in site and sound is identical with the ancient *Cæsareia*, the capital of Cappadocia, which was originally called *Mazaca*. The plain in which it stands is watered by the Melas, now called the Kara-su, which was dammed up by king Ariarathes to form a lake a little above its entrance into the Halys (not Euphrates as erroneously stated by Strabo). *Mazaca* was called also *Eusebeia*, and numerous coins with this epigraph have been found on the site. It was taken by Tigranes and its inhabitants carried off to his new capital Tigranocerta. When Cappadocia was made a Roman province in the reign of the emperor Tiberias, *Mazaca* was named *Cæsareia*. It became a place of great importance in the later times of the empire. When taken by Sapor in the reign of Valerian (about A.D. 259) it had a population of 400,000. In the reign of Justinian the walls were repaired. There are many ruins and heaps of rubbish of ancient structures about the town.

Cæsareia gave title to a Christian bishop from an early period of the Church; it is the birthplace of St. Basil the Great, who became bishop of *Cæsareia* A.D. 370.

(Strabo; Suidas; Eutropius; Hamilton, *Researches in Asia Minor*; *Dictionary of Greek and Roman Geography.*)

GEORG. DIV. VOL. III.

KALENBERG. [HANOVER.]

KALGUJEW, a considerable island in the circle of Mezen, in the Russian government of Archangel, lies between 68° and 69° 40' N. lat., 47° 30' and 48° 10' E. long., and is about 66 miles in breadth. The surface is undulating; it has some low mountains, which rise in the centre, two small rivers, and several brooks of fresh water. The surface is covered with mosses; there are also extensive morasses. The ground bears nothing but berries, some antiscorbutic plants, and stunted bushes. The surrounding sea is shallow, but swarms with fish; the coast abounds in seals, walrusse, and other such animals. The cliffs are covered with an incredible number of sea-birds; the interior is full of polar bears, foxes, &c. It is only frequented by fishermen and seal-hunters from Mezen and Archangel. The little island of Plokti-Kookti and some others are near to Kalgujew.

KALMAR. [CALMAR.]

KALMUCKS. [RUSSIA.]

KALU'GA, a government of European Russia, lying between 53° 24' and 55° 21' N. lat., 33° 20' and 37° E. long., is bounded W. and N.W. by Smolensk, N.E. by Moskwa, E. by Tula, and S. by Orel. The area measures 12,134 square miles. The population in 1846 was 1,008,400. The surface is level, but here and there broken by a low hill or the wooded banks of the numerous rivers that flow through it. Forests cover about half the area, the arable lands about one-third. The soil for the most part is sandy clay. The Oka and its numerous feeders are the principal rivers. There are lakes and marshes in the centre and west of the government. The rivers, several of which are navigable for barges, or available for floating timber, are frozen from November to March. The soil of Kaluga being generally poor requires abundance of manure: the chief products are rye, oats, barley, wheat, hemp, and flax. Barely enough for the consumption is produced. Horses and horned cattle are scarce. Horticulture is carefully attended to. The mineral products are bog-iron, millstones, lime, gypsum, and turf. There are several great iron-forges. The manufactures of distilled spirits, coarse woollens, linen, sail-cloth, calico, silk, velvet, ribands, leather, paper, and glass are important. *Kaluga*, the capital of the government, is situated in 54° 30' N. lat., 36° 5' E. long., on the Oka, and has 32,345 inhabitants. It is surrounded with a rampart converted into a public walk. The streets are narrow, and for the most part consist of wooden houses. The best buildings are the bishop's palace, the residence of the governor, and the principal church. Hemp-seed, hemp, flax, linseed, honey, and wax are largely exported.

KAMENITZ. [CROATIA.]

KAMPEN. [OVERYSSEL.]

KAMTCHATKA, a peninsula projecting from the north-eastern part of Asia into the Pacific Ocean, in a direction nearly due south, lies between 51° and 63° N. lat., 155° and 165° E. long. Its length is above 800 miles, and its width varies between 30 and 120 miles. Its area is stated to be about 80,000 square miles.

Its southern extremity, Cape Lopatka, is a low and narrow tongue of land (51° N. lat.), which widens as it proceeds northward, and gradually rises into mountains. The country south of 53° 5' N. lat. is covered with hills and mountains, which are rocky and barren, and only in some inconsiderable valleys clothed with creeping cedar, willow, and stunted birch. At about 53° 5' N. lat. is a mountain-knot, whence issue two ranges, one running due north, and the other north-east. These ranges inclose the vale of the river Kamtchatka. The western range, which first runs nearly due north, declines afterwards to north-north-east, and in that direction traverses the whole length of the peninsula, joining north of it the eastern branches of the Aldan Mountains. It does not appear to contain high summits, and its mean elevation probably does not rise above the line of trees, which in this country is about 3000 feet above the sea. But the range running east of the river Kamtchatka is distinguished by several high summits, which are of volcanic origin, and most of them still are active. The highest, from south to north, are the Awatchanskaja, which rises to about 9500 feet; the Tolbatchinskaja, which attains 8346 feet; the Kliotchewskaja, the highest of all, rising to 15,825 feet; and the Shiwelutchkaja, whose highest summit is 10,591 feet above the sea-level. These volcanoes constitute the northern extremity of that extensive series which incloses the eastern coast of Asia, and, traversing the islands of Japan and the Philippines, probably has a connection with another series of volcanoes which traverses the Sunda and Molucca islands from east to west.

The mountains approach close to the eastern coast, which is composed of high rocks, rugged cliffs, and bold promontories, forming numerous inlets, the entrances to which are blocked up by reefs of rocks. The mountains are mostly covered with trees, which grow to a considerable height towards the south, but diminish in size to the northward. Numerous rocks are scattered in the sea at a distance of from one to three miles from the shores; some of them are only discernible by the breakers, while others tower up to a considerable height. The depth of the sea varies considerably and suddenly from 30 to 90 fathoms and more. Earthquakes are frequent, and sometimes very violent.

The western districts along the Sea of Okhotsk, or Tarakai, north of the mountain-knot, are uniformly low and sandy to a distance of about 25 or 30 miles inland. They produce only willow, alder, and

mountain-ash, with some scattered patches of stunted birch, and towards the north they are almost entirely overgrown with rein-deer moss. The sea is shallow to a considerable distance, and the soundings very regular. The small rivers which traverse this region have at their mouth not more than six feet at low water, with a considerable surf breaking on the sandy beach.

The best part of the peninsula is the vale of the Kamtchatka River, which towards its southern extremity is 40 miles across, but grows narrower to the northward. Its length is 180 miles. Its soil is deep and rich, composed of a black earth of considerable fertility.

Among the rivers only the Kamtchatka requires notice. It rises on the northern declivity of the mountain-knot, runs in general in a northern direction through the vale, but at Nishnei Kamtchatka, where it approaches its northern extremity, it turns east, and empties itself into a large but shallow bay, which is only 8 feet deep at high water, and in which the breakers are very violent when an easterly wind blows. It flows about 300 miles, and is the only navigable river in the peninsula.

The climate of Kamtchatka, when compared with that of Europe under the same latitude, is very severe; but it is much milder than the eastern districts of Siberia. The frost sets in about the 10th of October; but up to the middle of December the thermometer commonly varies between 23° and 27° Fahr. During the following months it averages between 14° and 20°. In very severe frosts it descends to -10° and -15°, and sometimes though rarely, to -25°. On the sea-coast vegetation does not begin before the end of April, but in the vale of the Kamtchatka, which is sheltered on all sides by mountains, it begins at the end of March. Rain is frequent in summer, and in winter a great deal of snow falls.

Agriculture was introduced by the Russians about 100 years ago. In some places on the western coast, but more extensively in the vale of the Kamtchatka River, rye, barley, buckwheat, potatoes, white cabbages, turnips, radishes, and cucumbers are grown, but these articles are only cultivated by the Russian settlers. The number of horses and cattle is on the increase. The natives formerly lived chiefly on the produce of the chase, by hunting bears, wild sheep or argalis, wild rein-deer, ermines; black, red, and stone foxes; wolves, sables, seals, and otters; but since the number of these animals has considerably decreased their time and industry are employed in fishing. In no part of the globe is fish more abundant. The natives scarcely know any other kind of food, and the bears and dogs, wolves and foxes, sea-otters and seals, water-fowl and birds of prey of various sorts, all feed upon fish. The most numerous kinds are herrings, salmon, and cod. Wild-fowl, both land and aquatic, are very numerous. Some of them are eaten; but their eggs, of which whole boats-full are easily collected, are of more importance to the inhabitants. Poultry is very scarce on account of the dogs, who devour the fowls wherever they find them. Whales are numerous.

The forests contain chiefly birch, larch, fir, and cedar-pine (*Pinus cembra*). The mineral wealth is little known: in some places there is iron-ore, and sulphur is found in the vicinity of the volcanoes.

Two native tribes inhabit the peninsula, the Kamtchatdales and the Koriakes, the former occupying the peninsula as far as 58° N. lat. The Koriakes wander through the country north of the Kamtchatdales. The Kamtchatdales are short, but stout, and broad in the shoulders: their head is large, their face flat and broad, their cheek-bones are prominent, their lips thin, and their nose flattened; their hair is black, hard, and lank; their eyes sunk in the head, and their legs thin. The Koriakes are principally distinguished from them by the smallness of their head. Both nations differ in language and in mode of life. The Kamtchatdales are hunters and fishermen, have fixed habitations, and use dogs to draw their sledges in winter. The Koriakes are a wandering tribe, subsisting on the produce of their numerous herds of rein-deer, of which the richer among them frequently possess several thousands, and their sledges are drawn by these animals. The whole population of the peninsula is stated not to exceed 5000 souls, but it seems that the wandering Koriakes are not included in this estimate. The number of Russian settlers and their descendants is said to amount to 1400, a few Cossacks included. The remainder are Kamtchatdales.

The principal place is now Pétropaulovski, built on an extensive bay [AWATKA BAY], with about 600 inhabitants. Nishnei Kamtchatka, on the river Kamtchatka, formerly the residence of the governor, hardly contains more than 100 inhabitants. Bolcheresk has a small harbour on the western coast and about 200 inhabitants.

The commerce of Kamtchatka is inconsiderable. It exports only the furs of several animals which are taken by the natives, and imports flour, sugar, colonial goods, whisky, &c., chiefly from Okhotak, and partly from Java.

Kamtchatka is a Russian province annexed to the government of Eastern Siberia, or that of Irkutak.

(Cook, Beechy, Suer, Krusenstern, and Langedorff, *Voyages*.)

KANAGA. [ALEUTIAN ISLANDS.]

KANDAHAR, or CANDAHAR, a fortified city of Central Afghanistan, and formerly the capital of the whole of that country, is situated in a fertile plain watered by the Arkand-ab, the Turnuk, and the Arghasan, tributaries of the Helmund, at an elevation of about 3500 feet above the level of the sea, in 32° 37' N. lat., 66° 20' E. long.

200 miles S.W. from Cabul, 265 miles S.E. from Herat; and has about 60,000 inhabitants, chiefly Afghans, Persians, and Hindoos. The ancient *Arachotus* stood somewhere in the same plain as Kandahar, which is also said to occupy a very ancient site. Be this as it may, the present city was built by Ahmed Shah, the founder of the Duranee dynasty of Afghanistan, in 1754. That ruler made it the capital of his dominions; but on the accession of Timur Shah in 1774 the seat of government was removed to Cabul. The city is still the capital of a small state, which is subject to the brothers of Dost-Mohammed, ruler of Cabul. [AFGHANISTAN.] The form of the city is oblong, and its plan perfectly regular; four streets meet in the centre, in a circular place 50 yards in diameter, surmounted by a dome. This is called the Chaursoo (Sharshee), and is a public marketplace surrounded by shops; the four principal streets are 50 yards in width, are lined with shops, and extend to the gates of the city. The smaller streets are narrow, but straight, and all cross at right angles. The town is well watered by canals from the Urghund, or Arkand, a tributary of the Helmund, and a small stream runs through almost every street; but nevertheless the streets are not clean. The houses are mostly built of wood, with flat or domed roofs. The mosques are numerous, but meanly built. The tomb of Ahmed Shah, covered by a gilt cupola, stands near the palace, and is held as a sacred asylum. The city is inclosed with bastioned mud-walls and a ditch, and is further defended on the north side by a citadel. Kandahar is a place of considerable manufacturing industry, and its transit trade is considerable. [AFGHANISTAN, vol. i. col. 94.] The plain round it is irrigated by canals from the rivers, and produces excellent fruits, corn, tobacco, madder, &c. The occupation of Kandahar by a British force under General Nott from 1839 to 1842 is related under AFGHANISTAN.

KANDY. [CEYLON.]

KANESVILLE. [IOWA.]

KANNSTADT. [CANNSTADT.]

KANSAS, or KANZAS, a territory of the United States of North America, established by Act of Congress 1854, occupies the country lying along the river Kansas, north of the Indian territory, and extending northward to the Nebraska River. It is bounded E. by the Missouri River, which divides it from the states of Iowa and Missouri; S. by the Indian territory; W. by offsets of the Rocky Mountains; and N. by the territory of Nebraska. Of its limits we have no very definite statement; and no census has been taken of its population. The settled population is however at present extremely small.

By far the larger part of the territory consists of an unreclaimed wilderness, over which roam tribes of native Indians in search of game. The eastern and southern portions are broad open prairies, well watered and very fertile, but thinly timbered. The centre of the territory forms a portion of the Great American Desert, which is said to be for the most part wholly irreclaimable, and to present scarcely an oasis. On the west are outlying members of the Rocky Mountains. The chief river of the territory is the *Kansas*, the head streams of which rise near the eastern base of the Rocky Mountains, between the sources of the Arkansas and Nebraska. Its two principal branches, the Republican and Smoky Hill forks, run for a considerable portion of their course at a distance of 120 miles apart. Republican Fork issues from a rather large lake, in 39° 52' N. lat., 103° 30' W. long.; Smoky Hill Fork rises in the mountain region east of South Peak; their junction is near 39° N. lat., 96° 30' W. long. The united stream is known as the *Kansas*: its general course is east-by-north to its confluence with the Missouri, in 39° N. lat., 94° 32' W. long. It has a full body of water, is 340 yards wide at its mouth, and is said to be navigable for steam-boats for 150 miles, and for keel-boats, with its forks, for some hundred miles higher. Republican Fork, the larger of the two main branches of the *Kansas*, receives on its right side two considerable affluents, Solomon's Fork and the Grand Saline. Numerous smaller tributaries swell the main stream and its affluents. The chief of the secondary streams belonging to this territory which fall into the Missouri are the Nemawhaw and the Independence. The Missouri itself forms the eastern boundary of *Kansas*, and affords an invaluable outlet for its products. The Nebraska River, on the northern side of the territory, is a very wide but shallow river, with a rapid current and a bed full of shifting sand-banks: it is navigable by steam-boats for about 50 miles. The great emigrant and Frémont routes to Oregon, Utah, and California lie across the territory of *Kansas*, and follow the line of one or other of these rivers.

As far as the country has yet been examined geologically, its southern and eastern parts appear to belong to the Lower Carboniferous system; the rocks consisting largely of mountain limestone and sandstone. In the south-eastern corner is perhaps some portion of the basin of Upper Carboniferous Rocks, or Coal-Bed, of the Indian territory. The western and northern parts of *Kansas* seem to consist chiefly of strata of the Cretaceous group, but we have no detailed account of the rocks. The country, with the exception of the central wastes, is considered to possess a fertile soil and a salubrious climate, while almost every part is well watered. The prairies are of the best kind, but are deficient in timber. The river bottoms have a rich alluvial soil. The few settlers who have established themselves within the territory are said to report very highly of its capabilities, but as yet even the surface of the country is very little known. The only settlement beyond the recently-founded 'city' of Worcester and a few

scattered farm-houses is the military station of Fort Leavenworth on the Missouri.

The vast tract known as Nebraska, including an area of upwards of 136,000 square miles, of which Kansas forms the southern part, was a portion of the country purchased by the United States from the French in 1803. It has been left till the last few years to the undisturbed occupation of the native Indians, but the constant stream of western migration, which caused the growth of one and another territory and state on its eastern and southern borders, and still more perhaps the flood of emigration which poured across it to Utah and California, led to propositions which increased yearly in urgency for its organisation as a territory. The first bill for the organisation of the territory of Nebraska was introduced into Congress in 1845, but rejected. Subsequent measures met with a similar fate. But in the session of 1854 a bill was introduced for forming out of this extensive tract two territories, Nebraska in the north and Kansas in the south; and as the form of the bill re-opened the question of the admission into the Union of new slave states north of 36° 30' N. lat., which the measure known as the Missouri Compromise was understood to have settled should not be done, it was made the occasion of a most earnest struggle between the supporters and opponents of slavery. Eventually the bill was passed, empowering the organisation of the territories, but throwing open the occupation of the soil to all citizens of the United States, and to all who shall make the usual declaration of their desire to become citizens; and providing that the inhabitants of each territory shall determine for themselves whether the institution of slavery shall exist among them. The consequence of this provision is said to have been that a considerable number of the more ardent slaveholders of the southern states at once prepared to remove with their property into Kansas, with a view to obtain possession of it in the interest of the south, as well as to avail themselves of its rich agricultural and other resources. But the movement was immediately met by a counter-movement in the north. A corporation was at once organised, and received a charter from the legislature of Massachusetts, having for its primary object the colonisation of Kansas by free labour. The Massachusetts Emigrant Aid Company, as it calls itself, proposes, if sufficient funds can be raised, to send 20,000 labourers into Kansas in the first year, and to establish them on lands settled by itself; and to assist it in so doing branch companies have been formed in New York and elsewhere. The matter is said to have been set about with so much energy, and to wear so promising an aspect, that the southern slaveholders already hesitate whether to venture into a country where they run so great a risk of losing their slaves by the passing of anti-slavery measures. The first party of the Massachusetts Emigration Company have established themselves in a very promising locality, about 40 miles up the river Kansas, which they have fixed on as the site of their first city, Worcester. Other parties are (August, 1854) making ready to follow them immediately.

KANTURK, county of Cork, Ireland, a market- and post-town, and the seat of a Poor-Law Union, in the barony of Duhallow, is situated in 52° 11' N. lat., 8° 52' W. long., 126 miles S.W. from Dublin, at the confluence of the rivers Allua and Dallua, which after their junction flow into the Blackwater, 3 miles south of the town. The population of the town of Kanturk in 1851 was 3125, besides 3352 inmates of the workhouse. Kanturk Poor-Law Union, which is divided into 33 electoral districts, contains an area of 186,523 acres, and had in 1851 a population of 41,801.

The town of Kanturk is neatly built. The chief industrial products are beer, flour, and serge: wool-combing is carried on. Six yearly fairs are held. The Roman Catholic chapel, the bridewell, and the workhouse, which occupies a site of six acres, are the chief public structures. Near the town are the remains of Kanturk Castle, which was built by the Mac-Donough Mac-Carthy, prince of Duhallow, in the reign of Elizabeth. The building, which occupies the four sides of a quadrangle, 120 feet long by 80 feet wide, is four stories high: in each of the angles is a square embattled tower, five stories high. The estates of Kanturk were forfeited in the rebellion of 1641, and were conferred on Sir Philip Perceval, from whom they have descended to the earl of Egmont.

KARABAGH. [GEORGIA.]

KARAMAN, a town in Asia Minor, which gives name to a pashalic, though the pasha resides at Koniye, is situated 65 miles S.E. from Koniye, in 33° 23' N. lat., 37° 8' E. long., and has about 2500 houses and 15,000 inhabitants. As each house is surrounded by a garden inclosed by a wall, the town appears very extensive for its population. Most of the houses are in a dilapidated condition. The bazaars are ill supplied. The Turkish castle consists of a square keep strengthened by several round and square towers, and surrounded at a little distance by an outer wall within which about a hundred small houses are built. In the wall are inserted stones with Arabic and Turkish inscriptions, which probably were taken from other buildings. Among several ruined mosques of Saracenic architecture is one of striking gracefulness, with an entrance of marble adorned with arabesques. The Armenians, who are pretty numerous, have a large and handsome church in Karaman. A little way north of Karaman is Kara-Dagh, an isolated tractytic mountain steep, rocky and barren, rising to the height of 8000 feet above the sea. To the south of it is the range of

the Taurus. This town is supposed to have given name to the district of Asia Minor called Karamania, or Caramania, which is marked on some maps, but is wholly unknown to the Turks. Karaman was the seat of a flourishing petty sovereignty in the 14th and 15th centuries. It is identified with the ancient *Laranda*.

The name Karamania has been sometimes given also to the Persian province of Kerman. [PERSIA.]

(Hamilton, *Researches in Asia Minor*.)

KARAMANIA. [CARAMANIA.]

KARASUBAZAR. [CRIMEA.]

KARIA, or CARIA, a division of Asia Minor, which comprised the south-western corner of that peninsula. It was bounded S. and W. by the Mediterranean Sea, N. by the valley of the Mæander, and E. by Phrygia and Lycia. Herodotus (l. 142) places Priene, which was north of the Mæander, in Caria, and it is most probable that Caria comprised the lower valley of that river; and that the Messogis range, now the Kastaneh-Dagh, which forms the watershed between the Mæander and the Caystrus, was its northern limit. The natural limit towards the east would be Mount Cadmus and its great southern offshoot, now the Bos-Dagh, which runs at a little distance from the right bank of the Calbis (Dolomon-Chai); but according to Strabo it seems that Caria comprised a large portion of the basin of the Calbis also, which lies east of this range, and extended to the western base of Mount Dædala and to the mouth of the river Glaucus, the towns of Dædala, Araxa, and Calynda being included in Caria.

With the exception of the valley of the Mæander (Mendereh), and a strip along the south coast, west of the Gulf of Glaucus (now Bay of Macri), the surface of Caria is extremely rugged and mountainous. From the mass of Mount Cadmus (now the Baba-Dagh) ranges run west and south, and cover with their ramifications the greater part of the surface. The Bos-Dagh, the southern range, runs parallel to the Calbis (Dolomon-Chai), and at a little distance from its west bank, attaining in its highest point an elevation of 8000 feet above the sea. Near 37° N. lat. it divides into two branches, one of which, forming the high land anciently called Lide, runs west and terminates in the peninsula of Halicarnassus, between the Ceramic and Iassic gulfs, now respectively the gulfs of Kos or Budrun and Mandelieh. The Gulf of Iassus extended northward as far as the promontory of Poseideion, now Cape Monodendri. The other branch range has a south-west direction, and terminates in the lofty Mount Phoenix, and in the remarkable peninsula the Rhodian Chersonese, which stretches southward towards Rhodes and along the eastern side of the Gulf of Syme. The Cnidian Chersonese, which screens the Bay of Syme or Doris on the north, and terminates westward in the Triopian promontory, now Cape Krio. The Rhodian Chersonese terminates in two remarkable promontories—the Kynosema, now Cape Aloupe, opposite Rhodes; and the Paridion promontory, opposite the island of Syme. Between this Chersonese and the island of Syme lies the Gulf of Syme; and the part of the same inlet north of the island is called the Bay of Doris, which washes the Cnidian Chersonese on the south. On the north-western side of the Rhodian Chersonese, forming a subordinate part of the Gulf of Syme, were the bays of Thymnia, Schœnus, and Bubessus, or Bubassus. This last bay was the most north-eastern part or head of the gulf; it was named from a town of the same name; and near it, to the west, was the narrow isthmus which connected the Cnidian Chersonese to the mainland. The coast along these bays is bold, the limestone rocks rising perpendicularly in many places from the water, which is clear, deep, and abounding with sponges. The shores are remarkably well wooded. The Cnidian or Triopian Chersonese, which divides the Ceramic and Dorian gulfs, consists of two peninsular portions, the more western of which was formerly an island, and was connected by the Cnidians with the eastern portion by means of a causeway. [CNIDUS.] Through the narrow isthmus which connects this Chersonese with the mainland the Cnidians attempted to cut a canal in the time of Cyrus to protect their city and Chersonese from the Persians.

The high land called Lyde extends to the valley of the Mæander. Its northern slope is furrowed by several streams, the largest of which are the Mosynus (Kara-su), the Harpasus (Arpa-su), and the Marsyas (Tehina-su), which last rises in a region called Idrias by Herodotus (v. 118), and is skirted on its western side by the range of Latmus. Except the Calbis, which was also called Indus, no stream of importance flowed to the south coast. The Mæander, which carries off the drainage of the greater part of Caria, flows in a west-by-south course, and in ancient times entered the sea to the north of the peninsula of Miletus by the harbour of Latmus, which is now filled up by the deposits of the river.

On the south coast, east of the Rhodian Chersonese and the lofty Mount Phoenix, was a land-locked bay, at the head of which stood the town of Phycus. There was a road from Phycus to Ephesus. Farther east was another small Chersonese, which sheltered the Bay of Panormus on the west; and on the coast between this and the Bay of Glaucus or Macri, were the towns of Imbrus and Caunus, and the promontory of Artemisium. A few miles inland from the head of the Bay of Panormus and to the west of the Calbis is a large lake six or eight miles across, and with a number of small streams running into it; a channel twelve miles in length connects it with the sea.

Fellowes says its waters are brackish. All the southern coast of Caria eastward from Mount Phoenix, and extending to the mountains inland belonged to the Rhodians, and was called Persea. This district is very beautiful, and contains many fertile tracts. The irregular coast of Caria is most picturesque, indented by countless bays and inlets, whose shores, generally bold and well-wooded, are in parts diversified by extensive ancient ruins and belted by numerous islands.

Though Caria is extremely mountainous it contains some extensive high plains, and there is a good deal of fertile land in the valleys of the Mæander and its feeders. The mountains are in most parts well clothed with timber; firs, oaks, and plane-trees being the prevailing species. The chief products are wheat, figs, olive-oil, fruits of all kinds, and wine. The vine is trained to grow up the highest trees. The wine of Cnidus was celebrated in ancient times. The palm-tree and the orange grow luxuriantly. Cattle are fed on the mountain pastures, and sheep are numerous; the green slopes along the valley of the Marsyas are covered with flocks. The climate, owing to difference of level, varies greatly; in the lower grounds it is hot, while the high lands are cold, wintry, and snow-covered. At the source of the Mosynus the winter lingers to March or April. The limestone which everywhere abounds affords excellent material for building. Among other mineral products Fellowes mentions iron-stone of great purity as abundant between Stratoniceia and Mylasa, mica-schist, marble, &c. Warm springs abound, and there are gaseous flames.

The Carians maintained that they were an autochthonous people descended from Car, the brother of Lydus and Mysus. According to Cretan accounts they originally inhabited the Ægean islands, were subject to Minos, whose ships they manned, but they paid no tribute; and that driven from the islands by Ionians and Dorians, they came to the mainland where they displaced the Leleges and Pelasgi. Homer mentions the Carians with the Leleges, Caucones, and Pelasgi among the auxiliaries of the Trojans; and they were probably all continental people and related to each other. The Caunii, whose town Caunus was on the south coast, spoke a language akin to that of the Carians. Thucydides says that the early inhabitants of the Ægean islands were Carians and Phœnicians, and that they were pirates. There seems little doubt from Thucydides (l. 3.) that the Carians with some other people occupied the island of Delos at some early period.

In Homer's time the Carians occupied Miletus, the banks of the Mæander, and the heights of Mycale to the north of the river. The Ionian emigration drove the Carians from Mycale near which Priene was built, from Myus, and from the city of Miletus. The Dorians dispossessed them of Halicarnassus, Cnidus, the Triopian Chersonese, and probably from the island of Kos. The south coast was probably seized by the Rhodians about the same time. Thus the principal parts of the sea coast were occupied by Greek colonies, but not all, for in the time of Xerxes the Carians furnished 70 ships to the Persian fleet, while the Dorian settlements supplied only 30 ships. North of the Mæander and in the neighbourhood of the Greek colonies there was probably some intermixture between the Carians and their neighbours; but they maintained their language, and in the interior the population was pure Carian. They lived in small towns or villages, and formed a federation with common religious rites to Zeus Chrysaorea. The federation was called Chrysaoreum; its place of meeting for sacrifice and deliberation was the spot where the Macedonians after the time of Alexander founded Stratoniceia.

Caria was included in the kingdom of Croesus, on whose defeat by Cyrus it came under the Persian dominion. In the Ionian revolt (B.C. 499-494) the Carians fought bravely side by side with the Greeks, but were at last compelled to submit. Under the protection of Persia, Caria was ruled by a dynasty of princes, whose capital was Halicarnassus. Artemisia, who accompanied Xerxes to the battle of Salamis with five ships, was one of these petty sovereigns. The Athenians afterwards made the inhabitants of the coast tributary, but the Carians of the interior maintained their independence. In the time of Alexander the Great there was a queen of Caria, named Ada. She surrendered to Alexander the strong town of Alinda, in consideration for which he restored her to the royal authority of which she had been deprived. Caria afterwards became successively subject to the Greek kings of Egypt and Syria. The Romans having defeated Antiochus (B.C. 190) shared Caria between Eumenes king of Persia and the Rhodians, but left certain towns free. About B.C. 129 Caria was added to the Roman province of Asia.

The Carians were a warlike race, not addicted to commerce like the Greeks; they hired themselves as mercenaries, and served under the kings of Egypt.

Among the towns of Caria were CNIDUS and Halicarnassus, which were members of the Dorian hexapolis in Asia. Halicarnassus, now Boudroum, or Budrun, is particularly interesting as the birthplace of Herodotus and Dionysius the historians. It was founded by a colony from Troezen in Argolis, was the largest and strongest city in all Caria, and became the seat of a Carian dynasty under the protection of Persia. One of its rulers, Artemisia, wife and sister of Mausolus, erected in his honour the celebrated sepulchral monument called the Mausoleum, of which there are still remains as well as of the ancient walls. Some interesting sculptures, supposed to have formed part of the decoration of the Mausoleum, are now in the British Museum. Halicarnassus continued to be a stronghold of Persia till the time of

Alexander, who after a long siege burnt the city but was unable to take the acropolis. Though afterwards rebuilt Halicarnassus never recovered from the blow.

Among the other towns were *Alabanda*, now supposed to be *Arab-Hissa*, on the Tahina, or Marsyas, where are remains of a theatre and other buildings; it was noted for its luxury: *Coccinia*, higher up the Marsyas, identified by Leake with the village of Tahina where Pococke found considerable remains: *Labranda*, to the south-west of Alabanda, famous for its Carian temple to Zeus Stratios, to which the Carians went in procession from Mylasa along the sacred road which connected the two places. The site of Labranda, is unknown; *Iakli* which Fellowes erroneously takes for Labranda was Euromus, where are the remains of a beautiful Corinthian temple. *Mylasa*, in the interior and to the north-east of Halicarnassus, is now *Mellassa*, which is built chiefly from the ruins of the old town. There are still many beautiful remains of ancient architecture at Mellassa which was visited by Fellowes. East by south from Mylasa was *Stratoniceia*, which was either founded or rebuilt on a spot called Idrias by a Macedonian colony after the time of Alexander. Stratoniceia is identified by Fellowes with *Esky-Hirsa*, which stands in a delightful country. There are remains of several temples, the marble walls of which are covered with inscriptions. The ruins of the ancient town extend far beyond the village of *Esky-Hirsa*.

Caunus, the chief town of the Caunii, was a place of considerable trade, on the south coast in the Rhodian Persea. It was the birth-place of the painter Protogenes, and famous for its figs. It was for a long time subject to the Rhodians. In the massacre of the Romans in Asia in the time of Mithridates Eupator, the Caunii distinguished themselves by their ferocious cruelty to their victims. On a height above Caunus was the fortress *Imbrus*. Between Caunus and the Gulf of Glaucus was *Calynnda*, which has not been identified, but is supposed to be in the basin of the Talamon, or Dolomon-Chai, the Calbis of Strabo and the Indus of Livy.

In the north-east of Caria, near the Phrygian frontier, was *Antiocheia* at the junction of the Mosynus with the Mæander; its remains, which are described by Hamilton and Fellowes, consist of the massive walls of the acropolis and an inner castle, some sub-structures of buildings, a stadium, and a small theatre. Southward from Antiocheia, on high ground to the east of the Mosynus, stood the city of *Aphrodisias*, now *Ghera*, where are remains of a beautiful Ionic temple of Aphrodite, from whom the town was named. There was a city *Plarasa*, probably not far from Aphrodisias. Fellowes ('Asia Minor') says that Ghera is the representative of the ancient *Caroura*, which was east of Mount Cadmus, near the confines of Caria, Lydia, and Phrygia. It was famous for its hot springs on the banks of the Mæander, by which its site has been identified. Hamilton ('Researches') conjectures that the town was named from its position on the boundary of Caria towards Phrygia (*Καρίαν ὄρος*).

North of the Mæander were *Tripolis*, near the point where the river enters the plains (38° 1' N. lat.), where are remains of the city walls, a theatre, and some other buildings: *Mastaura*, west of Tripolis and north-east of the modern Nazeli, and near the modern village of Mastaura, has some ancient ruins, most of which are overgrown with underwood, and a fine spring of cold water: *Tralles*, situated on a plateau of the Messogis above the modern Aidin (a town of about 6000 houses); the plateau is covered with ruins, among which the Turks have quarried materials for the houses and walls of Aidin; the most remarkable ruin is that of a palatial structure, which is probably not ancient: *Magnesia* farther west near the mouth of the Lethæus in the Mæander: and *Priene*, on a lofty rock near the modern town of Samsun, where many ancient walls remain, and a theatre cut out of the rocky hill. Several of these towns north of the Mæander are usually given to Lydia, to which in later times they seem to have belonged.

Along the west coast beyond Halicarnassus were *Myndus*, once the capital of Caria: *Caryanda*, a city which seems to have stood partly on an island and partly on the mainland, the two parts being united by a causeway (now a narrow sandy isthmus), alongside of which was the harbour which Leake takes to be that of Pasha-Limani: *Bargyllia*, on the southern shore of the Iassic Gulf, between Myndus and Iasus, celebrated for its statue of Artemis Cindyas, upon which, though exposed to the open sky, neither rain nor snow (it was said) ever fell. *Iasus*, or *Jassus*, now *Askem*, *Asyn Kaleri*, on a small island at the head of the Iassic Gulf, was founded early by Argive colonists, but received additional settlers in the Ionian emigration under Neleus; it became a wealthy place owing to its fisheries; part of the city walls and a theatre cut out in the side of a rock still remain. *Branchidæ* was famous for its oracle and temple of Apollo Didymus, of the south of which there are still some remains; the temple was robbed and burnt by the Persians (B.C. 494), but it was afterwards rebuilt. A sacred way led from the sea to the temple bordered with monolithic statues seated on chairs, the feet close together and the hands on the knees—an imitation of the avenues of the temples of Egypt. (Leake, 'Asia Minor.') Branchidæ stood near a harbour, called Panormus, on the south of the Poseideion. *Miletus*, one of the most ancient and flourishing towns of Caria and famous for its woollen manufactures and for the numerous colonies founded by it on the Black Sea, was situated on high ground on the south bank of the Mæander and near its mouth

Its citizens were great traders and powerful by sea. They carried on long wars against the Lydian kings. It was subjected to the Persians by Cyrus the Great, and notwithstanding internal dissensions continued prosperous until the Ionian revolt, instigated by its tyrant Aristagoras; this event brought down upon it the vengeance of the Persians, who utterly destroyed it B.C. 494. It was rebuilt, and made a long resistance to the army of Alexander; but it never recovered its former importance, although it was a prosperous place under the Romans. Its site is marked by the modern village of *Pallatia*, where are seen the remains of an enormous theatre, an aqueduct, and a Christian church formed out of a Greek temple. South-east of Miletus, in the interior near the brackish lake of Baffi, which is probably part of the ancient *Latmicus sinus*, was *Heracleia* at the western foot of Mount Latmus, where some ruins mark the spot. Near it was shown the cave of Endymion. To the north end of this lake, near the *Mæander*, was *Myus*; and on the east side of Mount Latmus lay *Amyzon*, ruins of the citadel and walls of which remain.

(Pococke; Leake, *Asia Minor*; Sir C. Fellows, *Asia Minor*; Hamilton, *Researches in Asia Minor*; *Dictionary of Greek and Roman Geography*.)

KARLOVESCZ. [CROATIA.]

KARS, a town in Turkish Armenia, is situated in a high rugged plain, between 6000 and 7000 feet above the level of the sea, on the Arpa a feeder of the Araxes, about 100 miles straight line distance N.E. from Erz-rum, N.W. from Bayazid, and S.E. from Batoum on the Black Sea, in 40° 27' N. lat., 43° E. long., and has about 12,000 inhabitants. It stands in a rocky amphitheatre of black basaltic hills, and has a dark dismal look, from the total absence of trees, and from the circumstance that all the houses are built of black basalt. It contains about 300 houses, 20 mosques, and 4 baths. Part of the town is walled and has a citadel built by Amurath III.; but it is untenable against artillery, being commanded by heights within musket range on the opposite side of a deep narrow ravine traversed by the Arpa. The two portions of the town are united by two stone bridges thrown across the river which encircles the walled portion of the town on three sides. Kars was formerly a large town with from 6000 to 8000 houses, but a great part of the Turkish population abandoned it during the Russian occupation in 1828-9, and on the retreat of the Russian army all the Armenians emigrated to the neighbouring provinces of Russia; so that from Russian violence and the desertion of its inhabitants it fell into a state of ruin and decay from which it has not yet recovered. The Armenian convents and churches are mostly in ruins.

The pashalic of Kars includes the most northern part of Turkey in Asia, extending from the Araxes and Suvanli-Dagh to the Choruk-su, the Black Sea, and the Russian frontier. It is a rugged country of lofty mountains and high plains, drained by the Araxes, the Kur, and the Choruk-su.

The country is described in the article ARMENIA (vol. i. cols. 507, 508, 509). The town of Kars is about 45 miles W.S.W. from the Russian town and fortress of Gumri, or Alexandropol.

KARUN. [BAGHDAD, Pashalic of.]

KASAN. [CASAN.]

KASCHAU. [HUNGARY.]

KASKASIA. [ILLINOIS.]

KATMANDU. [NEPAUL.]

KEADY. [ARMAGH.]

KEGWORTH. [LEICESTERSHIRE.]

KEIGHLEY, West Riding of Yorkshire, a market-town and the seat of a Poor-Law Union, in the parish of Keighley, is situated in 53° 52' N. lat., 1° 56' W. long., distant 44 miles W. by S. from York, 206 miles N.W. by N. from London by road, and 204 miles by the Great Northern and Midland railways. The population of the town of Keighley in 1851 was 13,050. The living is a rectory in the arch-deaconry of Craven and diocese of Ripon. Keighley Poor-Law Union contains 6 parishes, with an area of 35,534 acres, and a population in 1851 of 43,241.

Keighley is situated in a deep valley, at the junction of two small streams; the united stream falls into the river Aire about three-quarters of a mile to the north-east. The parish church, which was rebuilt in 1847, is a spacious structure. There are places of worship for Independents, Wesleyan, Primitive, and New Connexion Methodists, Baptists, Swedenborgians, and Quakers. The Free Grammar school, which has an income from endowment of 240*l.* per annum, had 60 pupils in 1853. Quarterly payments are received from all the pupils. The mechanics institute had 309 members in 1851, with 2127 volumes in the library. There are National schools and a savings bank. The worsted and cotton manufactures afford occupation to many of the inhabitants. There are paper-mills and iron-foundries. Wednesday is the market-day; fairs are held on May 8th and 9th, and on the 7th, 8th, and 9th of November.

KEITH, Banffshire, Scotland, a market-town in the parish of Keith, is situated in 55° 33' N. lat., 2° 59' W. long., on the banks of the small stream called the Isla, about 20 miles S.W. from Banff, 178 miles N. by E. from Edinburgh. The population of the town of Keith in 1851 was 2101.

The town comprises three distinct villages, called Old Keith, New Keith, and Fife Keith. Old Keith is a very ancient village, and at

one time was a regality. It is now a mere hamlet. New Keith dates from the middle of last century. It consists of five principal streets, intersected by several smaller ones, with a square or market-place in the centre of the town. It contains the parish church, a court-house, an Episcopal and a Roman Catholic chapel, besides chapels for congregations of the Free Church and United Presbyterian bodies. There are a library and a savings bank. A grain-market is held weekly; and several cattle-fairs are held annually, the most important of which is 'Summer-Eve Fair.' Fife Keith, a modern village, on the bank of the Isla, opposite Old Keith, with which it is connected by two bridges, consists of several well-built streets. Many of the inhabitants of Keith are employed in the manufacture of woollens, flax-dressing, weaving, bleaching, and the manufacture of tobacco.

KELAT. [BELOOCHISTAN.]

KELLS, county of Meath, Ireland, a post, market and corporate town, and the seat of a Poor-Law Union, is situated on the right bank of the Blackwater, in 53° 43' N. lat., 6° 50' W. long., distant 31 miles N.W. from Dublin, on the mail-coach road and railway from Dublin to Enniskillen. In 1851 the population was 3997, besides 1224 in the workhouse and 15 in the prison. The corporation of the borough consists of a sovereign, two provosts, and 24 burgesses; it has no jurisdiction. Kells Poor-Law Union contains 25 electoral divisions, with an area of 108,982 acres, and a population in 1851 of 31,326.

The entrance to Kells from the Dublin road, through the rich well-wooded demesne of the Marquis of Headfort, is very imposing. The four principal streets are substantially but irregularly built, and have wide roadways lined with trees. The old church and ancient round tower, a handsome Roman Catholic chapel, and the sessions-house encircled by trees, give interest to the place. New roads have been formed in the environs; large schools have been endowed by Miss Dempsey, and there are a Fever hospital and the Union workhouse. The town has a considerable retail trade, a good market for agricultural produce, a lace factory, a bridewell, and a savings bank. Six yearly fairs are held, and there is a weekly market on Saturday. Headfort House, the residence of the Marquis of Headfort, is a plain but substantial and very large edifice. The grounds are adorned by the Blackwater, which forms an artificial lake in the centre of the park. On the Hill of Lloyd, a gently swelling hill 422 feet in height, to the north-west of the town, is a pillar above 100 feet high, erected by the first earl of Bective, from the lantern at the top of which a fine view of the country round Kells is obtained.

Kells is a place of considerable antiquity: it was originally called *Kentis*. A monastery was founded here in A.D. 560, by St. Columbkil, whose stone-roofed cell or chapel is still shown near the richly-decorated ancient cross which stands in the churchyard. The town gave title to a bishop, whose see was united to that of Meath in the 13th century. During the 12th century Kells was frequently plundered by the Danes. As a borough Kells has several charters, the oldest of which dates from 11-12 Richard II. It returned two members to the Irish Parliament previous to the Union. The staff of the county militia is stationed at Kells, where also quarter and petty sessions are held.

KELSO, Roxburghshire, Scotland, a burgh of barony and market-town in the parish of Kelso, is beautifully situated on the margin of the river Tweed, not far from where the Teviot falls into that stream, in 55° 36' N. lat., 2° 26' W. long., distant 52 miles S.E. from Edinburgh, 22 miles S.W. from Berwick-upon-Tweed, and within 5 miles of the English border. The population of the town in 1851 was 4783.

In a central square or market-place is situated the town-house. From this square the several streets diverge to the different quarters of the town. Bridge-street is a handsome street: the bridge built by Rennie is a very fine erection; it formed the model from which Rennie afterwards designed Waterloo Bridge, over the Thames at London. The streets are clean and lighted with gas. Many of the houses are elegant buildings. There are, besides the parish church, two chapels for United Presbyterians, and one each for Episcopalians, Independents, and Reformed Presbyterians. The chief employment in the town is the currying of leather: woollens, linens, and flannels are manufactured. The weekly corn-market is well attended. Several important cattle-fairs are held in the course of the year.

In the neighbourhood of Kelso is Fleurs Castle, the residence of the Duke of Roxburgh. At a short distance are the ruins of Roxburgh Castle. The most interesting object here is Kelso Abbey, which is in the early Norman style; it was built at the same time as the abbey of Melrose. The ruins, consisting of a part of the choir and transepts and of the centre tower, are close to the town. The abbey was founded by David I. when earl of Huntingdon, and richly endowed by him and his successors. The abbey was severely injured in 1522, and reduced to ruins by the English in 1545. Owing to its situation, Kelso has been the scene of many events of national interest.

KELVEDON. [ESSEX.]

KEMPSTON. [BEDFORDSHIRE.]

KEMPTEN (the ancient *Campodunum*), a town of Bavaria, in the old duchy of Suabia, is situated on the Iller, in 47° 44' 40" N. lat., 10° 18' 45" E. long., and has about 8000 inhabitants. It is an old-fashioned town, consisting of two parts—the Stifts-Stadt, or St.-Hildegard, which is situated on a hill, and is an open town; and the ancient free imperial city, which is in the valley. It has a castle, two

churches, a gymnasium with a library and collection of works of art, an hospital, and an orphan asylum. There are manufactures of cotton and linen, and considerable trade in furs, wool, salt, linen, &c. The ancient abbey was in the Stifts-Stadt. The prince abbot held immediately under the Pope. The abbey and the town were assigned to Bavaria in 1802. Kempten is a first-class station on the railway from Augsburg to Lindau (on the Boden-see), and is 64 miles S. by W. from the former city.

KENDAL, or more accurately Kirby Kendal, or Kirkby in Kendal, that is, the kirk or church town in the dale or valley of the Ken or Kent, Westmorland, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Kendal, is situated in 54° 20' N. lat., 0° 44' W. long., distant 22 miles S.W. by S. from Appleby, 262 miles N.W. by N. from London by road, and 250 miles by the London and North-Western and the Lancaster and Carlisle railways. The population of the borough in 1851 was 11,829. The living is a vicarage in the archdeaconry of Richmond and diocese of Chester. The borough is governed by 6 aldermen and 18 councillors, and returns one member to the Imperial Parliament. For sanitary purposes the borough is under the management of a Local Board of Health. Kendal Poor-Law Union contains 58 townships and chapelrys, with an area of 185,790 acres, and a population in 1851 of 36,557.

Kendal was made a market-town by licence from Richard I., and became, by the settlement of the Flemings, in the reign of Edward III., the seat of a considerable manufacture of woollen cloths (which took from the town the name of Kendals): the manufacture still continues, although greatly diminished in extent. The town was incorporated in 1576 by Queen Elizabeth. Before the turnpike-road was made in 1752 nearly 200 pack-horses were employed weekly, some of them making two journeys in the week, in bringing provisions and merchandise to the town, or in taking away its manufactures; besides two waggons twice a week from Lancaster, carrying in all about sixty horse-loads, and two or three carts making several journeys, and carrying altogether about forty horse-loads weekly between Kendal and Milnthorpe.

The town is chiefly built on the slope of a hill which rises from the right bank of the Kent; it has a neat and clean appearance, and is lighted with gas. Among the public buildings are the town-hall, a house of industry, a house of correction, the Odd Fellows' hall, a theatre, and the assembly rooms.

The church, dedicated to the Holy Trinity, is chiefly of late perpendicular character, and is only remarkable for its unusual width, which is 110 feet, its length being 140 feet; the nave has four aisles, and terminates at the east end in five divisions—the chancel and four chapels. St. George's church was erected in 1841 on the left bank of the Kent; St. Thomas's was erected in 1837. The Independents, Baptists, Wesleyan and Primitive Methodists, United Presbyterians, Quakers, Roman Catholics, and Unitarians have places of worship. The Free Grammar school, founded in 1525, is free for classics to all residing in Kendal parish: it has an income of about 50*l.* per annum; in 1851 it had 23 scholars. Kendal possesses National, British, and Infant schools: a Blue-Coat Free school; a Roman Catholic school; a mechanics institute, with 83 members in 1851, and a library of 1293 volumes; news-rooms; a natural history society, with 126 members in 1851, and an excellent museum; a savings bank; a dispensary; a fever-house, and several almshouses.

Kendal has extensive manufactures of cotton checks, kerseys, and other woollen cloths, linsey, blanketing, carpets, fancy waistcoating, girths, hosiery, sacking, and worsted. Rope-making, iron and brass founding, marble statuary work, and brewing give some employment. The market, held on Saturday, is the principal market in the county for corn and provisions; fairs for horses, horned cattle and sheep are held five times in the year. A county-court and quarter-sessions are held in Kendal. On the left bank of the river Kent are the ruins of the old castle of the barons of Kendal, consisting of the outer wall, with two round and two square towers. The Castle-How, or Castle-Law Hill, an ancient earthwork, is on the west side of the town, opposite the castle. On its summit is an obelisk erected in commemoration of the revolution of 1688.

KENILWORTH, Warwickshire, a market-town in the parish of Kenilworth, is situated in 52° 21' N. lat., 1° 35' W. long., distant 4½ miles N. by E. from Warwick, 90 miles N.W. from London by road, and 99 miles by the London and North-Western railway. The population of the town of Kenilworth in 1851 was 3140. The living is a vicarage in the archdeaconry of Coventry and diocese of Worcester.

There was anciently at Kenilworth a castle, which was demolished in the war of Edmund Ironside and Canute the Dane, early in the 11th century. In the reign of Henry I. Geoffrey de Clinton built here a strong castle and founded a monastery. In the reign of Henry III. Kenilworth received a grant for a weekly market and a yearly fair. The historical interest of this place attaches to its castle, which was one of the strongholds of Simon de Montfort, earl of Leicester, in his insurrection against Henry III., and afforded shelter to his son and others of his adherents after the fatal battle of Evesham in 1266. It was however, after a gallant defence, obliged to capitulate in 1266. Henry IV., son of John of Gaunt, united the castle, which he inherited,

to the domains of the crown, of which it formed part till the time of Elizabeth, who granted it to Robert Dudley, earl of Leicester. The magnificent entertainment given here by Leicester to Elizabeth has been made familiar to the general reader by Sir Walter Scott's historical romance of 'Kenilworth.' After the civil war of Charles I. the castle was dismantled, but extensive and picturesque ruins remain. The ruins include some Norman portions. The most ancient part is called Caesar's Tower, of which three sides remain, with walls in some parts 16 feet thick. The large and massive additions of John of Gaunt, known as Lancaster Buildings, are in different stages of decay; and Leicester Buildings, added by Dudley, earl of Leicester, though of comparatively modern date, present, from the friable nature of the stone of which they are built, an appearance of considerable antiquity. They contain the ruins of the noble banqueting-hall, 86 feet long by 45 feet wide. The gate-house erected by the earl of Leicester is in better preservation. There are very few remains of the monastery, which was first a priory, and afterwards made an abbey. It belonged to the Regular Canons of St. Augustine. An ancient stone bridge crosses a brook flowing into the Avon.

The town consists principally of one long street, extending nearly a mile along the road from Coventry to Warwick; another street leads towards the castle. The church has a rich western doorway of Norman architecture, in the lower part of an ancient tower which is surmounted with a spire of more modern date. One of the windows is filled with beautiful modern stained glass. The Independents have a chapel, and there are Endowed, National, and Infant schools. The manufacture of Prussian blue and other chemical substances is carried on; comb-making and the weaving of silks and gauzes employ some of the inhabitants. The market is on Wednesday, and there is a yearly cattle fair.

KENMARE, county of Kerry, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated at the head of Kenmare Bay, on the north shore of the estuary of the Roughty, in 51° 52' N. lat., 9° 34' W. long., 16 miles S. by W. from Killarney, 163 miles S.W. from Dublin. In 1851 the population was 1501. Kenmare Poor-Law Union contains 16 electoral divisions, with an area of 198,146 acres, and a population in 1851 of 21,282.

The town was a mere hamlet till the close of the 18th century; it now consists of one large street of neat well-built houses from which others diverge towards the Sound, a narrow part of the bay, which is spanned by the Lansdowne suspension-bridge. In the town are a Protestant church, a large Roman Catholic chapel, a news-room, market-house, petty-sessions house, a bridewell, and the workhouse, which affords accommodation for 540 inmates. A little below the town is a substantial pier; the depth of water at high-tide is 16 feet, and vessels of the largest size can come at all times within a mile of the pier. Coal, timber, iron, and slates are the chief imports: corn, salmon, and other fish, and copper-ore from the neighbouring mines, are the principal exports. The country on both sides of the bay for several miles belongs to the Marquis of Lansdowne.

KENNEBECK. [MAINE.]

KENNINGHALL. [NORFOLK.]

KENSINGTON. [SURREY.]

KENSINGTON, Middlesex, a western suburb of London, in the parish of Kensington. The population of the parish of Kensington in 1851 was 44,053, of which number 14,870 were returned for Brompton subdistrict. The living is a vicarage in the archdeaconry of Middlesex and diocese of London. Kensington parish is, for poor-law purposes, governed by a board of guardians.

The principal street of Kensington consists of ranges of well-built houses extending along the great western road; and there are other streets diverging from, and parallel to it, besides a district of villas-residences on the north of the Oxford road, known as Kensington Park. Brompton and Little Chelsea, and Kensington Gravel-pits are in the parish. At Kensington is a royal palace, commenced by William III., who having purchased a dwelling-house, converted it into a palace, rebuilding the principal parts, and making many additions to it, which succeeding princes have augmented. The edifice is of red brick, ornamented with columns and quoins of stone, and consists of three principal quadrangles. The gardens and grounds, which are agreeably laid out, are three miles in circuit; they are open to the public. Several members of the royal family have apartments within the palace. There are barracks for detachments of the guards. A calvary barracks is at the southern entrance to Kensington Gardens. Holland House, a quaint mansion in the Elizabethan style, erected by Sir Walter Cope in 1607, was the residence of Addison, who died in it. It is now the property of Lord Holland: it contains some interesting portraits. Kensington church, a large inelegant brick building, is near the principal street. There are several district churches in the parish. One on the highest point of Kensington Park, is of unusually elegant as well as picturesque form; it is in the decorated style. There are Independent, Baptist, Wesleyan Methodist, and Roman Catholic chapels; and National, British, and Infant schools. A proprietary Grammar school, in connection with the Church of England, had 225 scholars in 1853.

KENT, a maritime county in the south-eastern corner of England. It is bounded N. by the estuary of the river Thames, by which it is separated from the counties of Middlesex and Essex; E. by the

German Ocean and by the Straits of Dover; S. by the county of Sussex; W. the county is bounded by Surrey. A detached portion of the parish of Woolwich in Kent lies on the left bank of the Thames. The form of the county is irregular. Its principal dimensions are as follows: length of the northern boundary, from the neighbourhood of London to the North Foreland, 64 miles in a straight line; of the southern boundary, from the junction of the three counties, Kent, Surrey, and Sussex, to Dungeness, 43 miles; of the eastern boundary, from the North Foreland to Dungeness, 38 miles; and of the western boundary, from the neighbourhood of London to the junction of the above counties, 24 miles. The area is estimated at 1627 square statute miles, or 1,041,479 acres. The population in 1841 was 549,353; in 1851 it was 615,766.

Coast-line, Islands, &c.—The northern part of the county, along the estuary of the Thames, is skirted by a line of marshes extending inland a distance varying from a few yards to two miles. At the junction of the estuaries of the Thames and the Medway the marshes occupy a large portion of the tongue of land between these rivers, the extremity of which is termed the Isle of Grain. Eastward of the Isle of Grain, the Swale, an arm of the estuary of the Medway, cuts off from the mainland the *Isle of Sheppey*, of which the isles of Elmley and Harty are subordinate portions. The northern side of the Isle of Sheppey is upland; the cliffs rise about 90 feet above the river. The southern part of the island is a low flat. Its area is nearly 33 square miles; it includes the decayed borough of Queenborough, and the royal dockyard and town of Sheerness at its north-western point. The population of the liberty of Sheppey Island (which does not include Harty Island) was 13,136 in 1851. The surface is laid down for the most part in grass; but the upland part on the northern side produces good corn. The marshes terminate east of the Swale, and the coast again rises to some height in clayey cliffs, which extend to Reculver and the flats which form the western limit of the Isle of Thanet. In the *Isle of Thanet*, which occupies the north-eastern corner of the county, the cliffs again commence, and continue along the coast to Pegwell Bay, the boundary of the isle to the south-east. The North Foreland is on the Isle of Thanet, east of Margate. The Isle of Thanet contains about 40 square miles, with a population in 1851 of 31,798, and includes the well-known watering places, Margate, Ramsgate, and Broadstairs. It is separated from the mainland by the narrow channels of the Stour. The coast from the Isle of Sheppey to the North Foreland is skirted by sands which extend from a quarter of a mile to a mile from high-water mark; and for some miles farther out by 'the flats,' which, except in Margate Roads, rarely afford, when the tide is out, more than two fathoms water. Margate Roads are sheltered to seaward by Margate Sands, which are dry at low water.

The chalk cliffs of the Isle of Thanet are succeeded by the low coast of Pegwell Bay, which continues to Walmer Castle, near Deal. Here the chalk cliffs recommence, and continue round the South Foreland (a headland bearing 14 miles nearly due S. from the North Foreland), to Sandgate, between Folkestone and Hythe. Between Dover and Folkestone a portion of the chalk cliffs has fallen forwards towards the sea, so as to present an under cliff somewhat similar to that at the back of the Isle of Wight. The works of the South-Eastern railway are carried along here, partly in tunnels, in cuttings, and on an embankment close to the beach. From the neighbourhood of Folkestone the coast declines until it forms the extensive tract of Romney Marsh, the coast-line of which extends south-west to Dungeness, a point 19 miles in a straight line south-west of the South Foreland, and thence westward 6 or 7 miles to the border of the county of Sussex. Romney Marsh is in one part protected against the sea by an embankment called Dymchurch Wall. There are lighthouses at the North and South Forelands, and on Dungeness, and beacons in various other places. Opposite to the coast which extends from the Isle of Thanet to the South Foreland, lies the Goodwin Sand, the channel between which and the Kentish coast is the well-known roadstead of the Downs. The Goodwin Sand is about 10 or 11 miles long from north to south; its greatest breadth is 3 or 4 miles. It is divided into two parts by a narrow channel called 'the Swatch,' navigable by small boats. Another sand-bank, called the Brake, lies between the north-eastern extremity of the Goodwin Sand and the shore; it is about 5 miles long with a depth upon it, at low water, of from 3 to 12 feet.

The Downs, which are about 8 miles in length and 6 miles in width, are a safe anchorage, and are the general rendezvous of shipping leaving the Thames for the Channel, or returning homeward. To the north of the Downs are 'the Small Downs,' a roadstead immediately contiguous to the Downs properly so called, and sheltered by the Brake, as the Downs are by the Goodwin Sand.

Surface and Geology.—Kent is on the whole a hilly county. The chalk range of the North Downs enters the county on the west side from Surrey, not far from Westerham, and runs east-north-east to the valley of the Medway between Maidstone and Rochester. On the eastern side of the Medway, which completely interrupts the chalk range, the Downs rise again, and run to the east-south-east to the coast near Folkestone. This part of the range is divided into two parts by the valley of the Stour. On the north side the Downs gradually subside towards the estuary of the Thames.

The breadth of the chalk formation varies; west of the Stour it is from 3 to 6 miles; east of the Stour it occupies the whole extent of the county north of a line drawn from Folkestone to Wye, except where it is interrupted by the marshy valley that surrounds the Isle of Thanet. The height of the chalk hills reaches in some instances an elevation of 642 feet above the sea. The cliffs near Dover are about 400 feet high; Dover Castle hill is 469 feet.

The district between the chalk range and the estuary of the Thames is, for the most part, occupied by the plastic clay which immediately overlies the chalk. The tongue of land between the Medway and the Thames, including the Isle of Grain and the Isle of Sheppey, is formed of the London clay, which overlies the plastic clay. This formation also occupies a considerable district north and north-west of Canterbury, extending to the shore between Whitstable and Reculver. The London clay also covers a small tract near Pegwell Bay. Shooter's Hill, near Woolwich, which is an insulated mass of London clay, is about 446 feet high.

In the valleys of the Darent and its feeder the Cray the strata above the chalk have been washed away, and the chalk is covered only by the vegetable soil. Another strip of chalk, denuded of the superior strata, runs along the bank of the Thames from the valley of the Darent to below Gravesend. South of the North Downs the chalk marl and greensand crop out, and cover a belt of land skirting the chalk throughout the whole extent of the county from west to east. The breadth of this belt varies from 2 to 7 miles. Its southern slope, which is the steepest, forms what is designated 'the ragstone range' of hills, the higher points of which are from 600 to 800 feet high, and overlook the valley watered by the Eden, the Medway (from Penshurst to Yalding), and the Beult. The valley just referred to is occupied by the Weald clay, and forms another belt extending throughout the county from the border of Surrey to the edge of Romney Marsh, having an average breadth of 5 miles.

The remaining portion of the county, which forms a narrow belt or strip of land along the Sussex border, is occupied by the iron-sand, which forms the nucleus of the great Weald district of the south-eastern part of England. This formation constitutes a range of hills, amid which the upper waters of the Medway and its tributary the Teyse have their sources: and extends far into Sussex. It rises in some parts of the Weald clay district through the overlying strata of that formation.

The county thus appears, when viewed with reference to its geology, to consist of five parallel belts, extending nearly in the direction of its length, and occupied by different formations, occurring in regular order:—1, The London and plastic clays; 2, the chalk; 3, the chalk marl and greensand; 4, the Weald clay; 5, the iron-sand. The southern border of the chalk and greensand formations, and the iron-sand district, form three parallel ranges of hills separated from each other by the Holmsdale and Weald clay valleys.

What is termed the Weald (Saxon 'weald,' a forest, or perhaps generally, a wild uncultivated tract) was anciently an immense forest, inhabited only by deer and hogs, but has been gradually cleared and brought into cultivation. Iron-works were formerly numerous and important, but the introduction of coal in the manufacture of iron has caused this branch of industry to be transferred to other parts of the island where fuel is more abundant.

Beds of limestone occur in the greensand formation, and are quarried near Maidstone for common purposes of building, for road-making, and for burning into lime, which is used for stucco, or exported to the West Indies for refining sugar.

Hydrography and Communications.—Nearly the whole county belongs to the basin of the Thames. This river affords a ready means of communication with the metropolis and with other parts. The royal dockyards of Deptford and Woolwich are upon it.

The other principal rivers are the Ravensbourne, the Darent, and the Medway, which flow into the estuary of the Thames; and the Stour and the Rother, which flow into the sea.

The *Ravensbourne* rises on Keston Common, near the border of Surrey, and flows northward past the town of Bromley and the village of Lewisham, and between the towns of Greenwich and Deptford, into the Thames. It is navigable to Deptford bridge for lighters and other small craft. The *Darent* rises in Squirries park, near Westerham, close to the border of Surrey. Its course is first east-north-east, parallel to the course of the North Downs, to Riverhead near Sevenoaks, where it turns north and passes through a depression in the Downs by Otford, and other villages, to the town of Dartford, below which it is called Dartford Creek, and becoming navigable, flows through the marshes into the Thames. Just before joining the Thames it receives the Cray, which rises near Orpington, and has a course of about 9 miles. The *Medway* rises in Sussex, near the northern border between East Grinstead and Crawley, and flows eastward into Kent, which it enters near Ashurst. In this part of its course the Medway is swelled by many brooks, which drain the higher districts of the Weald of Sussex. At Penshurst, in Kent, the Medway is joined by the Eden, which rises about Godstone in Surrey. From Penshurst, where the navigation of the river commences, it flows east-north-east to Tonbridge, forming in its way two or three islands. From Tonbridge the Medway flows east by north to Yalding, in the Weald, near which it is joined by the Teyse or Teise and the

Beult. The Teise rises in the northern part of Sussex, and flows by Lamberhurst into the Medway. The Beult rises in the Weald of Kent, near Shadoxhurst, and flows north by west to Yalding. From this place the course of the Medway, though very winding, is for the most part northward; it passes through an opening in the greensand hills, across the prolongation of the valley of Holmsdale by Maidstone and Aylesford, through a great opening in the North Downs, and by Rochester and Chatham, into the estuary of the Thames at Sheerness. It is navigable for more than 40 miles. The tide flows up to Maidstone bridge, but ships and large vessels cannot ascend above Rochester bridge. Below Rochester the estuary gradually expands to a considerable width, and forms an important harbour for the British navy. Numerous arms of the river or creeks penetrate the marshes, which spread inland to a considerable extent from the banks of the river. The royal dockyard of Chatham is on the Medway, and that of Sheerness at the junction of the Medway with the Thames. The Medway is plentifully stored with fish: above Maidstone is an abundance of fresh-water fish; and below Rochester are soles, flounders, and other flat-fish, and smelts of excellent quality and large size. In the creeks in the lower part of the river are considerable oyster-beds. The *Stour* has two main branches, distinguished as the Greater and the Lesser Stour. The Greater Stour is formed by two streams, which flow along the valley between the North Downs and the greensand hills in opposite directions, and uniting near Ashford, turn to the north-east, pass through a depression in the North Downs, and flow by Canterbury to the neighbourhood of Sarre in the Isle of Thanet. Here the Stour parts into two branches, one of which falls into the estuary of the Thames near Reculver; the other into Pegwell Bay below Sandwich. These two arms cut off Thanet from the rest of the county, and constitute it an island. The Lesser Stour rises near Lyminge, about 3 miles north from Hythe, and flowing north by east to Barham, above which it sometimes becomes dry, turns north by west, and skirting Barham Downs, flows to Bridge near Canterbury. Here it makes another bend, and runs north-east into that arm of the Greater Stour which falls into Pegwell Bay. The two arms of the Stour, which insulate Thanet, were once a channel 3 or 4 miles over, called the Wantsume, which received several streams besides the Greater and Lesser Stour. In Bede's time the breadth was diminished to 3 furlongs. The channel was navigable for ships of tolerable burden in the reign of Henry VIII.; but subsequently the waters of the northern branch from the Stour to Reculver became too small for navigation, and it was for a period quite dry in the neighbourhood of Sarre, so that Thanet became a peninsula rather than an island. A cut from the Stour restored the continuity of the watercourse, but this north channel is not used for navigation. The Greater Stour, which enters Pegwell Bay, is navigable up to Fordwich near Canterbury. The whole length of the river from Lenham to Pegwell Bay may be estimated at 45 miles. Both the Greater and the Lesser Stour contain excellent trout.

The *Rother* rises in Sussex, to which county it more properly belongs. [SUSSEX.] It first touches the border of Kent at the junction of a small stream, which rises near Hawkhurst, and separates the two counties. From this junction the Rother flows by Newenden and Wittersham, below which it quits the border and re-enters Sussex. Several small streams from the Weald of Kent flow into it, and the arms of these, with the Rother itself, inclose the river island of Oxney (6 miles long from east to west, and 3 miles broad). The Rother is navigable in all that part which touches this county.

The principal canal in the county of Kent is the Royal Military Canal, which was formed, rather for the purposes of defence than of commerce, during the alarm of invasion in the late war against Napoleon. It runs along the edge of Romney Marsh from its commencement in the sea near Hythe to its junction with the Rother in the south-eastern corner of Oxney Isla. Three principal roads traverse the county. The Dover road enters the county at New Cross, 3½ miles from London, and runs east-south-east in a nearly direct line through Gravesend, Rochester, and Canterbury to Dover, 71 miles. The Hythe road branches off from the Dover road at New Cross, and runs south-east to Maidstone, and from thence by Ashford to Hythe, 65 miles. The Hastings road branches off from the Hythe and Maidstone road more than a mile beyond New Cross, and passing through Bromley, Sevenoaks, and Tonbridge, enters Sussex near Flimwell, 45 miles. The road to Rye branches off from the principal Hastings road just before it quits Kent, and passes through Newenden, 53 miles, where it crosses the Rother into Sussex. The roads to Margate and Ramsgate, and to Sandwich and Deal, branch off from the Dover road at Canterbury. The South-Eastern railway diverges from the Brighton line at Reigate, Surrey, and enters Kent near Edenbridge, whence the main line proceeds in a generally eastern direction to Dover, 56 miles. From the Tonbridge station a branch runs off southward to Tonbridge Wells, 5 miles, where it quits the county. At Paddock Wood a branch runs off northward to Maidstone, 10 miles. From Ashford a branch is carried south-westward to Rye, 16 miles, and thence to Hastings; another in a north-eastern direction to Ramsgate, 30 miles, from which a short branch for goods diverges at Canterbury, north to Whitstable; at Minster one, 9 miles, to Deal; and from Ramsgate one, 4 miles, to Margate. The North Kent railway, also belonging to the South-Eastern Company, leaves the main-trunk at Deptford, and

runs at a short distance from the Thames to Gravesend, 24 miles, and thence to Strood, 7 miles.

Climate, Soil, Agriculture.—The climate of Kent is in general mild and genial. The proximity to the continent of Europe exposes it to occasional north-east winds, which chill the air, but they carry off the superfluous moisture of the soil; and some of the most fertile spots are in the Isle of Thanet, which lies at its north-eastern extremity, and in the adjacent parts. The soil of this county may be divided into the gravel, chalk, and clay, which produce, where they mix in due proportions, an extremely fertile loam. The alluvial soils along the Thames and Medway, and in Romney Marsh, produce some of the richest marsh pastures in the kingdom. The chalk rises into hills between Canterbury and Dover, where are extensive sheep downs, but from Canterbury towards London it is mostly covered by a stiff clay, and only breaks out here and there on the banks of the Thames. The Wealds contain some very fertile clays and woods, in which oaks grow to a great size. Throughout the county the clay may be said to predominate, and the mode of cultivation generally adopted is that which suits the strongest soils.

Besides the usual crops which are raised on good clays, Kent produces several which are peculiar to it, such as canary and radish-seed, which grow chiefly in the Isle of Thanet. Other seeds are likewise raised for the London seedsmen, such as spinach, cresses, and white mustard. Kidney beans are cultivated in the neighbourhood of Sandwich.

There is comparatively a very small proportion of grass land in Kent, if we except the sheep downs on the chalk hills and the marshes. The marshes produce most of the hay consumed in winter. Romney Marsh, which is well known for the richness of its grass, contains about 44,000 acres; on the borders of the Stour are 27,000 acres; and along the Medway, Thames, and Swale, about 11,500 acres more. A great many sheep are reared and fattened in these marshes. There are very few dairies of any consequence in Kent. Cheese is made only for domestic consumption.

Hops are grown to a very great extent in this county; and, with the exception of those which are raised at Farnham in Surrey, are the most esteemed of any in England. In that part of Kent which is nearest to London there are many extensive market-gardens; and many hundreds of acres are laid out in asparagus beds. Great quantities of peas are raised for the London market. Apples, pears, plums, and cherries are raised in orchards, and the produce sent to London. Cider is largely made. In some places hops, apples, cherries, and filberts may be seen growing together in the same grounds. The hops last 12 years, the filberts 30 years; after which the apples and pears require the whole ground. There are still some extensive woods in Kent, but they are diminishing every year; and the produce of bark and timber is much reduced from what it formerly was.

Divisions, Towns, &c.—Kent has long been divided into five lathes. These divisions, in the opinion of some writers, take their name from the Saxon, 'ge-lathian,' 'to assemble;' they had formerly distinct courts superior to the hundred courts; each of them comprehends several hundreds, and other smaller divisions. The lathes are as follows:—Sutton-at-Hone, containing 8 hundreds; Aylesford, 12 hundreds, with the liberty of the city of Rochester, and the liberty of the Lowey of Tonbridge; Scray, 16 hundreds, and the liberty of the Isle of Sheppey; St. Augustine, 12 hundreds; and Shepway, or Shipway, 13 hundreds, besides the barony of Bircholt.

There are several parts of the county which have their particular 'liberties,' exempt from the jurisdiction of the county magistrates. They are as follows:—I. The county of the city of Canterbury, in St. Augustine Lathes. II. The city of Rochester, and—III. The borough of Maidstone; both in Aylesford Lathes. IV. The liberty of Romney Marsh, comprehending several hundreds, which is under the jurisdiction of its own bailiff and jurats. V. The liberty of the Cinque-ports, which comprehends:—1. Sandwich, including the borough of Sandwich; the ville of Sarre and the ville of Ramsgate, in the Isle of Thanet; the town and parish of Deal, the parish of Walmer, and part of that of Woodnesborough, near Sandwich; and the parish of Fordwich, near Canterbury: 2. Dover, including the town of Dover, with part of the neighbouring parishes of Charlton and Hougham; the parish of Ringswold, between Dover and Deal, and the town and parish of St. John, Margate; the parishes of Birchington, St. Peter's, and Wood, or Woodchurch, in Thanet; the town and part of the parish of Folkestone, in Shepway Lathes; and the town and part of the parish of Faversham, in Scray Lathes: 3. Hythe, including the town and parish of Hythe, and part of the parish of West Hythe: 4. New Romney, including the town and parish of New Romney, and part of the parishes of Old Romney, Appledore, Brenzet, Ivychurch, Snargate, and part of Bromhill, all near Romney: 5. Rye, the liberty of which includes in this county the town of Tenterden.

There are in the county two cities, CANTERBURY and ROCHESTER; the Cinque-ports of DOVER, HYTHE, NEW ROMNEY, and SANDWICH; the parliamentary boroughs of GREENWICH, CHATHAM, and MAIDSTONE, and 18 other market-towns, namely, ASHFORD, BROMLEY, CRANBROOK, DARTFORD, DEAL, FAVERSHAM, FOLKESTONE, GRAVESEND, LYDD, MARGATE, MILTON, RAMSGATE, SEVENOAKS, SHEERNESS, Sittingbourne, TENTERDEN, TONBRIDGE or Tunbridge, and WESTERHAM. There were formerly markets at AYLESFORD, ELHAM, St. Mary Cray, Eltham,

Goudhurst, Lenham, TOWN MALLING, Queenborough, Smarden, Wrotham, and Wye. Of the places printed in small capitals an account is given under their respective titles. The other towns, with the town of Whitstable, the port of Canterbury, we shall notice here, with their respective populations in 1851.

Broadstairs, 20 miles E.N.E. from Canterbury, population of the parish 2975, a watering-place on the eastern coast of the Isle of Thanet, is much resorted to in the summer for sea-bathing. In it are a chapel of ease (a handsome gothic structure), chapels for Wesleyan Methodists, Baptists, and Independents, National schools, and an Infant school. At Broadstairs is a station of the coast-guard. The harbour has a wooden pier. Two batteries defend the town. There are remains of a chapel dedicated to the Virgin Mary, once held in great reverence by seamen.

Eltham, 30 miles N.W. by W. from Maidstone, 8 miles E. by S. from London, population of the parish 2568, is situated at the foot of Shooter's Hill. Eltham formerly possessed a royal palace, in which Edward II. and other sovereigns resided. After the reign of Henry VIII. Eltham palace was not used as a royal residence, though it was visited by Elizabeth and James I. The great hall, erected by Edward IV. is the only portion remaining: it is a very noble room, 100 feet long, 36 feet broad, and 55 feet high, and has a remarkably fine carved wooden roof. A few years back it was repaired. The parish church is a neat structure with a spire. There are National and Infant schools, and a preparatory school for pupils intended for the military profession. Eltham gives the title of earl of Eltham to the Prince of Wales.

Goudhurst, 13 miles S. by W. from Maidstone, population of the parish 2594, stands on a hill about two miles from the Sussex border. The church, a handsome structure with a massive tower at the west end, contains some interesting monuments. There are here an Endowed Free Grammar school, and National and Infant schools.

Lenham, 10 miles E. by S. from Maidstone, population 2070, a small town in a valley at the foot of the chalk hills, has very little trade. The church is partly of the decorated and partly of the perpendicular style. Sixteen stalls, eight in each chancel, were for the use of the monks of St. Augustine, who had an estate here. At the entrance to the churchyard is an ancient ligh-gate. There are a chapel for Independents, new National schools, and some almshouses. Fairs are held on June 6th and October 23rd. Emigration has caused a decrease in population.

Lydd, 33 miles S.E. from Maidstone, population of the parish 1605, on the edge of Romney Marsh, and about 3 miles from the sea, is included in the cinque port of New Romney. The parish church is chiefly of the perpendicular style, but it has been much disfigured by injudicious repairs. It has a lofty square tower with pinnacles. There are a chapel for Wesleyan Methodists, and National schools. The inhabitants are chiefly occupied in fishing. A market is held weekly on Thursday, and a pleasure fair on the last Monday of July. The shingle headland of Dungeness, some six square miles in extent, runs out from near Lydd. At the extremity of it is a lighthouse 110 feet high. On the Ness is a coast-guard station.

New Romney, 31 miles S.E. by S. from Maidstone, population 1053; a member of the cinque ports, and once a flourishing sea-port, but now about a mile and a half distant from the coast. Previous to the Reform Act New Romney sent two members to Parliament. The church is a magnificent structure of the 12th century: the lofty square tower is a rich example of the later Norman architecture. The Baptists and Wesleyan Methodists have chapels, and there are National schools. Grazing is extensively carried on in the district, which forms a part of Romney Marsh. Saturday is the market-day. A yearly fair, chiefly for sheep and lambs, is held on August 21st. Southland hospital, for the maintenance of a governor and four poor men and the education of two poor boys, was founded in 1610 by John Southland, Esq.

Queenborough, a decayed borough in the Isle of Sheppey, 17 miles N.E. from Maidstone: population of the parish, 722. The present name of the town appears to have been given to the borough by Edward III. in compliment to his queen Philippa. Edward built a castle here, which was destroyed in the period of the Commonwealth: the moat is still traceable. The parish church, built about 1347, consists of a nave and chancel, and has a western tower. The Independents have a chapel. The oyster fishery affords occupation to some of the inhabitants, and there is a copperas manufactory in the town. The whole of the parish, about 500 acres, is an uninclosed grazing tract of land. Queenborough, till the passing of the Reform Act, returned two members to Parliament. A fair is held on August 5th and 6th.

St. Mary Cray, 22 miles N.W. by W. from Maidstone, population 1400, had once a market, which was discontinued in 1703. Besides the parish church there are chapels for Wesleyan Methodists and Independents, and National schools. There is an extensive paper-mill in the neighbourhood.

Sittingbourne, 11 miles N.E. from Maidstone, population 2897, situated on the main road from London to Canterbury, near the head of Milton Creek. The church is a spacious edifice, rebuilt, except the tower and the external walls, since 1762, when it was accidentally burnt. The parish possesses National schools. Queen Elizabeth

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granted a weekly market and two fairs. The weekly market has been long discontinued; the fairs remain. A market is now held monthly. Paper-mills, a coach-factory, oil-mills, and flour-mills are in the parish. Malting, brewing, and brick-making are carried on.

Smarden, 14 miles S.E. by S. from Maidstone, population 1206, a small market-town, on the right bank of the Medway, has a large and handsome church with a square tower, two Baptist chapels, and a Free school with a small endowment. Some corn-mills are in the vicinity. The market-day is Friday; a pedlery fair is held October 10th.

Whitstable, 7 miles N. by W. from Canterbury, population of the town 3086, at the mouth of the river Swale, is the port of Canterbury. There is here an extensive oyster-fishery under the direction of the Incorporated Company of Dredgers. A considerable traffic is carried on in coals. There are copperas-works, breweries, rope-walks, and boat-building yards. A branch of the South-Eastern railway connects Whitstable with Canterbury. Besides the parish church, which has been recently erected, there are chapels for Wesleyan Methodists and Independents, and National schools. Roman pottery has been taken up from some of the oyster-beds, indicating the probable site of a former Roman station, now under low-water mark.

Wrotham, 11 miles W.N.W. from Maidstone, population 3184, at the base of the chalk hills, on the road from London to Maidstone, has a small market which is held on the fifth Tuesday of the month, when the month happens to have five Tuesdays. The church is a commodious edifice in various styles. There are National schools and four almshouses. Hops are largely cultivated: fruit for market is grown in orchards in the neighbourhood. At this place the archbishops of Canterbury had formerly a palace.

Wye, 10 miles S.W. from Canterbury, population of the town 1095, occupies a pleasant site in the vale of the Stour. The church is a fine old structure. There are a chapel for Wesleyan Methodists; the College Grammar school for boys, founded in 1434, which had 32 boarders and 9 day scholars in 1852; and National schools. Fairs are held on May 1st and October 14th. A commodious station and goods depot of the South-Eastern railway is at Wye.

The following are some of the more important villages in the county, with the population of the respective parishes in 1851, and a few other particulars:—

Appledore, 26 miles S.E. by S. from Maidstone, population 621, occupies an elevated site in the marsh district. The parish church is an ancient building with a beautiful porch. The Royal Military Canal between Hythe and Rye passes through Appledore. *Barham*, 6 miles S.E. from Canterbury, on the road to Dover: population, 1105. The church, an ancient building, is handsome, and has a lofty spire at the west end. In Barham are National and Infant schools. On Barham Downs are held the Canterbury races. *Beckenham*, 10 miles S.S.E. from London: population, 1688. The church is partly of the decorated style, but the larger part is more recent. At the entrance of the churchyard is an old ligh-gate. There are National and Infant schools, and three almshouses. Beckenham has numerous residences of wealthy London merchants. *Bexley*, 11 miles E.S.E. from London, population 4490, is situated on both sides of the river Cray. The church, which is ancient, contains some interesting brasses and monuments. There are National schools and some almshouses. Bexley manor was in the possession of Camden, the celebrated antiquary, and was bequeathed by him for the foundation of a chair of history in Oxford University. *Bexley Heath*, or *Bexley New Town*, about a mile N.W. from Bexley, is on the London and Dover road. A market-house is in the middle of the village. There are a neat gothic chapel in connection with the Established Church, chapels for Baptists and Wesleyan Methodists, schools for boys and girls, and many good dwelling-houses and shops. Numerous market-gardens are in the vicinity. A market is held on Saturday. *Biddenden*, 14 miles S.S.E. from Maidstone: population, 1457. The church is a neat building in the perpendicular style. There is a Free Grammar school, founded in 1566 for the education of 10 poor boys, which had 62 scholars in 1851. *Blackheath*, 5 miles E.S.E. from London, population included with Greenwich, Charlton, and Lewisham parishes. The heath is an extensive open common, on the margin of which are numerous handsome residences. [GREENWICH.] Blackheath possesses a district church, an elegant structure in the pointed style, with a lofty spire; two chapels of ease; chapels for Wesleyan Methodists and Baptists; National schools; a Wesleyan day school; a Proprietary school in connection with King's College, London, which had 127 scholars in 1853; another Proprietary school; a literary institute; a subscription library; the Blackheath and Lewisham Benevolent Society; and other benevolent institutions. Morden College, founded in 1695, provides a residence and support for decayed merchants, those in the Levant trade having the preference. The number of inmates was originally 30, but it has been more than doubled. The heath is a favourite rendezvous for holiday parties in summer. At Blackheath is a station of the North-Kent railway. *Boxley*, 2½ miles N.E. from Maidstone, population 1508, has an ancient church in which are several interesting monuments. Boxley Abbey, now a private residence, was formerly the site of an establishment for Cistercian monks. In this parish is Penenden Heath, where large county meetings have been held on remarkable occasions. *Brenchley*, 12 miles S. by W. from Maidstone, population 2693, near the small river Teise, a feeder of the Medway.

The church is an ancient stone building with a lofty square tower. In the village are a Wesleyan Methodist chapel and a National school. *Brompton*, [CHATHAM]. *Charing*, 13 miles E.S.E. from Maidstone, population 1321, has a handsome old church with a tower and a small beacon turret. There is here an endowed school. The site of a former residence of the archbishops of Canterbury is now occupied as a farmhouse, and part of the ancient structure has been converted into a barn. *Charlton*, 6 miles E.S.E. from London, population 4818, is pleasantly situated on elevated ground between Greenwich and Woolwich. The church is an ancient structure, containing some interesting monuments. There are National and Infant schools. Many of the inhabitants are employed in the government dockyards at Woolwich. *Chariton House*, the seat of Sir T. M. Wilson, Bart., is a very fine manorial residence, erected in the reign of James I. *Chiddingstone*, 19 miles S.W. from Maidstone, population 1260, on the right bank of the river Eden, has a handsome old church, with a very fine tower and spire at the west end. There are National and Infant schools. *Chilham*, 21 miles E. by S. from Maidstone, population 1247, is noticeable chiefly for its castle, now a private residence: the keep is of Norman date. The Romans had a station, and some severe conflicts took place here between the Romans and the Britons. Several of the Anglo-Saxon kings resided here. *Chilham church* is a handsome old structure. *Chislehurst*, 22 miles N.E. by E. from Maidstone: population, 2088. In this parish is Camden-place, the residence of William Camden the antiquary, where he wrote the 'Annals of Queen Elizabeth.' Several other fine mansions and some good parks are near the village. The church is a fine building, with a spire, and contains several interesting monuments. The Wesleyan Methodists and Baptists have places of worship, and there are National and Infant schools. A pleasure fair is held on the Wednesday in Whitsun week. *Cobham*, 14 miles N.N.W. from Maidstone, population 718, is chiefly worthy of notice on account of Cobham Hall and park, the seat of the Earl of Darnley. *Cobham Hall* consists of two wings, erected respectively in 1582 and 1594, which are united by a central building designed by Inigo Jones. The house was thoroughly repaired and modernised in the early part of the present century; it contains some spacious and elegant rooms, fitted up with great splendour. The picture gallery contains a fine collection of the works of the great masters; and in the other rooms are numerous portraits by Vandyke, Lely, Kneller, and others. The park covers an area of about 1860 acres, and presents a variety of pleasing scenery. In *Cobham church* is an altar-tomb, on which is a recumbent statue of Lord Cobham, who was executed in the first year of Queen Mary for the share he took in Wyatt's rebellion. It contains also a fine series of monumental brasses. The *Crays* are four villages situated near each other on the banks of the river Cray, about 22 miles N.W. from Maidstone. One of these, *St. Mary's Cray*, has been already noticed. The others are named *North Cray*, population 570; *Foot's Cray*, population 369; and *St. Paul's Cray*, population 554. At *North Cray* are the parish church and Hetherington's Charity school for boys and girls. *Foot's Cray* possesses a parish church, a Baptist chapel, National schools, paper-mills, and a coach-factory. *Paul's Cray*, besides its church, has a Wesleyan Methodist chapel, National schools, and a paper-manufactory. In the district are numerous mansions. *Crayford*, 22 miles N.W. from Maidstone, population 2935, on the left bank of the river Cray, has in its vicinity extensive silk- and calico-printing establishments, and flour-mills. The church is a large modern building. There are places of worship for Baptists and Roman Catholics, and National and Infant schools. Bricks are manufactured, and some extent of ground is laid out as market-gardens. Some curious caves of considerable extent are in the parish. *Dymchurch*, 34 miles S.E. from Maidstone, population 650, situated on the coast, is governed by a corporation consisting of a bailiff and jurats, under whose care is the embankment called *Dymchurch Wall*, which extends along the shore of Romney Marsh for about 3 miles. This wall is about 20 feet in height, and has two sluices through which the drainage of the marsh is carried off. *Edenbridge*, 21 miles W.S.W. from Maidstone, population 1718, so called from its position on the river Eden, over which there is a bridge. The parish church is a handsome and commodious structure with a spire at the west end. There is a chapel for Independents, and a National school. The South Eastern railway has a station at *Edenbridge*. The village possesses a considerable trade. There is a small weekly market for corn, a monthly cattle market, and a yearly fair. *Erith*, on the right bank of the Thames, 24 miles N.E. from Maidstone, population 2231, had formerly a market. A pier was erected some years back, and *Erith* has since been much resorted to by holiday visitors. The church is partly covered with ivy; in it are a carved wooden rood screen, and a tomb in alabaster, in memory of the Countess of Shrewsbury and Pembroke. There are a chapel for Wesleyan Methodists, a Free school for poor boys, and a Charity school for girls. *Belvedere House* occupies an elevated site, and commands some fine prospects. Many villa residences have been erected, and numerous orchards are in the neighbourhood. Brick-making is extensively carried on. The North Kent railway has a station at *Erith*. *Eynesford*, 16 miles N.W. by W. from Maidstone, population 1323, on the right bank of the river Darent, has a fine cruciform church of Norman date with a spire at the west end. The Baptists have a place of worship, and there are National and British

schools. On the Darent are some paper-mills. North of the town is the site of *Eynesford Castle*: the moat is now occupied by an orchard. Large quantities of fruit are grown in the district. *Farnborough*, population 920, about 24 miles W.N.W. from Maidstone, is surrounded by numerous orchards, which yield considerable quantities of fruit. A fair is held on June 4th. The church is an old building with a low square tower. There is here an Infant school. *Farningham*, population 701, being exactly the same as in 1831 and 1841, the proportion of males and females being a little different, is pleasantly situated on the right bank of the Darent, 17 miles N.W. from Maidstone. The Darent is here crossed by a handsome bridge of four arches. The church is a commodious edifice, in the early English style. The Wesleyan Methodists have a chapel, and there is a National school. A fair is held on October 15th. *Fordwich*, 3 miles N.E. from Canterbury, population 237, is on the right bank of the river Stour, which was once navigable for shipping up to *Fordwich*, but now only barges can ascend so high. *Fordwich* is nominally under the government of a mayor, jurats, and commonalty. It is a corporate town by prescription, and a subordinate member of the cinque port of *Sandwich*. Corn and coal are conveyed by the river Stour. The trout fishery, which is somewhat productive, is under the management of the corporation. *Gillingham*, 10 miles N. by E. from Maidstone, population 7952, is a suburb of Chatham. The church is an ancient structure; in the interior is a circular Norman font. There are National schools. *Gillingham Castle* was erected in the reign of Charles I. A palace of the archbishops of Canterbury formerly stood here. The hall, 110 feet long and 30 feet wide, has been in use as a barn. *Hadlow*, 9 miles S.W. from Maidstone, population 2395, has besides the parish church, chapels for Baptists and Wesleyan Methodists, and a National school. *Hadlow Castle*, a castellated mansion, to which a high tower has been added within the last few years, occupies a commanding position near the village. *Hawkhurst*, 18 miles S. from Maidstone, population 2704, on the southern border of the county, is pleasantly situated on elevated ground. There are a Free school for boys, six almshouses, and a dispensary. *Hayes*, 26 miles W.N.W. from Maidstone, population 552. The church is a very ancient building. There are National and Infant schools. *Holwood House* occupies the site of *Hayes Place*, the seat of the Earl of Chatham, and the birth-place of his son William Pitt. *Herne Bay* is on the north coast, about 8 miles N.N.E. from Canterbury, population of *Herne parish* 3094, of which *Herne Bay chapel* contains about one half. *Herne Bay* is a modern bathing place of considerable pretension. Villas, terraces, and rows of private houses have been built for the accommodation of visitors, with hotels, assembly-rooms, libraries, baths, &c.; also a chapel of ease, an independent chapel, National and Infant schools, a market-house, and a clock-house. The pier at which the London steamers receive and land passengers is a convenient promenade. The parade extends along the coast for about a mile. *Hever*, 20 miles W.S.W. from Maidstone, population 603, is chiefly noticeable for its castle, described elsewhere. A moat surrounds the building; the draw-bridge has been replaced by a fixed wooden bridge. The buildings form a quadrangle, inclosing an open court. *Hever church* contains several monuments to members of the Boleyn family; the finest of them is an altar-tomb which has on the top an effigy of the Earl of Wiltshire, the father of Anne Boleyn. *Ightham*, 11 miles W. by N. from Maidstone, population 1121, has an ancient parish church, in which are interesting monuments of the Selby family. The Wesleyan Methodists have a chapel, and there is a National school. *The Mote House* is a remarkable moated mansion of the 14th century. At old *Berry Hill* are traces of Roman fortifications. *Lamberhurst*, 16 miles S. by W. from Maidstone; the parish is partly in Sussex; population, 1734. The parish church is an ancient structure, with a lofty spire. The Wesleyan Methodists and Baptists have chapels, and there are National schools. At *Lamberhurst* were formerly extensive iron foundries, where were cast the iron railings which surround *St. Paul's cathedral*, London. *Lee*, adjoins *Blackheath*, 5 miles S.E. from London; population, 3552. It has a handsome new church, finely situated, a chapel for Independents, and National and Infant schools. The tower of the old parish church stands in the churchyard opposite the new church; in the churchyard is a monument to the memory of Dr. Edward Halley, the astronomer. There are numerous handsome private residences at *Lee*, occupied by London merchants and families of independent means. *Leeds*, 5 miles E.S.E. from Maidstone: population, 663. *Leeds Castle* is noticed elsewhere. *Leeds abbey mill* is distant from the castle about three-quarters of a mile. *Leigh*, 15 miles S.W. from Maidstone, population 1161, near the left bank of the *Medway*, has a parish church and a National school. A pleasure fair is held on June 16th. A mineral spring, similar in character to the springs at *Tonbridge Wells*, is in the parish. *Lympe*, 16 miles S. from Canterbury, population 552, is situated near the eastern extremity of *Romney Marsh*, about 2 miles W. from *Hytha*. During the Roman occupation it was a seaport known as *Portus Lemanianus*. [HYTHE.] There are traces of Roman works locally known as *Studfall Castle*. The parish church is an old and very massive structure; the remains of a castellated mansion called *Lympe Castle* adjoin the church: being situated on a steep inland cliff, they produce together a very striking effect. In the village are a chapel for Baptists and a National school. *Minster*, 12 miles E.N.E. from Canterbury,

population 1502, is situated in the Isle of Thanet. According to early legends, it was at Minster that the first Christian establishment was founded in Britain. The village occupies an elevated site along the edge of the marsh grounds, and contains several old half-timber houses. The parish church is ancient; the chancel, which is vaulted with stone, has been recently carefully restored. At the west end is a tower. There are here a chapel for Wesleyan Methodists, and National and Infant schools. *Northfleet*, 15 miles W.N.W. from Maidstone, population 5038, on the right bank of the Thames, is properly a suburb of Gravesend. There are at Northfleet extensive chalk and lime-works; ship-building and brick-making are carried on, and there are some market-gardens in the vicinity. The parish church is a fine ancient edifice, with a large and handsome chancel, and a richly carved screen. The Independents have a place of worship. Huggins's Hospital is a recent foundation, affording residences for 40 decayed tradesmen, to whom a weekly allowance in money is also given. A handsome church has been erected by Mr. Huggins, in connection with the hospital. The church and hospital buildings occupy a commanding site. A high causeway and flood-gates protect the north-west marsh from the incroachments of the Thames, by which it was at one time covered. *Oxford*, 17 miles W. by N. from Maidstone, population 837, has a church which was rebuilt about 200 years ago, on which occasion wooden pillars were inserted to separate the aisles: the eastern window was designed in imitation of that of the previous church, which had been burnt down. The Wesleyan Methodists have a place of worship. Malting, brick-making, and lime-burning are carried on, and some corn-mills are in the vicinity. A few fragments still remain of an ancient and splendid palace of the archbishops of Canterbury. *Penhurst*, 19 miles S.W. from Maidstone, population 1623, has a fine castle, noticed near the end of this article. This castle, which is situated in a finely-wooded park, contains some rich old furniture, tapestry, and numerous portraits and other paintings by celebrated masters. It is open to the public. The paper manufacture employs some of the population. *Reculver*, 11 miles N.E. by N. from Canterbury, population 273; the village is about a mile and a quarter from the site of the Roman station Regulbium. A monastery was founded here in 679. Two ancient towers formerly belonging to the parish church were purchased by the Trinity House in 1810 and repaired, that their use as landmarks might be continued. Coast-guard stations are at Regulbium Camp and Bishopstone. *St. Mary-at-Cliffe*, on the coast, 3 miles N.E. from Dover, population 763, is visited in summer for sea-bathing. It has a fine church of Norman date, which was repaired and restored in 1836. There is here a station of the coast-guard. *Sandgate*, 16 miles S. by E. from Canterbury, population included with the parishes of Folkestone and Cheriton, is a favourite resort for sea-bathing. Sandgate Castle was erected in defence of the coast in 1539. About 1504 it was repaired and converted into a circular redoubt, having in the centre a martello tower with three guns. About the same time, also, a large encampment was formed on the heights above the village, and some time after, extensive barracks were erected on the same site. Along the ridge of the cliffs six martello towers were placed at convenient distances, and at a short distance inland the Royal Military Canal from Sandgate to the river Rother, a few miles above Rye, was constructed. A fair is held annually on July 23rd. There are bathing-rooms, a public dispensary, numerous lodging-houses, National schools, and an Infant school. *Southborough*, 15 miles S.W. from Maidstone, about midway between Tonbridge and Tonbridge Wells, population of the ecclesiastical district 1327, has a convenient modern church, finely situated, and a National school. Many handsome private dwellings are in the village, it being much used as a place of residence by visitors to Tonbridge Wells. There are some corn-mills in the vicinity. *Southfleet*, 3 miles S.W. from Gravesend, and 18 miles N.W. from Maidstone, population 657, occupies the site of the Roman station Vagninaca. The parish church is ancient and contains numerous objects of interest to the antiquary. In the village is a Free school. Extensive orchards are in the neighbourhood. A great proportion of the water-cresses sold in London is supplied from gardens near Southfleet. The village is much visited in summer. *Staplehurst*, 9 miles S. by E. from Maidstone, population 1660, on the high road from Hastings to Maidstone, has a station of the South-Eastern railway. Several flour-mills are in the neighbourhood. *Stone*, near the Thames, 2 miles E. from Dartford, population 829. The parish church is a very fine example of the early English style and date; at the west end is an embattled square tower. Stone Castle, now a private residence, was erected in the reign of Edward III. Of the original structure a small square tower still stands. *Strood*, 1 mile N. by W. from Rochester, population 3067, of which number 2937 are within the parliamentary city of Rochester, is on the left bank of the Medway; it consists of one long narrow street, and is united to Rochester by a bridge. The church, which was rebuilt a few years ago, contains some ancient monuments. There are in Strood an Independent chapel and National schools. The terminus of the North Kent railway is at Strood; also the North Aylesford Union workhouse. The inhabitants of Strood are mostly dependent on the fisheries and shipping. *Sutton Valence*, 6 miles S.E. from Maidstone, population 1090. Lamb's Free Grammar school, founded in 1576,

free to 24 boys, increased by statutes of 1817 to 30 boys, has two exhibitions of 10*l.* each, which are not claimed. It is under the patronage of the Clothworkers' Company. Near the village are the remains of Sutton Castle, an ancient fortress. *Swanscombe*, 19 miles N.W. by N. from Maidstone, and about 3 miles W. from Gravesend, population 1763, is said to have derived its name, originally Sweynscamp, from Sweyn, the Danish king, having landed and encamped at the place. The church, an ancient edifice, has some portions of Anglo-Saxon date. It is said that at Swanscombe the men of Kent met William the Conqueror and disputed his progress till he had promised to confirm to them their former rights and privileges. *Sydenham*, about 7 miles S. by E. from London, population 4501 in 1851, is pleasantly situated, and contains many genteel residences of London merchants and wealthy families, and many new villa and cottage residences. The Croydon branch of the Brighton and South Coast railway has a station at Sydenham. There are here a handsome modern church, and an Episcopal chapel, two chapels for Independents, and one for Wesleyan Methodists; and there are National, British, and Infant schools. At Sydenham are some springs which in the 17th and 18th centuries were in some repute for their medicinal qualities. From Sydenham Hill and Oak of Honour Hill (on which Queen Elizabeth is said to have breakfasted on one of her Maying excursions) are very extensive and beautiful prospects, including some fine views of the metropolis. On Penge Hill, near Sydenham, is the site of the Crystal Palace, which was opened by Queen Victoria on Saturday, June 10th, 1854. *Teynham*, 16 miles E.N.E. from Maidstone, population 842; the church is a commodious and handsome cruciform structure, with an embattled tower at the west end. In the interior are some ancient brasses, and there are some specimens of stained glass. Much attention is paid to the cultivation of fruit-trees, and there are several hop-gardens. At Conyer's Quay, in Conyer's Creek, an arm of the river Swale, vessels of considerable size can discharge their cargoes. *Wateringbury*, 5 miles S.W. from Maidstone, population 1443, has a parish church and well-attended National schools. There is here a station of the Maidstone branch of the South-Eastern railway. Near the village is Wateringbury Cross. *Wilmington*, 21 miles N.W. from Maidstone, population 915, has extensive orchards and market-gardens. The church is placed on the summit of a hill. There are National schools. In the neighbourhood are some good family mansions. A fair is held on April 23rd. *Wingham*, 6½ miles E. from Canterbury, population 1082, had once a market. The church, an ancient structure, is spacious and has a lofty steeple. The Independents have a chapel, and there are National and Infant schools. Some ancient half-timber houses are in the village. In the parish are several market-gardens. Fairs are held on May 12th and November 12th. *Wittersham*, 23 miles S.S.E. from Maidstone, population 937, is situated on the Isle of Oxney, which is surrounded by the river Rother and its branches. The parish church is an ancient edifice, with a tower; there are a chapel for Wesleyan Methodists and an Endowed Free school. A fair is held on May 12th. *Woodnesborough*, 12 miles E. by S. from Canterbury, population 813, has a parish church, and a chapel for Independents. The village was anciently called Wodnesbeorh, and was one of the many places in England dedicated to the Saxon god Woden. On Woodnesborough Hill numerous Saxon antiquities have been found. *Yalding*, 6 miles S.S.W. from Maidstone, population 2672, has a parish church, a chapel for Baptists, a Free school for boys, and a Charity school for girls and young children. By the river Medway barges can come up to Yalding. The South-Eastern railway has a station here.

Divisions for Ecclesiastical and Legal Purposes.—Kent constitutes the larger part of the diocese of Canterbury, within which the whole of the county is included, except the city and deanery of Rochester, which are in the archdeaconry and diocese of Rochester, and some parishes, chiefly near London, which are in the diocese of London. By the Poor-Law Commissioners the county, exclusive of the city of Canterbury, which is managed under a Local Act, is divided into 27 Unions:—East Ashford, West Ashford, Blean, Bridge, Bromley, Cranbrook, Dartford, Dover, Eastry, Elham, Faversham, Gravesend and Milton, Greenwich, Hollingbourn, Hoo, Lewisham, Maidstone, Malling, Medway, Milton, North Aylesford, Romney Marsh, Sevenoaks, Sheppey, Tenterden, Isle of Thanet, and Tonbridge. Canterbury city is under a local act in respect to the management of the poor. The whole include 424 parishes and townships, with an area of 950,549 acres, and a population in 1851 of 612,355.

Kent is in the Home circuit, except that part of it which is within 10 miles of St. Paul's, London, which is in the jurisdiction (in criminal matters) of the Central Criminal Court. The assizes are held at Maidstone, where are the county jail and the house of correction. County courts are held at Ashford, Bromley, Canterbury, Dartford, Deal, Faversham, Folkestone, Gravesend, Greenwich, Margate, Ramsgate, Rochester, Romney, Sevenoaks, Sheerness, Sittingbourne, Tenterden, Tonbridge, and Tonbridge Wells.

By the Reform Act the county was divided for parliamentary purposes into the divisions of East Kent and West Kent; each returning two members. Two members each are returned for the cities on Canterbury and Rochester, for the cinque ports of Dover and Sandwich, and for the boroughs of Greenwich and Maidstone, and one member

each for the cinque port of Hythe and the borough of Chatham. The total number returned from the whole county is eighteen.

History and Antiquities.—This county comprehends that part of England which from its proximity to the Continent first obtained distinct historical notice. Cæsar mentions the district by its name, which he gives in the Latinised form Cantium; he ascribes to the inhabitants civilisation much superior to that of the other islanders. It was the part on which his attack was made in his first invasion, and he did not then pass beyond its limits; in his second invasion he passed through it to the assault of other tribes; some sharp encounters took place during his march in this county, and in his absence five of the reguli, or petty princes of Cantium, made an unsuccessful attempt to storm the fortified intrenchment which protected his fleet, B.C. 54. Ptolemæus places Londinium (London) among the towns of the Cantii, or the people of Cantium; a statement which, if accurate, supposes the district to have exceeded the limits of the present county. In the division of the Roman empire which prevailed in its later period, Cantium was comprehended in the province of Britannia Prima. Several important stations were within the limits of the modern county. There were the four harbours of Regulbium (Reculver), Ritupæ, or Ad Portum Ritupis (Richborough near Sandwich), Dubræ, or Ad Portum Dubris (Dover), and Lemansæ, or Ad Portum Lemaniæ (Lympe or Linne, near Hythe). Roads from these places met at Durovernum (Canterbury), whence the military way called Watling-street ran in a direct line to Londinium (London), passing by the way through Durolevum (Newington, or more probably Judde Hill near Ospringe), Durobrivæ or Durobrivis (Rochester), and Vagniacæ (Southfleet near Gravesend). The above places, with the exception of Regulbium, are mentioned in the Itinerary of Antoninus, which also notices several other stations. Besides Watling-street, and Stone-street, which runs from Canterbury to Lympe, there are probably other Roman roads in Kent.

Of these stations and roads there are many remains. Regulbium, now Reculver, defended the northern entrance of the channel between Thanet and the rest of the county. The incroachments of the sea have washed away part of the station. The inclosure was a square with the angles rounded off. The town is supposed to have been to the north of the station, on a site now undermined and washed away. Ritupæ, or Ad Portum Ritupis, now Richborough, is called Rhotupis by Richard of Cirencester, who terms it a colony; it is Ratupis in the Peutinger table. Richborough is one of the noblest Roman remains in the island. It was the usual place of communication with the Continent, and guarded one mouth of the channel which then insulated Thanet. The walls form a parallelogram, but the east wall has disappeared and probably fallen into the Stour, on the side of which the station is placed. The area within the walls is five acres. The walls are flanked by projecting round towers at the angles, and by intermediate round towers. The walls to the height of 6 feet are 11 feet 3 inches thick, above that height they are 10 feet 8 inches. The top of the wall is everywhere imperfect; its greatest height is 23 feet. A quarter of a mile from the south-west angle of the castle are the remains of a Roman circular amphitheatre of about 70 yards diameter. Coins and other antiquities have been dug up here. In the circuit of Dover Castle are the ruins of a pharos, or watch-tower, an indubitable relic of the Roman Dubræ. This watch-tower has an octangular base externally, but within it is a square. The structure is composed of long, thin, irregular bricks, with intermediate courses formed by blocks of hard stalactitical incrustations: it is now in a very dilapidated state. The ruin of an old church adjoining the pharos is not Roman, but Roman bricks have been worked up in it. The remains of the Roman fortress Lemansæ, or Ad Portum Lemaniæ, at Lympe, or Lympe, near Hythe, have been mentioned above in the notice of Lympe village, as well as in the article HYTHE. At Durovernum (Canterbury) numerous antiquities have been discovered. Many Roman bricks have been worked up into the city walls. At Durobrivæ (Rochester) various antiquities have been found, and Roman bricks have been worked up in the ruined walls of the cathedral precinct. To Durolevum two positions have been assigned: one at Newington, the other on Judde Hill, in the parish of Ospringe, south of the Canterbury road. At Southfleet, the Roman Vagniacæ, a large earthen vessel and a stone tomb containing several funeral antiquities were discovered early in the present century. On Holwood Hill near Farnborough, on the Hastings road, the ancient Noviomagus, there are the remains of an immense elliptical encampment.

Of the Roman roads, the Watling-street, which nearly coincided with the present road from London to Canterbury, may be traced in several places. It is visible on Bexley Heath, and again just beyond Dartford, where the modern road bends to the left towards Gravesend, while the Street pursues a direct course through Southfleet to Rochester. From hence to Canterbury the ancient and modern roads coincide, and the traces of the ancient one appear to have been, except in a few places, obliterated. The branch of Watling-street which led from Durovernum (Canterbury) to Lemansæ (Lympe), is still conspicuous for some miles. It pursues a straight course between the two places, and is known by the name of Stone-street.

The North Foreland is mentioned by Ptolemæus under the name of the promontory Cantium or Acanthium. The Medway, the Stour, the small stream which enters the sea at Dover, and the Rother, appear

to be mentioned by Richard under the respective names of Madus, Sturius, Dubris, and Lemanus. Thanet appears in the pages of Richard, under the name of Thanatos, and the channel which insulates it, under that of Wantsum.

In the Saxon invasion Cantium was the scene of many interesting events. The fabulous or semi-fabulous brothers Hengist and Horsa are said to have landed in Pegwell Bay, near Ipswich Fleet, now Ebb Fleet, in Thanet. Of the early battles of Hengist and his Jutes with the Britons, the principal were fought in the year 455; the first on the Dereunt (Darent); the second at Epsford or Eglesford (Ayleford) on the Medway, and the third at Stonar, near Sandwich. The ancient chronicles assign the victory in the second and third engagements to the Britons, who were led by Vortimer, son of Vortigern; the Jutes fled, and did not return to England till Vortimer's death, two years after. In 457, and 473, the Jutes obtained victories over the Britons. Hengist's dominions did not extend beyond Kent; his son Eric, or Æsc, was honoured as the real founder of the Kentish dynasty of the Æschingas, or sons of the ash-tree. Kent was called by the Saxons Cantwaraland: Durovernum became Cantwarabyrig or Cantwaraburh, whence Canterbury. In 589, or thereabout, Ethelbert, king of Kent, obtained the power or dignity of Bretwalda, which he retained till his death in 616. After the conversion of Ethelbert to Christianity, a church was built by Augustine, adjacent to the royal palace, which was the precursor of the present cathedral of Canterbury, which from the political supremacy of Ethelbert, and his earlier conversion, became the ecclesiastical metropolis of England. Under Eadbald, son and successor of Ethelbert, the crown of Kent lost the supremacy which the talent or power of Ethelbert had acquired. A succession of obscure princes followed. For a time Kent was in subjection to the king of Wessex. In 726 the reigning authority was in the hands of three brothers, Ethelbert, Eadbert, and Alric, who acknowledged the supremacy of Mercia. Alric was the survivor of the three, and in him ended the line of the Æschingas.

In 752 Kentish men formed part of the army of Ethelbald, the Mercian king, in his war against Cuthred of Wessex. In the following half century Kent appears to have been in subjection to Mercia, having been conquered by Offa, who defeated the Kentish men in 776 at Otford. About 796 or 797 Eadbert, or Ethelbert Pren, king of Kent, was attacked by Cenwulf of Mercia; and the country was again brought under subordination to Mercia. About this time Wessex was establishing its supremacy over the other Anglo-Saxon kingdoms. Egbert, king of the West Saxons, having defeated the Mercians at Ellandun, or Wilton, in 823, dispatched a force into Kent, at whose approach Baldred, the reigning prince, fled, and Kent passed from under the Mercian supremacy to that of the West Saxons, under which it long remained.

From this time Kent, with which Surrey and Sussex, and probably Essex, were incorporated, became a subordinate part of the West Saxon empire. It commonly formed the appanage of the eldest son, or heir apparent, of the king of Wessex, and when the heir succeeded to the paramount sovereignty he usually resigned the Kentish crown to his heir. Thus Ethelwulf, son of Egbert, was, during his father's reign over Wessex, king of Kent; and when he succeeded to the throne of Wessex he bestowed Kent successively on his sons Athelstan and Ethelbert; the latter of whom retained the crown when his brother Ethelbald ruled over Wessex, and on the death of Ethelbald united Kent and Wessex under one sceptre. During the reign of Ethelwulf in Wessex, and of his sons in Kent, the latter kingdom was repeatedly attacked by the Danes: Canterbury and Rochester were sacked by them. Athelstan, king of Kent, and the alderman Elchere, or Ealhere, however defeated the Danes at Sandwich, and took many of their ships. At a subsequent period the Danes landed in the Isle of Thanet, and vanquished the men of Kent and Surrey. In the warfare of Alfred the Great with Hasting the Northman, Kent was for a short period in the year 803 the scene of conflict. From this time the crown of Kent was never separated from that of Wessex. The 'Juti Cantiani,' Jutes of Kent, are mentioned by an ancient chronicler as subdued by Edward the Elder in the very commencement of his reign. In the next reign, that of Athelstan, Kent possessed its separate legislature, which regulated the terms on which the laws of Wessex should be accepted. Traces of the distinct laws and franchises of Kent continued however till long afterwards.

In the reign of Ethelred (980-991), when the Northmen renewed their ravages, Kent was subject to their fury until they were bought off by Ethelred. In 999 they entered the Medway, took Rochester, and plundered the western part of the county. In 1006 Sandwich was plundered by Sweyn, king of Denmark, who re-embarked on receiving a large sum as the price of his retreat. In 1009 a large Saxon fleet had its rendezvous at Sandwich, but performed nothing; and in 1010 the Danes landed on the Isle of Thanet and besieged Canterbury, extorting as usual a large sum as the condition of their withdrawal. In a later invasion they took Canterbury by treachery, plundered it, and reduced it to ashes. In the short but fierce struggle between Canute and Edmund Ironside, Edmund defeated his rival at Otford in 1016, and drove him to the Isle of Sheppey.

In the reign of Edward the Confessor, Kent was included in the earldom of the famous Godwin, but it does not appear that he took his title from it, but from his more important earldom of Wessex.

The earldoms of that day were not mere titles, but conveyed viceregal power over the districts confided to the earl.

At the great battle of Hastings the men of Kent formed the vanguard of the Anglo-Saxon army: it was their privilege to occupy that post. A detachment of the Norman force having landed at Romney just before the battle, were defeated by the townsmen, in revenge for which William subsequently burned that town and massacred the inhabitants. Having secured Dover Castle after a slight resistance, hung the governor, and burnt the town, he marched towards London by Watling-street; and in his way conciliated the favour, or at least disarmed the resistance, of the men of Kent, by granting them the continuance of their privileges. An unsuccessful attempt was subsequently made (1067) by the Kentish men, aided by the earl of Boulogne, to surprise Dover Castle. In the reign of William Rufus, Odo, bishop of Bayeux and earl of Kent, raised the county in favour of Robert duke of Normandy. Rochester town and castle, which were held on behalf of Odo, did not capitulate till after a siege of many weeks. King John, when threatened with an invasion by Philip II. of France, encamped with an army of 60,000 men on Barham Downs; but his courage failed him, and he made his memorable submission and surrender of his crown to Pandulphus, the Pope's Legate, at Dover. In the subsequent troubles (1215) John collected an army of mercenaries at Dover and marched inland; but William de Albini bravely defended Rochester Castle for three months against him. In 1216 Louis, dauphin of France, landed in the Isle of Thanet, near Sandwich, in aid of the barons, and took the castle of Rochester; but after his retreat and the death of John, it again submitted to the crown. The rest of Kent submitted for a time to Louis, except Dover Castle, which was defended for the king against the dauphin and the barons by Hubert de Burgh. In the troubles of the succeeding reign Rochester Castle was defended for the king against Simon de Montfort, who besieged it in vain.

It was in Kent that the rebellion of Wat Tyler broke out. The commons in this county and in Essex rose in a body in 1381. They attacked the archbishop of Canterbury's house at Maidstone and released John Balle, a priest, who had been imprisoned for teaching doctrines like those of Wickliffe. The issue of the rebellion is well known. In the reign of Henry VI. the insurrection of Jack Cade broke out in Kent A.D. 1450. At the outbreak of the war of the Roses, 1451, Richard duke of York encamped near Dartford, where he fortified himself. The king, Henry VI., encamped on Blackheath. There was another encampment on Blackheath in 1471. Sandwich was the scene of several naval operations in 1460 and 1471. In the reign of Mary (1554) Sir Thomas Wyatt's rebellion broke out in Kent. In the civil war of Charles I. and the Parliament a severe battle was fought at Maidstone (1648), in which the Parliamentarians, under Fairfax, obtained a complete victory.

In the reign of Elizabeth the river Medway appears to have formed the only harbour for the royal navy, then in its infancy. The dock at Chatham was built by that queen; and she erected Upnor Castle, on the opposite side of the Medway, to defend the passage of the river. In the reign of Charles II. (1667), a detachment from the Dutch fleet under De Ruyter sailed up the Medway as far as Upnor Castle. [CHATHAM.]

Of ancient castellated edifices we may here specify Leeds, Hever, Chilham, Allington, Saltwood, and Westerhanger castles, with the castellated mansions of Penshurst and Knole. Leeds Castle is to the right of the road from Maidstone to Ashford, 4 or 5 miles from Maidstone. It is surrounded by a broad moat: the entrance is by a stone bridge of two pointed arches, and through a deep gateway in good preservation. Leeds Castle was the residence occasionally of Richard II. and Henry IV. Hever Castle, on the Eden, one of the upper waters of the Medway, was erected partly in the time of Edward III., and possesses some historical interest as the residence of the Boleyn family. The castle is now used as a farm-house. Chilham Castle is about midway between Canterbury and Ashford. After the Conquest a Norman castle was built here, of which the keep is in good preservation. It is an irregular octagon of three stories, with walls 10 or 12 feet thick, built of flint, chalk, and stone intermingled, faced with squared stone, and now mantled with ivy. The remains of Allington Castle, on the left bank of the Medway just below Maidstone, are occupied as two tenements. Allington was the seat of Sir Thomas Wyatt, an accomplished scholar of the time of Henry VIII., and of his son Sir Thomas, who suffered for treason against Queen Mary. Saltwood Castle is seated at the head of a narrow valley about a mile from Hythe. It belonged to the archbishops of Canterbury till the reign of Henry VIII., when Cranmer surrendered it to the king. The outer gate-house, erected by Archbishop Courtney in 1381, is in tolerable preservation. Of Westerhanger, or Westonhanger, 2½ miles from Hythe, the principal remains are the outer walls, with the towers of the north and east sides, and a small chapel. Penshurst Castle is a very extensive pile. It is one of those castellated dwellings that immediately succeeded the baronial castles of a more troubled period, and derives its chief interest from having been the residence of the Sidney family. Knole, or Knowle, near Sevenoaks, the former residence of the Sackvilles, dukes of Dorset, but now of Earl Amherst, is another extensive and magnificent mansion: the principal buildings, like those of Penshurst, form a spacious quadrangle, and are in the

castellated style. The greater part is of the 15th century, but some portions of it are yet older. There are slight remains of castles at Cowling, near the mouth of the Thames; at Thurnham, on the brow of the chalk hills near Maidstone; and one or two other places. Sandown, Sandgate, and Walmer castles, all on the coast, hold a middle place between ancient and modern fortifications. They are coeval with Deal Castle, and are of the time of Henry VIII. Of ancient mansions there are several in the county. The Mote House at Ightham, of the 14th century, is the oldest. Charlton House, erected in 1607, is a characteristic example of the architecture of its period.

Of monastic remains the principal are St. Augustine's Abbey [CANTERBURY], Aylesford Priory [AYLESFORD], and St. Radigund's Abbey, near Dover, which was founded about 1191, for Premonstratensian canons. The walls of the entrance gateway of St. Radigund's Abbey are nearly entire; the north and west sides of the chapel, and part of the dwelling, now patched up as a farm-house, are also standing. There are considerable remains of the Benedictine priory at Dover, including the gateway and refectory, both nearly entire. The church of the Maison Dieu, founded at Dover by Hubert de Burgh, has been purchased by the corporation and turned into a jail, sessions-house, and town-hall. The abbeys of Faversham and Malling, and the priories of Tunbridge and Folkestone, are noticed elsewhere. Of Boxley Abbey, near Maidstone, there are few remains; and the abbey buildings at West Langdon, not far from Dover, have been new fronted with brick and much altered. There are some remains of the priories of Bilsington, on the edge of Romney Marsh, and of Monks Horton, near Stone-street causeway, of which last the western entrance to the church is a small but beautiful ruin of late Norman architecture, with insertions of windows and doors of perpendicular character. The chapel of St. Nicholas's Hospital, at Harbledown, near Canterbury, is partly of Norman and partly of later architecture.

Of the churches of the county the most worthy of note are its two cathedrals, Canterbury and Rochester. For antiquity Barfreston church, between Canterbury and Dover, but not on the high road, is most deserving of notice. It is of Norman date, and consists of a nave and chancel, which communicate by an arch rising from wreathed columns and richly sculptured. It was carefully restored a few years back. The church of Darent, near Dartford, has a rude chancel of Anglo-Saxon date. Several other churches, including St. Mary's at Dover, and St. Margaret-at-Cliffe, are chiefly valuable for their Norman features; but the predominant character in the churches of the county is the early English, of which Stone church is a good specimen. Chatham church is of the decorated style. Maidstone church is a fine example of the perpendicular style; it was completely restored two or three years back at a very great expense. Aylesford is also a good perpendicular church.

Religious Worship and Education.—According to the returns published as the result of the Census of 1851 it appears that in March of that year there were in the county 997 places of worship, of which 479 belonged to the Church of England, 250 to six sections of Methodists, 107 to four sections of Baptists, 86 to Independents, 13 to Roman Catholics, 10 to Quakers, 7 to Mormons, 5 to the Countess of Huntingdon's Connexion, 5 to Jews, 3 to the Presbyterian Church in England, and 32 to various other bodies. The total amount of sittings provided was 802,948. The number of Sunday schools was 638, of which 301 belonged to the Established Church, 172 to six sections of Methodists, 77 to Independents, 60 to Baptists, and 5 to the Countess of Huntingdon's Connexion. The total number of scholars was 57,987, of whom 24,613 belonged to the Church of England schools. The number of day schools was 1930, with 85,458 scholars, namely, 500 public schools with 53,631 scholars, and 1430 private schools with 31,827 scholars. There were 37 literary and scientific institutions, with an aggregate membership of 5771, and libraries containing in all 40,513 volumes.

Savings Banks.—In 1852 there were 22 savings banks in the county, at Ashford, Bromley, Canterbury, Chatham, Dartford, Deal, Deptford, Dover, Faversham, Gravesend, Greenwich, Hawkhurst, Hythe, Maidstone, West Malling, Margate, Ramsgate, Sevenoaks, Sheerness, Tonbridge, Tonbridge Wells, and Woolwich. The total amount owing to depositors on November 20th 1852 was 1,008,386*l.* 9*s.*

KENT ISLANDS. [VAN DIEMEN'S LAND.]

KENTBURY. [BERKSHIRE.]

KENTON. [DEVONSHIRE.]

KENTUCKY, one of the United States of North America, extends between 36° 30' and 39° 12' N. lat., and between 82° and 89° 40' W. long. It is bounded E. by the state of Virginia; S. by that of Tennessee; W. by the Mississippi River, which divides it from the state of Missouri; and N.W. and N. by the Ohio River, which divides it from the states of Illinois, Indiana, and Ohio. Its greatest length from east to west is 368 miles; its greatest width from north to south is 168 miles; but the outline of the state being extremely irregular both length and width vary very much. The area is 37,680 square miles, or about 6300 square miles larger than that of Scotland. The federal representative population in 1850 was 898,012, in which number three-fifths of the slaves are included. This, according to the present ratio of representation, entitles the state to send 10 representatives to Congress. To the Senate, like each of the other United States, Kentucky sends two members.

The following table shows the population of Kentucky at the decennial censuses of the present century, with the relative proportions of whites, free coloured persons, and slaves:—

Date of Census.	Whites.	Free Coloured Persons.	Slaves.	Total.
1800 . . .	179,871	741	40,343	220,955
1810 . . .	324,237	1,713	80,561	406,511
1820 . . .	434,644	2,759	126,732	564,317
1830 . . .	517,787	4,917	165,213	687,917
1840 . . .	590,253	7,317	182,258	779,828
1850 . . .	761,413	10,011	210,981	982,405

Surface, Hydrography, Communications, &c.—The greater part of the surface of Kentucky is nearly level; the broad plains being however broken by gentle undulations. But the south-eastern portion, which is however less than one-tenth of the whole state, is covered with ridges of mountains and high hills, the slopes of which are rather steep, and which contain between them narrow, deep, and gloomy valleys. The whole of this region is well wooded, especially the lower parts of the hills and the vales. None of the summits of these mountains appear to attain the height of 3000 feet above the sea, and their mean elevation probably does not exceed 2000 feet. The highest ranges are the Cumberland Mountains along the boundary-line of Virginia, and the Laurel Mountains, which run parallel to the Cumberland Mountains, and join them between the upper branches of the Kentucky and Cumberland Rivers. To the north and west of the hilly region lies what may be called the upland region, which extends from the Big Sandy River, on the boundary of Virginia, to about 86° W. long., and comprehends more than half of the whole area of the state. Its surface is undulating, with gentle ascents and descents, but it is intersected by numerous narrow but deep valleys in which the rivers run. Though this upland region is sparingly provided with spring-water, its soil is of the first quality, and as fertile as any part of the United States. The western portion of the state is divided between the Barrens and a country which is partially hilly. The Barrens, which occupy chiefly the tract between the Green River and Cumberland River, in their natural state are generally destitute of trees, resembling the prairies north of the Ohio River; but the level surface is diversified by a considerable number of low round-topped hills, called 'oak-knobs,' on account of the trees which cover them. This tract is the least fertile part of the state. The alluvial bottoms between these hills and the Ohio and its affluents are exceedingly rich. On the north and west the Barrens are surrounded by a more broken and hilly country, which gradually passes to the low flats which skirt the Ohio and Mississippi rivers. This tract is superior to the Barrens in fertility, but cannot be compared with the upland region.

Kentucky is amply provided with noble streams. The *Mississippi* forms its western boundary for above 80 miles. Along the north-western and northern boundary runs the *Ohio*, in a winding course of 580 miles, navigable throughout, and affording with its chief affluents ready water-communication to all parts of the state. The *Mississippi* receives from Kentucky only a few inconsiderable tributaries. The *Ohio* receives all the larger rivers that drain Kentucky. Of these the most eastern is the *Big Sandy River*, which rises in Virginia, on the Great Flat-top Mountains, a portion of the Alleghany range; where it approaches the boundary of Kentucky it turns nearly due north, and continues in that direction to its very mouth, forming the boundary between the two states. It is not navigable to a great distance from its mouth, owing to some falls which occur where it issues from the mountain region. The *Licking River* rises in Floyd county, Kentucky, and flows with many windings in a north-western direction for considerably over 100 miles: it falls into the *Ohio* at Newport, opposite Cincinnati. Though it swells in winter and spring to a considerable height, it has but little water in the other seasons; it is navigable by boats for 70 miles. The different branches of the *Kentucky River* rise in the Laurel Mountains, and form by their union a considerable stream, which first flows north-west, then west, and at last nearly due north. Its course is about 280 miles, and though it is very rapid it may be navigated by steamboats to Frankfort, 60 miles from its mouth, and by small boats for 100 miles higher. *Green River* rises in the western districts of the upland region, and flows for the greater part of its course westward, to its junction with its chief affluent, the Big Barren, when it declines to the north-west, and finally to the north, joining the *Ohio* about 50 miles above the mouth of the Cumberland River. Its course is above 250 miles, and it is navigable by steamboats to Bowling Green, 180 miles, and by small flat boats nearly to the heads of the stream; but the navigation is interrupted by falls about 50 miles from its mouth. *Cumberland River* rises in the valley between the Cumberland Mountains and the Laurel Mountains, where it is called *Clove River*. It traverses both the mountain and upland region generally in a western direction; but on approaching the Barrens it turns southward, and enters Tennessee, where it makes a large bend to the southward, and then re-enters Kentucky with a north-western course, continuing in

that direction to its mouth, which is 10 miles above that of Tennessee River. It is nearly 600 miles in length, and as its current is comparatively gentle it offers an easy navigation for sloops and steamboats as far up as Nashville in Tennessee, 200 miles from its mouth, and in full water to Burkesville in Kentucky; for boats of 15 tons it is navigable for 300 miles from its mouth: river-boats ascend much higher. The Tennessee River flows only about 70 miles through Kentucky, and properly belongs to TENNESSEE. It admits steamers to Florence in Alabama, 300 miles from its mouth. The navigation of several of these rivers has been improved by locks and artificial cuts or canals.

The principal canal is the Portland and Louisville, which was formed in order to overcome the obstruction to navigation caused by the rapids of the Ohio at Louisville. The Portland and Louisville Canal is less than three miles long, but is a work of vast labour, having been for almost its whole length excavated out of the solid limestone rocks. It is 50 feet wide at top, has four locks, and was constructed at a cost of 1,200,000 dollars. The other more important canals and works are those for improving the navigation of the Kentucky, Green, Big Sandy, and Licking rivers, which were completed at a cost considerably exceeding 2,000,000 dollars.

Kentucky has a well-arranged system of ordinary carriage roads. It has also a great many miles of plank roads. Of railways it has about 200 miles in operation, and nearly 600 miles in course of construction. The lines at work are the Louisville and Frankfort, 65 miles; the Lexington and Frankfort, 29 miles; and the Covington and Lexington, 96 miles. The chief lines in course of construction are the Kentucky portion of the Mobile and Ohio, the Nashville and Louisville, and the Maysville and Lexington.

Geology, Mineralogy, &c.—Palaeozoic rocks occupy by far the larger part of Kentucky. The centre of the northern portion of the state belongs to the Silurian system: a compact mass of Lower Silurian rocks being bounded by a comparatively narrow belt of Upper Silurian. A few detached patches of both Lower and Upper Silurian rocks occur in the middle and southern counties. The Lower Silurian rocks are mostly blue limestone, but there are also the hard sandstones, which form the lowest rocks of the system in North America. The Upper Silurians consist chiefly of gray limestones, locally known as the Tennessee River group. Bounding the Silurian rocks is a broad band of strata of the Devonian formation, which however does not reach a greater depth than from 100 to 200 feet. A second bed of this formation occurs in the south-western part of the state. The Devonian formation here consists of what have been called by local geologists an upper and lower coralline beds; a middle or shell bed; and an upper or limestone bed. The most prevalent rocks of Kentucky are however those of the Carboniferous group, which occupy nearly all the eastern, western, and southern districts. The whole interior of the state is occupied by Lower Carboniferous rocks, consisting of the characteristic black schist; fine-grained waverly sandstones; and conglomerates, or pudding-stones, consisting of quartz, pebbles, &c., united by a fine sand. The Upper Carboniferous, or Coal-Measures, lie outside these on the east and west. In the extreme south-western corner of the state, along the Mississippi, are rich alluvial deposits, bounded by a narrow band of cretaceous rocks.

Iron is the metal which occurs most abundantly in Kentucky, but it is of inferior quality, and has as yet been very little worked. Lead has been found in small quantities, and silver near Cumberland Falls. The western coal-bed of Kentucky forms a part of that of Illinois and Indiana; the eastern belongs to that of Virginia and Ohio. These beds occupy in Kentucky a large area, but hitherto they have been comparatively little worked: not more than 300,000 tons are raised annually. The blue limestones form an excellent building material. Some good marbles are quarried in the cliffs of the Kentucky River. The sandstones serve for building materials, the making of grindstones, &c. In the limestone rocks occur numerous caverns, 'sinks,' or depressions of the surface of the ground, and subterranean water-courses. Of the caverns the best known is the celebrated Mammoth Cave, situated near the Green River, about midway between Nashville and Louisville. It consists of a series of immense chambers, connected by very long and narrow passages, somewhat like the Peak Cavern in Derbyshire, but on a vastly grander scale. It is said that the cavern has been explored to a distance of upwards of 10 miles without reaching its termination; while the aggregate width of all the branches is above 40 miles. One of the principal chambers is 200 feet long by 150 feet wide, and 50 feet high, and has two passages, each above 100 feet wide, opening into it. Large quantities of bones have been found within it. Mammoth Cave is greatly resorted to by visitors, being by far the most remarkable place of the kind in America. In one of the chambers is a row of cabins, constructed for consumptive patients, who are attracted by the temperateness and purity of the atmosphere. Nitrate of lime (saltpetre) and gypsum abound in this and most of the other limestone caverns. Very productive salt-springs, locally known as 'licks,' occur in many places among the sandstone rocks. Sulphur, saline, and chalybeate springs are numerous.

Climate, Soil, Productions.—The mean annual temperature seems to be about 55° and consequently 5 degrees higher than that of London, but the differences in the extremes of heat and cold are much greater.

The winters are long and severe: they begin about Christmas and last three months. The thermometer annually descends as low as 25°, and has been known to sink as low as 14° of Fahr. Snow falls every winter, but not in great quantities. In summer the heat is sometimes very great, and the thermometer rises to 94° and 95°. In spring and autumn south-west winds prevail, and the weather is delightful. The north-west wind produces great cold in winter, but it seldom continues many days. Rain falls abundantly in winter and spring, but in the other seasons the weather is rather dry and constant.

The soil varies greatly in different parts of the state, but on the whole Kentucky is blest with a large proportion of fertile land; though not more than half the surface of the state is under cultivation. The best soil is that of the blue-limestone districts, in the neighbourhood of Lexington and towards the Ohio. An area of above 100 square miles occupied by this soil is said to be one of the finest and most fertile tracts in North America. The southern districts are somewhat less fertile; and much of the Barrens is chiefly adapted for grazing. Great flocks of sheep pasture on the Barrens; the breed of sheep has been improved by crossing them with merinoes.

The cereals which are most extensively cultivated are maize, of which a larger quantity is grown than in any other state except Ohio, wheat, rye, and oats. Rye and oats are said to thrive better than in the states on the shores of the Atlantic: only two states grow a larger quantity of oats; rye is commonly used for the distilling of whisky. The staple products are however hemp and flax, which are generally cultivated. Five-eighths of the entire hemp crop of the Union, and four-sevenths of that of flax, are grown in Kentucky. In the south-western districts, along the Tennessee, Cumberland, and Mississippi rivers, cotton is raised in abundance. The tobacco which is grown in these districts and the rich lands farther east supplies a considerable article of exportation. Kentucky yields more than one-fourth of the aggregate quantity of tobacco raised in the United States. The principal fruit-trees are apples and peaches; from the former cider is made, and from the latter peach-brandy, of which there is a great consumption.

There are still very extensive forests in the state, and trees of very large size abound. In the mountain and upland region are chiefly tulip-trees, elm, oak, hickory, black-walnut, cherry, &c.; those of the Barrens are commonly oaks, chestnuts, and elms. Among the more generally diffused and most useful trees are the sugar-maple, the honey-locust, and coffee-trees, with the pawpaw, which bears an excellent fruit, in shape and size resembling a cucumber, but of a very sweet flavour. The extensive cane-brakes afford most nutritious feeding for cattle.

The following are the principal results of the inquiries made respecting the agricultural statistics of the state at the last Census. The number of farms under cultivation in the state on the 1st of June 1850 was 74,777; the extent of improved land in farms was 5,968,270 acres; of unimproved, 10,981,478 acres. The cash value of farms was returned at 155,021,262 dollars; of farming implements and machinery 5,169,037 dollars. The total produce of the principal crops in 1850 was as follows:—Wheat, 2,142,822 bushels; rye, 415,078 bushels; maize, 58,672,591 bushels; buckwheat, 16,097 bushels; oats, 8,201,311 bushels; barley, 95,843 bushels; rice, 5688 lbs.; potatoes, 1,492,487 bushels; sweet potatoes, 998,179 bushels; peas and beans, 202,574 bushels; tobacco, 55,501,196 lbs.; ginned cotton, 308,200 lbs.; wool, 2,297,433 lbs.; hay, 113,747 tons; cane-sugar, 284,000 lbs.; molasses, 30,079 gallons; maple-sugar, 437,405 lbs.; hemp, dew-rotted, 18,432 tons, water-rotted, 1355 tons; flax, 2,100,116 lbs.; flax-seed, 75,801 bushels; grass-seeds, 24,741 bushels; wine, 8093 gallons; hops, 4309 lbs. The value of orchard products was 106,280 dollars; and of market-garden products, 303,120 dollars.

The number of horses in the state in 1850 was 315,682; asses and mules, 65,609; milch cows, 247,475; working oxen, 62,274; other cattle, 442,768; sheep, 1,102,091; swine, 2,891,163. The value of live stock was 29,661,436 dollars; of animals slaughtered, 6,462,598 dollars. The products of animals were:—Butter, 9,947,523 lbs.; cheese, 213,954 lbs.; bees'-wax and honey, 1,158,019 lbs.; silk-cocoons, 1281 lbs.

Manufactures, Commerce, &c.—Kentucky is mainly an agricultural state. The number of free males above 15 years of age employed in agriculture in 1850 was 115,017; in commerce, trade, manufactures, mechanic arts, and mining, 36,598. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards, in 1850, was 3471. Of these, there were 8 cotton-factories, employing a capital of 289,000 dollars, and an average of 181 males and 221 females; 25 woollen-factories employing a capital of 249,820 dollars, and an average of 256 males and 62 females; 275 tanneries, employing a capital of 763,455 dollars, and 879 persons; and 45 iron-works, including 20 for castings, which employed a capital of 502,200 dollars, and 578 hands; 21 for pig-iron, employing a capital of 924,700 dollars, and 1855 hands; and 4 for wrought-iron, employing a capital of 176,000 dollars, and 183 hands. The other manufactures are chiefly tobacco-factories, rope-walks, bagging-factories, distilleries, agricultural implement works, and the various works connected with an agricultural district, and the production of the ordinary articles

of domestic consumption. The home-made manufactures of the year were valued at 2,459,128 dollars.

The state has little direct foreign commerce; most of the foreign exports being through New Orleans, but some go by way of the Atlantic ports. The imports in 1852 were valued at 185,559 dollars, all in American vessels; no exports are returned. The shipping owned in the state (collection district of Louisville) in 1850 amounted to 14,820 tons, the whole navigated by steam, and employed in river navigation. In 1852 there were 27 steam-vessels built in the state of an aggregate burden of 7312 tons.

Divisions, Towns, &c.—Kentucky is divided into 101 counties. Frankfort is the political capital, but Louisville is the commercial metropolis, and by far the largest town of the state. There are few other towns with any large amount of population: all the towns which require notice are mentioned below; the population is that of 1850:—

Frankfort, the capital, is built on high ground on the right bank of the Kentucky River; South Frankfort, its suburb, on the left bank, being connected with it by a suspension-bridge; in 38° 14' N. lat., 84° 40' W. long., 551 miles W. by S. from Washington: population 3308, or with the suburbs, 4372. The river is here 80 yards wide, flows in a deep limestone bed, and after very heavy rains rises 50 or 60 feet. Steamboats of considerable burden ascend the river to Frankfort, which is the centre of a considerable commerce, being the mart of a very rich district; the city has great railway facilities. Frankfort is regularly laid out and well built. Many of the public buildings are constructed of white marble, which is found abundantly in this neighbourhood. Of these buildings the chief is the state-house, 86 feet by 54 feet, with a handsome Ionic portico; the other public buildings are the state penitentiary, court-house, and jail; market-house, churches, &c. Streets of considerable size are built here, and there are several manufacturing establishments. One daily and four weekly newspapers, with a semi-monthly and a monthly periodical, are published here.

Louisville, a city, port of entry, and the capital of Jefferson county, is the chief commercial and manufacturing city in Kentucky, and the third in commercial importance on the Ohio. It occupies a sloping plain on the left bank of the Ohio, 70 feet above low-water mark; and is 65 miles by railway W. by N. from Frankfort, and 394 miles above the mouth of the Ohio: the population in 1850 was 43,194; in 1840 it was 21,200; in 1800 it was only 600. The town was founded in 1780; it is regularly laid out and well built, consisting of 10 broad streets running parallel to the river, and 30 others intersecting them at right angles. Along the river are spacious wharfs. The town is lighted with gas, and well supplied with water. Some of the public buildings have considerable architectural pretensions. There are 17 Methodist, 5 Baptist, 5 Presbyterian, 3 Episcopal, 6 German Protestant, 4 Roman Catholic, and 4 other churches, and 2 Jewish synagogues; Louisville University, and numerous public schools; an orphan asylum, a school for the blind, a general and a marine hospital, and several other benevolent institutions; literary, scientific, and agricultural societies; the usual county buildings; a city hall; market-house, and numerous hotels. As a commercial town Louisville is a place of great and constantly increasing traffic: the value of its commerce is stated to be 70,000,000 dollars annually. Its imports are all the ordinary foreign-goods required, for home consumption, in return for which it receives the various products of the state for export by the river. Among its chief exports are tobacco, hemp, flax, bagging, rope, cordage, live stock, pork, spirits, cotton, flour, machinery, &c. Its trade in pork and bacon is very large; in 1850 it received 197,150 hogs for slaughter, and 75,500 barrels of pork; in addition to which many thousand tons of bacon are annually sent in by waggons, &c., and packed in the establishments in the city for exportation by the river steamers. Louisville has also extensive manufactures, consisting of iron-foundries, steam-engine, locomotive-mill, and machine shops; steam-bagging factories and rope-walks; cotton and woollen factories; flour- and saw-mills; distilleries, breweries, tobacco factories, agricultural implement-works, boot and shoe manufactures, and various other large establishments. A considerable trade is carried on in building steamers and other river craft. Constant communication with other leading towns on the Ohio is maintained by steamers, about ten of which leave the port daily. Louisville stands at the head of the natural steam-navigation of the Ohio, but the Louisville and Portland Canal, which is carried round the rapids, enables steamers to ascend much higher. With the interior Louisville has communication by a very complete system of roads, which radiate from it in all directions. It is now being also made a centre of divergence for the state railways. The Jeffersonville railway, which has its terminus at Jeffersonville on the Ohio, immediately opposite Louisville, affords ready communication by way of Indianapolis with all parts of Indiana and the adjoining states. Six newspapers are published here daily, each issuing also editions once, twice, or thrice a week: there are besides three weekly newspapers, and four monthly magazines.

Covington city, on the left bank of the Licking River, at its confluence with the Ohio, opposite Cincinnati, 60 miles N.N.E. from Frankfort, population 9408, or with the suburbs about 12,000, is one of the most rising places in Kentucky. The city is regularly laid out and well built. It contains 8 churches, a Baptist theological

college, several schools, a city-hall, and market-house. There are in the town several tobacco factories, rope-walks, rolling-mills, &c. Covington is connected with Cincinnati by a steam-ferry; and with most parts of the state by railways. Two weekly newspapers are published here. Newport lies on the right bank of the Licking directly opposite to Covington; and about 4 miles inland are the Latonian Springs, a watering-place much resorted to during the summer. *Danville*, the capital of Boyle county, stands on a little tributary of Dick's River, and on the Nashville and Lexington railway, 40 miles S. by E. from Frankfort: population about 1600. It is a place of growing trade, and contains the Centre college, the Kentucky deaf and dumb asylum (which contains about 60 inmates), churches, schools, and the usual county buildings. *Georgetown*, the capital of Scott county, on the north fork of the Elkhorn River, 18 miles E. by N. from Frankfort, population about 1800, contains besides the usual county buildings, churches and schools, Georgetown Baptist college; and supports a weekly newspaper and a monthly magazine. *Harrodsburg*, the capital of Mercer county, on the right bank of the Salt River, 29 miles S. from Frankfort, population 1481, contains the usual county buildings, four churches, and several schools. Bacon college, having 5 tutors, and 75 students, is situated here. In the vicinity is a mineral spring much resorted to by invalids. *Henderson*, the capital of the county of the same name, stands on the left bank of the Ohio, 150 miles W. by S. from Frankfort: population, 1775. It is a place of a good deal of trade, being the shipping port of a considerable tract of country, and having a large supply of coal and iron in its vicinity. It contains also six large tobacco-factories. Besides the court-house and other county buildings, it has 7 churches and 5 schools; and supports two weekly newspapers. *Hopkinsville*, the capital of Christian county, stands on Little River, 170 miles S.W. from Frankfort, population about 1800; contains a court-house and other county buildings, 7 churches, 3 or 4 schools; and is a place of a good deal of trade. Two weekly newspapers are published here. *Lexington*, the capital of Fayette county, and formerly the capital of the state, stands on a branch of the Elkhorn, 25 miles E.S.E. from Frankfort: its population in 1840 was 6997; in the Census Report of 1850 the population of Lexington is not given, but it was probably about 8000. The city is the oldest in the state; it is regularly laid out, forming a square, the sides of which are two miles long, with wide streets intersecting each other at right angles, and many of them bordered by rows of fine trees. It contains several good public buildings, churches, schools, and benevolent institutions. Transylvania University, the oldest college in the state, is situated here, and also the state lunatic asylum. There are considerable manufactories, extensive tobacco warehouses, and stores; and the town carries on a large trade with the interior. Several railways, some as yet however only in course of construction, meet in Lexington, and good turnpike roads diverge in all directions. Ashland, the residence of the late eminent American statesman Henry Clay, is about a mile and a half from Lexington, and numerous other mansions are in its vicinity. Two newspapers are published twice a week, and one daily. *Maysville*, stands on a high bank at the junction of the Limestone Creek with the Ohio, 73 miles N.E. from Frankfort: the population in 1850 was 4256, but is said to have since increased very largely, in consequence of the construction of the railways which have opened to it a ready communication with the interior. Maysville has a good harbour, is the port of a busy district, and has extensive iron-foundries, cotton-factories, rope-walks, bagging-factories, several saw- and flour-mills, pork-packing establishments, lumber-yards, extensive wholesale grocery and other stores, &c. The town is regularly laid out, and well built. The principal buildings are the city-hall, several churches and schools, a hospital, bank, &c. Two newspapers with weekly, and two with tri-weekly issues are published here. *Newport*, the capital of Campbell county, on the right bank of the Licking River at its confluence with the Ohio, immediately opposite to Covington: population, 5895. The town is built on very elevated ground, and commands a fine view of Cincinnati on the opposite side of the Ohio, with which city there is communication by a steam ferry. Besides the usual county buildings, churches, and schools, there are no buildings of any consequence. In the town are several factories. A garrison of the United States army is maintained here. A newspaper is published daily. *Paducah*, the capital of McCracken county, on the left bank of the Ohio near the confluence of the Tennessee, 214 miles W.S.W. from Frankfort, population, 2428, is the port of the valley of the Tennessee, and has a considerable shipping trade. The only public buildings are those of the county, with several churches and schools. A weekly newspaper is published here.

Government, Judicature, &c.—The first state constitution was framed in 1790 and amended in 1799. The present constitution of Kentucky was adopted in 1850. By it the right of voting in all state elections is vested in every white male citizen 21 years of age, who has resided two years in the state, and one year in the place for which he proposes to vote. All votes are given openly. The legislative body, styled the general assembly, consists of a Senate of 38 members elected for 4 years, one half being elected biennially, and a House of Representatives of 100 members elected for two years. For establishing the representative districts a census is taken every eighth year.

Teachers of religion, and persons holding any office of profit under the state or the United States are ineligible as members of the general assembly. The governor is elected for four years, but is incapable of re-election for a consecutive term; he has a salary of 2500 dollars.

Among the special provisions of the constitution are the following:—The legislature cannot grant divorces; or change of names; or sales of estates of persons under legal disabilities; or change the venue in any criminal or penal prosecution by special legislation, but shall by general laws confer such powers upon the courts. With respect to slavery, it is enacted that no laws shall be passed for the emancipation of slaves without the consent of their owners, or without paying their owners a full equivalent, and providing for their removal from the state. Owners may emancipate their slaves, saving the rights of creditors. Immigrants may bring their slaves with them into the state; but slaves are not allowed to be introduced as merchandise, nor under any circumstances slaves imported into the Union since January 1st, 1789. Where slaves are treated inhumanly by their masters, they are to be taken from them and sold. Slaves are not to have the right of an inquest by the grand jury; but are not to be deprived of an impartial trial by petit jury. Free negroes or mulattoes coming into or refusing to leave the state, are to be deemed guilty of felony. The constitution cannot be altered or amended except after such amendments having been twice carried in successive sessions by majorities of the legislature, and each time thereupon submitted to the people and approved by them, and then in the third session passed by a majority of a convention of representatives specially elected for the purpose.

The public debt of the state on the 1st of January 1852 amounted to 5,726,307 dollars. The entire revenue for the year ending October 10th 1852 was 783,885 dollars, the expenditure for the same time was 724,694 dollars. The total value of taxable property in the state was returned at 333,131,512 dollars. The rate of taxation is 17 cents for every 100 dollars worth of property; of this 10 cents is appropriated to ordinary purposes, 5 cents to the sinking fund for the payment of the principal and interest of the state debt, and 2 cents to the school fund. Besides the ordinary items taxed as property, land, houses, stores, slaves, horses and cattle, there are certain rather unusual articles placed under the head of specific taxation, namely, 3705 carriages and barouches at 1 dollar each; 1413 buggies at 50 cents; 1982 pianos at 1 dollar; 394 gold spectacles at 50 cents; 7808 gold watches at 1 dollar; and 853 silver lever watches at 50 cents. The total number of white male citizens over 21 years of age who pay a poll tax of one dollar each for county purposes is 163,005. The state militia in 1852 was composed of 88,979 men, of whom 4370 were commissioned officers.

The judicature consists of a court of appeal, circuit, and county courts. The court of appeal is presided over by a chief justice and three judges, who are elected by the people for a term of eight years, one being chosen every second year, and the senior being chief justice; each of the judges has a salary of 1500 dollars. There is a separate court of chancery at Louisville, the chancellor presiding over which has a salary of 1500 dollars. There are 12 circuit courts, each presided over by a judge who has a salary of 1400 dollars, and is elected by the people for six years. The judges of the county courts and justices of the peace are elected for four years.

The provision made by the state for educational purposes consists of a school fund, which in December 1852 amounted to 1,400,270 dollars, and an annual tax on property producing about 55,000 dollars. A superintendent of public instruction, elected by the people for four years, has the supervision of the common schools. According to his Report for 1852 there were in that year 194,963 children on the books of the state schools, and the average number attending school was 69,825. The number of children in the state between the ages of 5 and 16 was 215,195. The principal colleges in the state are the following:—The Transylvania University at Lexington, founded in 1798, which has 7 instructors, 50 students, and a library of 14,000 volumes; connected with it are law and medical schools, the latter of which has 7 professors and 214 students. The Louisville University at Louisville, founded in 1837, is chiefly celebrated for its law and medical schools, the latter of which has 7 professors and 376 students. St. Joseph's Roman Catholic college at Bardotown has 17 instructors, 80 students, and a library of 6000 volumes. The Centre college at Danville, founded in 1820, has 7 instructors, 189 students, and a library of 5000 volumes. Augusta Methodist college, founded in 1825, has 4 instructors, 54 students, and a library of 2500 volumes. Bacon college at Harrodsburg, founded in 1836, has 5 instructors, 75 students, and a library of 1200 volumes. Georgetown Baptist college, founded in 1840, has 7 instructors, 83 students, and a library of 6600 volumes. The Western Baptist theological institution at Covington, founded in 1840, has 4 professors, 18 students, and a library of 2000 volumes. The Western military institute at Drennon Springs, founded in 1847, has 10 instructors, 186 students, and a library of 1500 volumes. Shelby college at Shelbyville, founded in 1841, has 6 instructors, and 44 students.

Of the various religious denominations, the Baptists, and next to them the Methodists, are the most numerous. In 1850 the Baptists had 803 churches, affording accommodation for 291,855 persons; the Methodists 580 churches, affording accommodation for 167,455

persons; the Presbyterians 224 churches, affording accommodation for 99,106 persons; 'Christians' 111 churches, with accommodation for 46,340 persons; Roman Catholics 48 churches, affording accommodation for 24,240 persons; Unionists 30 churches, affording accommodation for 10,900 persons; 'Free' 34 churches, with accommodation for 9377 persons; Episcopalians 19 churches, affording accommodation for 7050 persons. In all there are in the state 1845 churches, affording accommodation for 671,053 persons. The state institutions for the relief of the unfortunate are—a lunatic asylum at Lexington, containing 249 inmates in 1852, and another at Hopkinsville; an asylum for the deaf and dumb at Dunsville, containing 67 pupils; and one for the blind at Louisville. The number of newspapers and periodicals published in the state in 1850 was 62, with an aggregate annual circulation of 6,582,838 copies. Of these 9 were published daily, 7 three times a week, 38 weekly, and 8 monthly.

From the extensive fortifications which occur in several places, but especially on the banks of the Ohio opposite Scioto River, and are now overgrown with high forest-trees, it appears probable that this part of America was once the seat of a nation which had made some progress in civilisation. The first Europeans arrived in Kentucky in 1767, and the first settlement was formed in 1775, though Daniel Boone is said to have settled in Kentucky some years earlier. It was then a part of Virginia, but the population having increased rapidly Virginia consented to a separation; and in 1792, only seventeen years after the first settlement, Kentucky became one of the United States.

(*Statistical Gazetteer of the United States, 1853*; Haakell and Smith, *Lippincott, Gazetteers of the United States*; *Seventh Census of the United States, Official Report, 1853*; Lunsford and Shumard, *Contributions to the Geology of Kentucky*; Marcou, *Geological Map of the United States*; *American Almanac, 1854*.)

KENVIG. [GLAMORGANSHIRE.]

KERDISTAN, RIVER. [BAGHDAD, Pashalic of.]

KERKHAH, RIVER. [BAGHDAD, Pashalic of.]

KERMAN, KERMANSHAH. [PERSLA.]

KERRY, a maritime county of the province of Munster, in Ireland, is bounded E. by the counties of Limerick and Cork, S. by the county of Cork and the estuary of the Kenmare River, W. by the Atlantic Ocean, and N. by the estuary of the Shannon, which separates it from the county of Clara. It is situated between 51° 41' and 52° 38' N. lat., 9° 7' and 10° 30' W. long. Its greatest length from north to south is 60 miles; from east to west 58 miles. The coast-line with its various indentations measures above 220 miles. The area is 1353 square miles, or 1,186,126 acres, of which 414,614 acres are arable, 726,775 acres uncultivated, 11,169 acres in plantations, 807 acres in towns and villages, and 32,761 acres under water. In 1831 the gross population was 263,126; in 1841 it was 293,880; in 1851 it had fallen to 238,239.

Coast, Surface, Hydrography.—The county of Kerry forms the south-western extremity of Ireland. The coast, which is washed by the Atlantic Ocean, is deeply indented by the estuary of the Kenmare River, the Bay of Dingle, and the Bay of Tralee, the two former of which penetrate into the mainland about 30 miles in an easterly direction. The peninsulas intercepted between these arms of the sea are occupied by the western extremities of the mountain system, which, commencing in Waterford, extends with little interruption across the entire south of Ireland. The Muskerry Mountains, spreading from the western boundary of Cork across the south of Kerry, occupy the district between the bays of Kenmare and Dingle. The peninsula of Corkaguiney, between the bays of Dingle and Tralee, consists of a prolongation of the mountain groups which occupy the north-western extremity of Cork and the south-west of Limerick. The northern part of the county consists of a rich and generally level country, which rises into rough land in only one direction, towards Kerry Head on the Shannon.

At the head of Kenmare Bay, the most beautiful of Irish bays, is a long glen, at the lower extremity of which the town of Kenmare is situated. The peninsula between the bays of Dingle and Kenmare is divided into three principal valleys by ridges running nearly north-east by south-west. Of these valleys the most northern is separated from the Bay of Dingle by the Drung Mountains, which are 2104 feet high, and terminate in Dowlas Head. At the foot of this valley is situated the town of Cahiriveen, near which the river Fartin expands into a small lake before falling into Valentia Harbour. Separated from the valley of the Fartin by the Iveragh Mountains is another valley terminating towards the sea in the open Bay of Ballinaskelligs, so called from the Skelligs, two remarkable rocks in the offing. Between the Iveragh ridge and the Dunkerrin Mountains is a considerable extent of comparatively open country, subdivided into two valleys by a secondary ridge. In the eastern of these two valleys lie the lakes Derresana, Lanan, and Currane, of which Lough Currane receives the surplus waters of the other two, and communicates with the Bay of Ballinaskelligs by the Currane River—a stream only a few hundred yards in length, and a favourite resort for salmon. In a sheltered creek between Ballinaskelligs Bay and the Kenmare estuary is Derrymane Abbey, the seat of the late Daniel O'Connell, Esq. Between the Dunkerrin range and the shore of Kenmare estuary are numerous narrow lateral valleys drained by mountain streams running

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nearly north and south, of which the principal are the glens of Suceem and the Little Blackwater. The surface here is chiefly bog.

The Iveragh Mountains are bounded on the north-east by the valley of Glencar, in the lower portion of which is Lough Carragh, a considerable expanse of water. In the interior and opposite the extremity of the Iveragh Mountains is situated the great group of Mac-Gillicuddy's Reeks, extending about 10 miles from north-west to south-east, among which Carran Tual rises to the height of 3410 feet, being the highest ground in Ireland. The Reeks have steep, almost precipitous sides, and peaked summits on several of which are small lakes; the summits are covered with a loose shingle resting on sandstone, and the sides with heath and coarse grass. On the north-east Mac-Gillicuddy's Reeks are separated from the Toomies and Glens Purple Mountains by a deep chasm called the Gap of Dunloe.

In a deep hollow between the south-eastern flank of this range and the group of Mangerton lies the Upper Lake of Killarney, a beautiful sheet of water, which is three miles in length by three-quarters of a mile in breadth, inclosed on all sides by mountains from 2000 to 3000 feet in height, except at one point towards its eastern extremity, where it discharges its waters by a tortuous course of three miles between the southern declivities of the Glens Purple Mountains and the precipitous side of Turk Mountain. There are several wooded islands in the Upper Lake, the luxuriant foliage of which forms an agreeable contrast to the general sterility of the surrounding mountains. There is also a considerable tract of natural oak-forest towards its southern extremity, and the channel leading to the Lower Lake passes through a thickly-wooded defile. About midway between the extremities of the channel a remarkable detached rock, called the Eagle's Nest, rises over the left bank to a height of 1100 feet: the echoes here are of unusual continuance and distinctness. Emerging from this defile the river expands into the Lower Lake of Killarney, 7 miles long by 3 miles broad, skirting the eastern declivities of the Toomies and Glens Purple Mountains. These mountains, descending abruptly to the western verge of the lake, are clothed with the richest natural woods of oak, ash, pine, alder, and beech, intermixed with hazel, whitethorn, yew, holly, and arbutus, from a height of several hundred feet down to the water's edge through a continuous distance of six miles. O'Sullivan's River, descending by a thickly wooded ravine on this side, forms a cascade 70 feet high close to the shore of the lake. On the opposite side the low alluvial banks are everywhere broken into promontories and islands, on which the arbutus grows with uncommon luxuriance. The town of Killarney is situated on the plain about a mile from the eastern shore; half a mile south of Killarney runs the Fleak, the chief feeder of the lake. About a mile south from the embouchure of the Fleak the richly-wooded promontory of Muckruss runs into the lake about a mile and three-quarters, separating a portion of the lake. This detached portion is called the Middle Lake, and sometimes Turk Lake, on account of its skirting the base of the Turk Mountain. Two cascades descend into Turk Lake: of these the more considerable is fed by a stream that flows from the Devil's Punchbowl, a lake situated near the summit of Mangerton Mountain. Mangerton is easy of ascent, and commands splendid views of the Lakes of Killarney, Macgillicuddy's Reeks, the Sugarloaf Mountains, and in clear weather of several of the bays that indent the coast. The castles of Dunloe and Ross, and the ruined churoches of Aghadoe and Muckruss, which are all situated on the eastern shore of the Lower Lake, add considerably to the interest of the surrounding scenery. The waters of the Lakes of Killarney discharge themselves at the northern extremity of the Lower Lake through the river Laune, which runs by a course of 12 miles into the head of Dingle Bay.

The remainder of the plain between Killarney and the mountains south of Tralee is drained by the Main, which rises near the Cork boundary, and after passing the towns of Castle Island and Castlemain discharges itself into the head of Dingle Bay, where it forms Castlemain Harbour. Near the neck of the peninsula of Corkaguiney the conical mountain of Cahirconree rises to a height of 2784 feet, and has its summit crowned with a circle of massive undressed stones, a circumstance in which the name originated, Cahir Con-rioh meaning the stone fortress of king Con, whose name is famous in Irish legendary story. Westward from this a chain of hills extends to Dingle on the southern side of the peninsula; beyond and north of Dingle the mountains rise towards the Atlantic in great masses, of which the chief is Mount Brandon, 3126 feet in height, being the second highest ground in Ireland. The extremity of the peninsula has an abrupt coast of about six miles from north to south, formed by Sybil Head, Mount Eagle, and Dunmore Head, the most western point of Ireland, off which lie the Blasquet Islands. A new road from Tralee to Dingle skirts the base of Mount Brandon, and affords magnificent views of mountain, lough, and sea.

North of Tralee the country improves in facility of access and cultivation. The plain of Ardfer, between Tralee and the high ground towards Kerry Head, is rich and well improved. The remaining district, extending to Tarbert on the Limerick boundary, is drained by the rivers Feale, Gale, and Brick, which, uniting within five miles of the sea, receive the common name of the Cashen River. A rough district extends from the mouth of the Cashen to Beal Point on the estuary of the Shannon. The coast is here precipitous, and near the bathing village of Ballybunlion abounds in magnificent caves. In

Sneem Harbour, on the north side of Kenmare River, vessels may lie landlocked in four fathoms of water, or in the entrance may ride in 10 fathoms. Ballinaakelligs Bay is generally unsafe in southerly or westerly winds. St. Finian's Bay, between Bolus Head and Puffin Island, is much exposed to the prevalent run of the sea.

The harbour of Valentia possesses the advantage of a double entrance, so that ships may sail in or out with any wind. It is quite landlocked, but the entrances are narrow. Valentia Island, which has an area of 6371 acres and is extremely fertile and tolerably well cultivated, belongs almost entirely to the Knight of Kerry, whose residence Glanleem or Zelva is on the eastern side of the island. The Spaniards occupied Valentia Island up to the time of the Commonwealth, when they were expelled, and two forts still called Cromwell's Forts erected, one to command the north, the other the south entrance to the harbour.

Dingle Bay is full of shoals at its upper extremity. Ventry Bay and Smerwick Harbour have good anchorage and deep water but are somewhat exposed. At the head of Smerwick Harbour is the hamlet of Gallerus, which contains a cluster of Irish antiquities, consisting of a hermitage beautifully constructed, a tower built in the style of the Anglo-Saxons, a cemetery containing several very ancient tomb-stones, and a castle which belonged to the Fitzgeralds, knights of Kerry.

Under the neck of the peninsula of Corkaguiney, on the northern side, is the Bay of Tralee, much of which is dry at low-water, but by means of a canal recently constructed, vessels of 300 tons come up to the town. From Tralee northward there are numerous shoals and sand-banks. Beyond Kerry Head opens the estuary of the Shannon, in which the first sheltered anchorage is off the point of Tarbert, where ships may lie nearly landlocked in 12 fathoms water.

Communications.—The roads in the south-western part of Kerry up to the year 1830 were scarcely passable for wheel-carriages. Several good roads at comparatively low levels have since then been constructed, and have greatly facilitated the development of the resources of these remote districts. A branch railway runs from the Mallow station of the Great Southern and Western line to Killarney, a distance of 40 miles.

Geology and Mineralogy.—The chief mountain chains consist of a red or gray conglomerate and sandstone supporting flanks of siliceous flags, and overlaid in the low districts by stratified limestone. The chief limestone fields occupy the basins of the Feale, Main, and Roughty. Northward from Ardferit the country towards Kerry Head consists of thick beds of argillaceous sandstone, beyond which the limestone re-appears in contact with beds of alum slate in the cliffs of Ballybunian. From Tralee eastward the country rising towards the boundaries of Cork and Limerick is occupied with an extension of the great Munster coal district.

The mountains of Glanbeagh, in the neighbourhood of Lough Carragh, abound with iron-ores. Killarney was celebrated for its iron mines in the 9th century, but they are not now worked. At Muckross and Ross Island in the Lower Lake, copper-mines were formerly worked. Lead-ore has been found in the vicinity of the lake. Copper-ore has been found at Ardferit and in Glanbought. A valuable copper-pine has been recently discovered in the vicinity of Kenmare. The slate quarry in Valentia produces flags and slates of a superior description, which are largely exported to London.

Climate, Soil, and Produce.—The climate is very moist owing to the vicinity of the Atlantic, and the south-western district is much exposed to storms. But in the inland parts, especially in the neighbourhood of Killarney, the air is mild and genial, and vegetation extremely luxuriant.

The soil of the south-western district, where not incumbered with bogs, is an adhesive loam, fit for the reception of corn crops, and formed by the decomposition of the clay-slate rock, which, from the nearly vertical position of its strata, is readily disintegrated by the weather. The soil of the middle district is a rich loam, which produces excellent crops of grain, and fine dairy pasture. The northern district has a stiffer soil, more retentive of wet, and inclined to run to rushes. It also is grazed to a considerable extent by dairy farmers, who find a market for their butter in Tralee. Cider, of a quality which is considered superior, is made here in large quantities. The system of farming is improving. The chief occupations are dairy farming, tillage, and fishing. The total number of acres under crops in 1853 was 151,275, namely:—Wheat, 1931 acres; oats, 35,920; barley, bere, rye, beans, and peas, 12,873; potatoes, 27,715; turnips, 12,661; other green crops, 2966; and flax, 1033; with 56,176 acres in meadow and clover. In 1841 the plantations covered 13,036 acres, growing oak, ash, elm, beech, fir, fruit-trees, &c. In 1852 there were on 16,604 holdings, 11,921 horses, 5045 mules and asses, 170,398 head of cattle, 64,438 sheep, 44,549 pigs, 18,835 goats, and 211,331 head of poultry. The live stock thus enumerated was valued at 1,354,443. The native breed of cattle is very small, but well formed. They are good milkers, and easily fattened. A breed of small ponies is peculiar to Kerry; they are too light for farming purposes, but suit very well for the saddle.

The chief trade of the county consists in exports of agricultural produce, chiefly oats and butter. Coarse woollens are manufactured by families for their own consumption; linen is made in the district about Dingle.

The fishery districts are those of Westcove, Knightstown, Dingle, and Ballyheige, comprising together 242 miles of coast, which had 581 registered fishing-vessels in 1853, employing 2603 men and boys. The fish caught are turbot, cod, ling, hake, haddock, gurnet, pollock, plaice, soles, dorces, brill, mullet, mackerel, herrings, pilchards, &c. with a plentiful supply of oysters, crabs, lobsters, and scallops. Great numbers of seals formerly frequented the river of Kenmare and the caves of Ballybunian; but they are now rarely caught. Large quantities of ling, hake, and haddock are cured and smoked for the Dublin and Cork markets. The fish are conveyed to Cork, Limerick, and Dublin, and other towns in the interior, by Mr. Bianconi's cars and by railway. A government curing station is at Valentia.

Divisions and Towns.—The county of Kerry is in the diocese of Ardferit and Aghadoe. It is divided into 8 baronies—Clanmaurice, Glan-west; Corkaguiney, west; Dunkerrin, south-south-west; Glanerought, south; Iraghticonnor, north; Iveragh, south-west; Magonihy, east; and Trughenacmy, central. The principal towns are TRALEE, KILLARNEY, DINGLE, LISTOWEL, CAHIRIVEEN, and KENMARE. All these are noticed under their respective titles. The following are the smaller towns and most important villages, with the population of each in 1851.

Ardferit, about 4 miles N.N.W. from Tralee, population 509, the seat of one of the most ancient bishoprics in Ireland, was before the Union a parliamentary borough, but is now a poor decayed village, with a nominal cathedral for its sole attraction. The diocese has been united from time immemorial to the see of Aghadoe, and both, under the Church Temporalities Act, are now united to the see of Limerick. The chapter of the united sees of Ardferit and Aghadoe consists of a dean, an archdeacon for each see, a chancellor and a precentor; the number of benefices is 58. The cathedral, which was the church of a monastery founded here by St. Brendan, bears marks of high antiquity, and combines specimens of various styles. There is here a new Roman Catholic chapel. The ruins of the decayed episcopal town of *Aghadoe* are situated on a green hill, 2 miles N.W. from Killarney, and consist of the remains of a cathedral, of a round tower, and of a circular structure called the Bishop's Chair, said to have been erected in the 9th century.

Ballylongford, population 1113, is 21 miles N. by E. from Tralee, at the head of an inlet of the Shannon. Agricultural produce is shipped from the quays for Limerick. The town contains a Roman Catholic chapel; in the vicinity are the interesting ruins of Lislaghtin Abbey. Opposite the entrance of the inlet is the island of Carriga-Foile, on which are the remains of a castle, formerly one of the strongholds of the O'Connor of Kerry.

Castle-Island, population 1718, formerly one of the most important places in the county, is situated on the Many River, a feeder of the Main, 9 miles E. from Tralee. It takes its name from a castle built here in 1226 by Geoffrey de Mariscis, lord-justice of Ireland, and called the Castle of the Island of Kerry. The town contains a church, a Roman Catholic chapel, a sessions house, bridewell, and dispensary.

Killorglin, 11 miles S. from Tralee, population 590, is situated in a fertile country on the Laune, which enters Castlemain Bay about 2 miles below the town. It is an ill-built place, though well situated for trade, the river being navigable up to the town for vessels of 180 tons. The town contains a church, and chapels for Roman Catholics and Wesleyan Methodists. Killorglin is much frequented by anglers and tourists on their way to the Lough of Carragh and the bold wild scenery of Iveragh. The Laune affords excellent salmon fishing, and Killorglin is celebrated for its artificial flies.

Millicom, population 439, a small market- and post-town, 8 miles S. from Tralee, contains a court-house, a bridewell, and a Roman Catholic chapel. Killoleman Abbey, the residence of Sir William Godfrey, is near the town.

Tarbert, population 1005, a post-, market-, and seaport-town, is situated 27 miles N.N.E. from Tralee, on the little bay of Tarbert, which is formed by an inlet of the Shannon. The town is neatly built and clean, and contains a church, chapels for Roman Catholics and Wesleyan Methodists, a bridewell, and a dispensary. Pigs, butter, and corn are shipped in considerable quantities for Limerick. About a mile north from the town is Tarbert Rock, which is alternately an island and a peninsula, according to the state of the tide; on it are a lighthouse, a battery, and a coast-guard station.

The following villages may be mentioned. The populations are those of 1851.

Abbey O'Dorney, population 229, is situated on the Brick, a feeder of the Feale, 6 miles N. from Tralee, and takes its name from the parish of O'Dorney, in which it stands, and from the Cistercian Abbey of Kyrie Eleison, founded here in 1154. The abbot was a lord of parliament. Some ruins of the abbey still remain. *Ballybunian*, population 284, before noticed for its cliffs and extensive caverns, is a village on the coast of the estuary of the Shannon, 17 miles N.W. from Tralee, and is a favourite watering-place. Several neat lodges have sprung up in its vicinity. *Castle-Gregory*, population 816, a fishing village on the south shore of Tralee Bay, 14 miles W. from Tralee town, takes its name from a castle of the Husseys, which was demolished in the invasion of Cromwell, in 1641. *Castle-Maine*, 7 miles S. from Tralee, on the right bank of the Main, is a small place of only 146 inhabitants. A castle was built here jointly by the

M'Carthy More and one of the earls of Desmond, but was forcibly retained by Desmond, and continued in the possession of his family till the reign of Elizabeth. In the wars with Cromwell in 1641 it was nearly demolished. Since the Restoration, the castle, ruined as it is, with 7 acres of land adjoining, has remained in possession of the crown. *Lixnaw*, an ancient village, said to derive its name from one of the old Milesian tribes, stands on the right bank of the river Brick, and has 208 inhabitants. The castle of Lixnaw, one of the fortified residences of the earls of Kerry, is now a ruin. *Port-Magee*, population 161, a fishing village with a small harbour, on the south side of the southern entrance of Valentia Harbour, 8 miles from Cahirciveen. It contains a Roman Catholic chapel, and a coast-guard station. *Water-ville*, population of the township 141, situated on the short stream formed by the outlet of Lough Currane into Ballinaskelligs Bay. The village is clustered round the spot where the river makes a fall into the bay; it is much frequented by anglers and sportsmen.

Kerry is represented in the Imperial Parliament by two members for the county, and one for Tralee borough. The assizes are held at Tralee, where also are the county prison and county infirmary. Quarter-sessions are held at Tralee, Killarney, Cahirciveen, Dingle, Kenmare, and Listowel; each of these towns is also the seat of a Union workhouse. Petty sessions are held at 24 places. There are bridewells at Killarney, Dingle, Kenmare, Cahirciveen, Castle Island, Milltown, Listowel, and Tarbert. The lunatic asylum for the county is at Limerick, and contains about 200 patients. There are fever hospitals at Tralee, Killarney, Ballylongford, Listowel, and Cahirciveen; and 25 dispensaries in various parts of the county. That portion of the county which lies on the right bank of the Feale is included in the military district of Limerick; the remainder belongs to the Cork district. There are barracks at Tralee, Tarbert, and Carigue Islands. The constabulary force, consisting of 241 men and officers, has its head-quarters at Tralee. The county is divided into 6 police districts, comprising 39 stations; the districts are Tralee, Cahirciveen, Dingle, Killarney, Kenmare, and Listowel. The coast-guard, which numbers 118 men and 12 officers, is distributed among 26 stations. In September 1852 there were 168 National schools in operation, attended by 12,647 male, and 13,879 female children. Classical schools are common, and there is a very general turn for classical learning among the peasantry, many of whom have some knowledge of the Latin language. In November 1852 there was no savings bank in the county.

Kerry has its name from Ciar, the son of Fergus, king of Ulster, and signified Ciar's kingdom; and originally formed part of the kingdom of Desmond, or South Munster, of which the Mac Carthies were sovereigns. Dermot Mac Carthy, chief of this country, having invited the assistance of Raymond le Gros, one of the early Anglo-Norman adventurers, to suppress the rebellion of his son Cormac, granted him as a recompense for his services a large tract in the north of the county round Lixnaw, where Raymond, about A.D. 1177, settled his son Maurice, from whom the Fitzmaurices, lords of Kerry, draw their pedigree, and the barony of Clannaurice takes its name. Soon after, the Fitzgeralds established themselves in the south of the county, where they rose to such power on the downfall of the Mac Carthys, that in 1295 Thomas Fitzmaurice Fitzgerald was captain of all Desmond, comprising the counties of Cork, Waterford, and Kerry, and lord-justice of Ireland. He left two sons, John, afterwards created earl of Kildare, and Maurice, created earl of Desmond, with a royal jurisdiction over the palatinate of Kerry. The rebellion of Gerald, the sixteenth earl, in the reign of Elizabeth, caused the final suppression of their authority and the confiscation of their estates.

On the breaking out of the rebellion of 1641, the Irish again took arms, and after compelling the English who held Tralee to surrender, kept possession of the county till 1652, when Ludlow reduced them to subjection. Extensive confiscations of the estates of the native Irish again followed.

Kerry contains several monuments of a very remote antiquity, of which the most remarkable are the Cyclopean stone fortresses of Cahircorree, Staig, near the road from Kenmare to Waterville, and Cahir Donnell, not far from Derrynane Abbey; and the sepulchral stones with ogham inscriptions in the neighbourhood of Dingle. Stone cells, probably of the 6th and 7th centuries, are still standing on the greater Skellig Island, at Ventry, and at Smerwick. There are a round tower at Ratoo, near the river Brick, one on an island in Lough Currane, part of another at Aghadoc, and a fourth formerly stood near the cathedral of Ardferd. There are also the remains of thirteen religious houses and thirty feudal castles.

KERTSH. [CRIMEA.]

KESH. [FERMANAGH.]

KESTEVEN. [LINCOLNSHIRE.]

KESWICK, Cumberland, England, a market-town in the parish of Crosthwaite, is situated in 54° 36' N. lat., 3° 7' W. long., distant 30 miles S. by W. from Carlisle, and 291 miles N.W. by N. from London by road. The population of the town of Keswick in 1851 was 2618. The living is a perpetual curacy in the archdeaconry and diocese of Carlisle.

Keswick is pleasantly situated on the left bank of the river Greta, near the foot of Derwent Water. The town consists chiefly of one street, in which are some good stone houses; it is lighted with gas.

Keswick is generally regarded as the head-quarters of visitors to the lakes and mountains of Cumberland; and upon the visitors the prosperity of the town is to a great extent dependent. The parish church of Crosthwaite is about half a mile N. from the town. It is a spacious edifice of the perpendicular style. In it is a recumbent statue in memory of Southey the poet, whose residence, Greta Hall, was close by. Keswick church is a neat early English structure, erected in 1848. The Independents, Wesleyan Methodists, and Plymouth Brethren have places of worship. Crosthwaite Free Grammar school, a very old foundation, has an income from endowment of 116*l.* a year, and had 180 scholars in 1852. There are besides a school for boys and girls, with a piece of ground for the boys to work in, an infant school, a public library and reading-room, two museums for preserving specimens of the mineral wealth of the district, and a savings bank. A county court is held in the town. The market-day is Saturday; fairs are held at Whitsuntide and Candlemas. Mines from which black-lead is obtained are at Borrowdale, near Keswick. The black-lead is made into pencils and carried to London for sale. Some of the inhabitants are employed in the manufacture of woollen-cloth and fancy waistcoatings, and the making of edge tools. Char, taken in Buttermere Lake, about 7 miles from Keswick, are potted in the town, and sent to various parts of the country. In the town-hall, a neat structure with a tower, there is an excellent model of the lake district, constructed by Mr. Joseph Flintoft.

KETTERING, Northamptonshire, a market-town and the seat of a Poor-Law Union, in the parish of Kettering, is situated in 52° 25' N. lat., 0° 44' W. long., distant 18 miles N.N.E. from Northampton, and 74 miles N.N.W. from London by road. The population of the town of Kettering in 1851 was 5125. The living is a rectory in the archdeaconry of Northampton and diocese of Peterborough. Kettering Poor-Law Union contains 28 parishes and townships, with an area of 50,111 acres, and a population in 1851 of 18,002.

The town of Kettering contains many well-built houses and respectable shops, and a spacious market-place. A sessions-house and lock-up has been recently erected. The town is lighted with gas. The church is a large and handsome building in the perpendicular style, with a fine tower and hexagonal crocketed spire at the west end. The date of the tower is about 1450; portions of the church are of much earlier date. The Independents, Baptists, Wesleyan Methodists, and Quakers have places of worship. There are in the town a Free school, which has an income from endowment of 155*l.* a year, and had 22 scholars in 1852, National and British schools, a reading-room and library, a savings bank, and a dispensary. Wool-stapling and wool-combing are carried on; there is a considerable manufacture of shoes; and silk-weaving employs some of the inhabitants. The market is on Friday; fairs are held four times in the year. A county court is held in the town.

KETZKEMET. [HUNGARY.]

KEW. [SURREY.]

KEY or KI ISLANDS are a group of considerable extent in the Indian Archipelago, situated between 5° 20' and 6° 30' S. lat., and between 132° 30' and 133° 40' E. long. Three islands are rather large, and are called Great Key, Little Key, and Key Watela. The number of the smaller ones is not known, as they are rarely visited by Europeans.

They rise to a moderate elevation above the sea, and all the heights are overgrown with forest-trees. The inhabitants are engaged in ship-building to a considerable extent; a great number of the small vessels that ply in the eastern seas are built in the harbour of Doola, which lies on the western coast of Little Key. There is no town at Doola; but the harbour is large and surrounded by numerous villages. Banda obtains from this place provisions and cattle, for which European and Indian goods are received; these are partly re-exported from the harbour of Elie, which lies on the eastern shores of Great Key, and is famous for its manufacture of earthenware. Many of the inhabitants are occupied with fishing trepang, which is largely exported. The inhabitants of the group have generally embraced Mohammedanism. Many families from Banda and Ceram have settled among them. The islanders have attained a considerable degree of civilization. They are stated to be friendly to foreigners and honest in their dealings. Besides provisions, which are abundant, timber, tortoise-shell, cocoa-nut oil, &c., are the chief products.

KEY, WEST. [FLORIDA.]

KEYNSHAM, Somersetshire, a town and the seat of a Poor-Law Union, in the parish of Keynsham, is situated on the left bank of the river Avon, in 51° 24' N. lat., 2° 29' W. long., distant 6 miles N.W. by W. from Bath, 110 miles W. by S. from London by road, and 118½ miles by the Great Western railway. The population of the parish of Keynsham in 1851 was 2318. The living is a vicarage in the archdeaconry of Bath, and diocese of Bath and Wells. Keynsham Poor-Law Union contains 19 parishes and chapelries, with an area of 32,129 acres, and a population in 1851 of 21,613.

Keynsham was formerly a market-town. It consists chiefly of one long street. The parish church is a spacious building, partly decorated and partly perpendicular in style, with a lofty tower. In the town are a chapel for Baptists, an Endowed school, and an almshouse. Flax-manufactories and copper-mills near the town give employment to some of the inhabitants. At Keynsham the Avon is crossed by a

good stone bridge of 15 arches, which connects the counties of Somerset and Gloucester.

KHABS. [SYRUS; MEDITERRANEAN.]

KHABUR, RIVER. [BAGHDAD, Paschalic of.]

KHATUNIYEH, LAKE. [BAGHDAD, Paschalic of.]

KHANDKISH. [CANDRINE.]

KHANDIA. [CANDIA.]

KHAIFA. [CARMEL.]

KHERSON. [CHERSON.]

KHIOS. [CHIOS.]

KHYVA, or KHYVA, a country in Asia, forming a part of that natural division which goes by the name of Turan, or Lower Turkistan, is situated on the east of the Caspian Sea, between 39° and 45° N. lat., 54° and 62° E. long. On the east the boundary between Khyva and Bokhara traverses the river Oxus a few miles north-west of the Bokharian fortress of Charchui, and runs northward near the town of Karakol. On the north of Khyva is the desert of Kizil Koum, the Sea of Aral, and the table-land of Usturt. The Caspian constitutes its western boundary. On the south of Khyva is the desert called Desht Cowas, and through it lies the boundary-line separating Khyva from Persia and Merve. The authority of the khan of Khyva may extend over a country containing about 150,000 square miles.

Surface and Soil.—The country between the Caspian Sea and the Sea of Aral is called the Turkman Isthmus. Between 44° and 45° N. lat., an extensive promontory projects into the Caspian. It is called Manghislak, and consists of a mountain-mass divided into three chains, which, according to an estimate, rise to 1500 or 2000 feet above the level of the Caspian. From this place a mountainous country extends in a north-eastern direction towards the northern shores of the Sea of Aral, and in a south-eastern direction to the table-land of Usturt. The whole of the Turkman Isthmus, as well as the country east of the Aral Sea, is described in the articles CASPIAN SEA and ARAL, SEA OF.

Above 30 miles south of Kooli Deria, on the east coast of the Caspian, is an isolated mountain range running east and west. It extends along the northern shores of the Gulf of Balkhan, and is also called Balkhan. Near the Caspian Sea the hills are of moderate elevation, but north-east of the innermost recess of the bay are some summits called Great Balkhan, which appear to attain an elevation of at least 2000 feet above the level of the sea. This chain does not advance much farther east, but turns southward, and incloses the bay also on the east, where it is known by the name of Little Balkhan. At its southern extremity, south of 40° N. lat., a depression is said to exist, by which it is supposed that the Oxus may have discharged its waters into the Caspian. The depression by which an arm of the Oxus is said in former times to have connected the Caspian with the Aral is generally placed farther north, namely, between the head of Kooli Deria Bay and the Oxus, near Kana-Ourghej, where a low broad flat extends, covered with sand, as if it had once been covered by the sea. From the southern base of the Balkhan to the river Atreck, on the boundary of Persia, an uninterrupted ridge of sand-hills skirts the Caspian, about 10 miles from its shores.

The Turkman Isthmus, with the exception of the mountains and hills already noticed, is generally speaking, a plateau or plain, whose surface is only here and there interrupted by flat depressions, in which lakes are generally found; of these however the greater part is dried up during the summer. The northern part of it cannot properly be called a desert. There certainly are many sandy tracts, but they are not extensive, and the remainder consists of a loamy hard soil, impregnated with salt, which in spring and the beginning of summer is partly covered with grass; but later in the season is without vegetation. In the hot season the Truchmenes, or Turkomans, feed their herds of camels and horses on the leaves of the bushes and trees that grow in the depressions, or bring them to the boundary of Persia, or of the cultivated part of Khyva. The southern part however is almost entirely covered with sand.

Khyva proper, or the cultivated portion of the Khanat, consists of a comparatively narrow tract contiguous to the course of the river Oxus, and extending north and south, a distance of about 150 miles. The area of this tract falls short of 4000 square miles. It is thickly inhabited, and produces almost every kind of grain in abundance. But its fertility is properly not derived from the soil, which, where it is beyond the reach of irrigation, consists of a hard loam, impregnated with salt, and nearly without vegetation. But the whole region is traversed by so many canals that it resembles a net. The water is drawn from the Oxus, and runs with a perceptible current to the west and north-west, where the canals terminate in a series of lakes at the foot of sandhills which divide Khyva proper from the desert.

This description however applies only to the southern part of the region; the delta of the Oxus, or that portion of the country which is inclosed by its arms, contains very little land fit for agricultural purposes. It is annually inundated by the river, and mostly overgrown with reeds and rushes, but there are considerable tracts which serve as pasture-ground for cattle, which is of great importance, as the southern country has no meadow-land or pastures. Where the delta borders on Lake Aral it is a complete swamp all the year round. This country is so low that probably the whole delta would be laid under water if the level of the Sea of Aral were raised a few feet.

On the east of the river Oxus the cultivable ground is of small

extent. About 42° 20' N. lat. begins a tract of higher ground about 2 miles from the river, which runs parallel to it for about 40 miles to the south-east. This ridge is about 4 miles wide, and is called Shikhodahelli; it rises about 600 feet above its base, and descends gradually eastward into the desert of Kizil Koum. Where this ridge terminates (40° 35'), the cultivated land probably extends to 5 or 6 miles from the banks of the Oxus, and here also there are several smaller canals.

Rivers and Canals.—The river Oxus, whose modern name is Amoo Deria, or Jyhus, originates in the elevated mountain region called the Table-land of Pamir. [BADAKEBBHAN.] There it issues from a lake called Sir-i-kol, which is about 14 miles long from east to west, with an average breadth of 1 mile, and near 37° 27' N. lat., 73° 40' E. long. Pliny mentions the fact of its rising in a lake, which was supposed to be a blunder, until this lake was discovered a few years ago by Lieutenant Wood. After leaving Badakhshan the Oxus flows west through the south of Bokhara, and having passed the meridian of Balkh (67° E. long.), its course declines more to the north-west, and in that direction it continues to the boundary-line of Khyva, watering the adjacent country for more than 250 miles. The country which it traverses is unfit for cultivation, except in the immediate vicinity of the river, where the fields are irrigated from it. It is here a rapid stream and navigable, but not far from the boundary-line between Bokhara and Khyva rapids are said to exist, which are full of rocks, and during low-water dangerous to be passed by boats. In this middle part of its course the Oxus is not joined by any permanent stream.

The lower course of the Oxus, from the above-mentioned rapids, above the Bokharian fortress of Charchui, or Chaorjee, to its mouth in the Sea of Aral, probably exceeds 500 miles in length, and its whole course amounts to nearly 1300 miles. Nearly 200 miles of its lower course lie through a desert country, similar to that traversed by it in its middle course, but there does not occur any obstruction to navigation, and it is navigated. The river reaches Khyva proper near 41° N. lat., and traverses it in one bed as far north as 42° 20' N. lat., or upwards of 100 miles. Its course is turned by the northern extremity of Mount Shikhodahilli to the west, and a few miles lower down the river divides into two arms, of which the smaller, called Lowdahn, continues to run in a western direction about 50 miles, when it falls into Lake Ak-Cheganak. This lake is situated near the base of the table-land of Usturt, and at a distance of more than 100 miles from the Sea of Aral. It extends about 30 miles from east to west. On its northern side begins a deep depression, which extends along the base of the table-land to the Sea of Aral, and has a mean breadth of 15 miles. It is entirely filled with water even in winter, when the level of the Oxus is lowest, but only to a moderate depth. It is overgrown with reeds, rushes, and other aquatic plants, with the exception of a comparatively narrow strip in the middle, which is unincumbered, and where a perceptible current runs to the Sea of Aral. The water of this swampy tract is sweet. Nearly halfway between the place where the Lowdahn branches off from the Oxus and its influx into Lake Ak-Cheganak, it sends off a branch to the south-west, which is called Szarkrauk, and passes near the town of Kana (Old Ourghej), but its farther course is not known.

From the place where the Lowdahn branches off the main stream of the Oxus runs due north about 10 or 12 miles, and then sends off an arm to the north-east, called Kook-Usak, which, after a course of more than 30 miles, falls into a lake called Dankara. From this lake a swampy depression similar to that of Lake Ak-Cheganak is stated to extend to the Aral; but this fact rests only on the information of the natives. From the efflux of the Kook-Usak the Oxus runs again north-west, and sends a branch, called Kara-Baili, to Lake Dankara, and two smaller ones, Kiatt Chargin and Kok-Daria, to the depression north of Lake Ak-Cheganak. Farther on, at a distance of about 30 miles, the Oxus divides into two arms, of which the smaller and western, called Taldyk-Daria, reaches the Sea of Aral without dividing any further, but the eastern, Ulu-Daria, enters the sea by two arms, of which the eastern is known as Kasak-Daria.

Ancient authors who mention the Oxus state that it flowed into the Caspian; Arrian distinctly affirms this (iii. 29), and the Arab geographers of the middle ages held the same opinion. Alexander Von Humboldt is of opinion that historical facts prove that, as late as A.D. 1500, the Oxus still carried its waters to the Kara-Bogaz. The most decisive proof he finds in the 'Theatrum Orbis Terrarum' of Ortelius (1570), where an account and map of Russia and Tartary are found, which both had previously (1562) been published in London, by Anthony Jenkinson, the agent of the Russia Company, who was sent to establish a commercial intercourse with central Asia by the way of the White Sea and Moscow. The title of Jenkinson's work is, 'Russiæ, Muscoviæ, et Tartariæ Descriptio, Auctore Antonio Jenkinsonio, Anglo, edita Londini, 1562, et dedicata Ill. D. Henrico Sydneo, Walliæ Præsid.' In this map the Oxus is laid down as falling into a large arm of the Caspian at 41° N. lat. This is evidently the lagoon of Kara-Bogaz, but it appears that at the time of his travels (1559) the lagoon advanced much farther eastward, which change may have been produced by a change in the level of the Caspian. In his account Jenkinson states that the water of the Oxus no longer reached the bay as it formerly did, and he attributes this

change to the great volume of water which was drawn from the river to irrigate the adjacent countries. But Oorgentah was at his time a large commercial town, built near the river, which was navigable at that place. In fact, he embarked here, and ascended it to the vicinity of Bokhara. In the history of Abul Ghasi it is stated that in 1575 the Oxus turned to the northward, and began to run into the Sea of Aral, and that the fertile country surrounding Oorgentah or Ourghenj was then converted into a desert. Since that time this place has presented only ruins to the travellers who visited it; no river has been found in its vicinity in the last three centuries. But it would appear that in recent times the river has made some efforts to re-occupy its old bed. Several statements tend to prove this; and Basiner found, in Sept. 1842, that the Szarkrauk, near Kana-Ourghenj was from 60 to 70 feet wide, and 2 feet deep, and that the place, which was formerly uninhabited, had again been settled.

The Oxus brings down during the freshets a great quantity of detritus; but the earthy deposit left diminishes the fertility of the soil. To prevent inundations the banks of the river and of the larger canals have been raised considerably above the level of the country. The detritus is thus confined to their beds, and it leaves there a thick layer of mud mixed with sand. The canals must annually be cleaned, and this is a laborious work. In spite of the embankments partial inundations are rather frequent, and destructive of life and property. The level of the river is highest from May to July, and then its waters are very turbid; but in the remainder of the year they are clear and well-tasted. It runs with a considerable current, at least two miles an hour. Its depth varies between 6 and 10 feet. It must be much navigated, as it is stated that there are more than 1000 river-barges in the country.

The *Jazartes*, now *Syr-Daria* (on some maps *Sikoua*), which waters the barren steppes of the Khirgis Cossacks, and falls into Kamechlou Bay, the most easterly inlet of the Sea of Aral, rises in the Kashkar-Davan Mountains to the north of Kashgar, on the boundary of Chinese Tartary, and flows westward through Kokand; thence north-west between the desert steppes of Kizil-Koum and Kara-Koum to its mouth. After entering the steppes the river becomes gradually narrower, so much so that from about 120 miles above its mouth the breadth decreases from 300 to 120 yards. The country between the Oxus and the Syr was in ancient times called *Transoxiana*. To the north of it lay *Soythia*. Cyrus the Great lost his life in a battle fought upon its banks, according to Herodotus (l. 201—216), who calls the river *Araxes*; and Alexander founded a city (Alexandria) on its banks, which some suppose to be Khojend.

No country in the world has so many canals as Khyva. The number of the larger canals is stated to exceed 20. In the southern districts they run westward, but farther north to the north-west, and terminate in that series of small lakes which, with the sand-hills contiguous to them on the west, separate the cultivated region from the desert. Their width varies between 70 and 100 feet, and their length is considerable; that of Shawat, which is the largest, is at least 70 miles long. From these larger canals others of minor dimensions branch off and water the country to the distance of 20 miles. The canal of Falwan has 12 such lateral canals, three of which exceed 20 miles in length and about six are more than 15 miles long. The water of these canals is brought to the fields by ditches. During the freshets a considerable current runs through the canals, and even at other seasons it is perceptible. The canals are still more navigated than the Oxus itself.

Climate.—On the 8th of October, 1842, the thermometer stood at 90° at 2 o'clock in the afternoon in the shade, and on the 22nd of December in the same year it fell as low as 11° below zero of Fahr. The summers are very dry; rains fall rarely, but gales are frequent. Frost is commonly experienced towards the end of October, and the lakes and canals are soon covered with ice. The Oxus however does not freeze before the end of the year. Snow does not fall in large quantities, hardly more than 4 inches deep at once, and lies rarely more than four days on the ground, which is remarkable, if the frost is continuous. The climate is generally healthy; but in autumn fevers and agues are endemic.

Productions.—Agriculture is attended to with great care and industry; sometimes the fields are ploughed seven times. Great attention is paid to the preparation of manure. On the fields are cultivated rice, wheat, barley, millet, sesamum, cotton (which is exported by the Cossacks by way of Orenburg and Samara to Nijni-Novgorod), jugari, peas, lentils, hemp, poppy, and clover; in the gardens melons and water-melons, pumpkins, carrots, turnips, peas, onions, potatoes, and cucumbers; in the orchards, mulberries for rearing the silk-worm, apricots, apples, pears, plums, cherries, and vine, also currants. But the fruits are not distinguished by flavour, except the melons and water-melons. On the banks of the canals and ditches are alleys of aspen, ash, willow, and poplar. Forest-trees are only found on the eastern banks of the Oxus.

The horses of the Truchmenes are very beautiful, and held in great estimation, especially those which are called 'argamaka.' Common horses are brought to Khyva by the Kirghis, who dwell between Russia and the Aral. Many camels are kept, even by the poorer people, and also asses. Few cattle are reared, on account of the want of meadows. The Kara-Kalpaks, however, who roam between the

Sihoon and the eastern shore of the Aral, import cows and oxen into the cultivated region. Sheep are reared by the Truchmenes, or imported from Bokhara, on account of the fleece: the Kirghis import a considerable number for slaughtering. Fowls are numerous; but turkeys, geese, and ducks are only kept by the khan. Water-fowl are numerous in the delta, but other wild birds are rare. Of wild animals there are bears, wolves, foxes, wild cats, jackals, hares, wild goats, deer, and wild hogs, mostly in the delta, where also the tiger is sometimes met with. Fish abound in the lakes, river, and Sea of Aral; but are not much eaten, except by the Kara-Kalpaks. Turtles and crayfish abound. Silk-worms are reared to a considerable extent.

Gold and copper are said to exist in the Shikhodshilli Mountains, but are not worked. The other useful minerals are stone for building, limestone, pipe-clay, salt, and sulphur.

Population.—The whole population is estimated at 2,000,000, of which one-fourth are stated to be settled in Khyva proper. This region is inhabited by two nations—the Usbecks and the Sartes. The former are a branch of the Turks, whose language they speak, and are the ruling nation. The Sartes are Persians, and the same race of men which, in other parts of Central Asia, are called Tajiks. It appears that they are the most ancient settlers of the country.

The uncultivated portion of the Khanat is in possession of three nomadic tribes—the Truchmenes, Kara-Kalpaks, and Kirghis. All three are Turkish nations, and speak dialects of the Turkish language. The Turkomenes (Truchmenes), or Turcomans, wander about in the wide region lying between Khyva proper and the Caspian. They live on the produce of their large herds of horses, camels, and sheep. Their women are very industrious, and make carpets, tents, felts, cloth, and girdles. Though they do not pay strict obedience to the orders of the khan, they admit a certain degree of dependence, and acknowledge it by sending presents to him. The Kara-Kalpaks (Black-Caps) are numerous in the delta, especially to the east of Kungrad, and some families are found on the south of the Oxus and Lowdahn, north of 42° N. lat. They are besides dispersed over all the shores of the Sea of Aral, where they are especially occupied in fishing. At other places they cultivate a piece of ground, but rely for subsistence especially on their herds of cattle, sheep, and goats. They are peaceful, and entirely dependent on the khan. The Kirghis, who call themselves *Kasauks*, wander about in that immense plain which extends from the banks of the Volga to Lake Balkash. They have numerous herds of horses and sheep, of which they annually import a great number into Khyva.

Towns and Villages.—It is observed as a very remarkable circumstance that in no part of Central and Western Asia, except in Khyva, is the country lying between two towns interspersed with a great number of single farming establishments, which are situated in the centre of the lands belonging to them. This proves that the inhabitants of Khyva must enjoy a considerable degree of security.

Khyva, the capital and residence of the khan, consists of about 700 mud-houses, but the suburbs contain 1500, and the population exceeds 12,000 individuals. The streets are crooked, and so narrow that a loaded camel cannot pass through them. The palace of the khan is only a large mud building. There are two colleges and three mosques, all built of brick. The karavanseraï is also of brick, and arched over. The plain round it is irrigated and cultivated like a garden. Khyva is situated near the point 41° 40' N. lat., 59° 20' E. long.

The other towns are—New Ourghenj, Gurian, Mangyt, and Kiptahak, in the vicinity of the Oxus, and Shawat and Tashathaus in the interior of Khyva proper, with populations varying from 3000 to 5000. The town of Kungrad may be considered the capital of the nomadic population of the delta. In summer it has very few inhabitants, but in winter it is the common residence of several nomadic tribes that inhabit the adjacent country. Its walls are stated to be more than twelve miles in circuit. Kana-Ourghenj is the former Kharism, or Chorasnia, of which there are extensive ruins, and from which the whole country, from the Oxus to the Caspian and the frontiers of Persia, was formerly called *Kharism*. The Chorasmiï are mentioned by Strabo as a tribe of Sogdians (xi. 518), and by Herodotus (iii. 98) they are named with the Parthi, Sogdi, and Arii as forming the 16th Satrapy of Darius.

Manufactures.—The manufactures are cotton-stuffs, some silks, articles of wool made by the nomadic nations, earthenware, and copper utensils. All articles of iron are imported from Russia: only a few Kirghis settled in the khanat exercise the trade of blacksmiths.

Commerce.—The commerce of Khyva is carried on chiefly with Bokhara and Russia. Caravans go from Khyva to Orenburg, exporting a few manufactured articles, sheep-skins, hides, and horses, and bring back utensils of cast-iron, some woollen-cloth, and copper and other metals. They pass through Kana-Ourghenj, traverse the table-land of Ust-urt near the shores of the Sea of Aral, and after descending to the low plain their route lies through the steppe of the Little Horde of the Kirghis; but a part of the traffic with Russia is now carried on by the Cossaks, as stated above. The commerce between Khyva and Persia is less important. Khyva sends there chiefly horses, and receives in return dried fruits and some silk goods. On the whole, about 2000 camels (which are the ordinary beasts of burden) go annually to Orenburg, Astrakhan, and Cabul, with agricultural produce, silk and cotton-stuffs, and yarn. Russian produce is also now imported by steamers and boats across the Caspian.

History.—Khyva probably was a part of ancient Bactria. In the second century before Christ the nomadic nations of Upper Turkistan began to descend into Turan, and took possession of the countries north of the Oxus and south of the Sea of Aral. They seem to have laid waste the country and kept possession of it during more than two centuries. In the second century after Christ however they were subjected to the sway of the Chinese emperors, who at that period extended their dominions to the shores of the Caspian. In the third century of our era it was connected with Persia, and remained so up to the 10th century, when one of its governors acquired independence, and erected the kingdom of Kharism, or Khowarism, which appears to have remained an independent state until conquered by Genghis Khan (1218). The descendants of Genghis Khan remained in possession of the country, which continued to form an independent kingdom under the name of Khowarism up to 1379, when the town was taken by Timur, and the country annexed to his possessions. Khyva remained a part of the kingdom of Samarkand to the beginning of the 16th century, when a Turkish nation, the Usbecks, under the auspices of Shibani Khan, descended from Upper Turkistan, and by degrees took possession of the whole of Turan. Khyva, as it appears, soon became an independent state under an Usbeck prince, and has remained so up to this time. Russia has been frequently accused of attempting to extend her frontier in the direction of Khiva. However this may be, it has been lately stated that, with the consent of the khan, she has erected and manned some forts for the protection of her caravan trade with Khiva against the attacks of the Khirghiz and Turkoman hordes.

(Murawiew, *Reise in China*; Humboldt, *L'Asie Centrale*; Zimmermann, *Denkschrift über den untern Lauf des Oxus*; Abbot, *Narrative of a Journey from Herat to Khiva, &c.*) [See BOKHARA, in SUPP.]

KHOORD CABUL PASS. [AFGHANISTAN.]

KHORASSAN. [PERSIA.]

KHOTIN. [BESSARABIA.]

KHYRGAON. [HINDUSTAN.]

KHYRPOOR. [HINDUSTAN.]

KIACHTA is a town in Siberia, in the government of Irkutsk, 50° 20' N. lat., 121° 40' E. long., south of the lake of Baikal, and in a sterile country 2480 feet above the level of the sea, on a small stream also called the Kiachta. A considerable trade is carried on here, as it is the only place in which the subjects of the empires of China and of Russia are permitted to exchange their merchandise. Kiachta consists of two separate parts: the fortress, called Troitako Sawak, where the custom-house, the imperial offices, and the military government are established; and the lower town, or Kiachta, which is nearly two miles farther south, and where the merchants live. Kiachta has one bridge, a square, one wooden church, two chapels, and thirty-seven houses, mostly belonging to merchants, elegantly built, and kept in good order: the total number of inhabitants is about 5000. Merchants from several parts of Russia have settled in Kiachta.

The commerce of this place is carried on with *Maimaitchin*, a Chinese village and emporium, which is less than a mile from the lower town. Until 1727 it was conducted by the Russian government, and was insignificant; but in the last-mentioned year the trade was opened to private merchants, and has since become of great importance. A large fair is held between the two places in December. The Russians bring to Kiachta furs, tanned hides, broadcloth and other coarse woollen fabrics, coarse linen, bullion, glass, looking-glasses, and cattle. They receive in return from the Chinese manufactured silks and cottons, tobacco, china, rhubarb, furniture, and several kinds of toys; but the principal commodity taken in exchange is tea. Cochrane estimated the quantity of tea imported in 1821 at three millions of pounds weight; and at the great fair of Nijni Novgorod the value of the tea which was sold in 1823 amounted to twelve millions of paper roubles. The tea brought to the fair of Nijni Novgorod in 1838 was 37,356 chests, valued at 17,899,500 roubles; to which must be added 560,000 roubles for the value of 5000 chests of tea pressed into cakes. In 1843 the Russians imported through Kiachta 102,700 chests of superfine tea. The value of woollen and cotton goods, leather, and furs, taken by the Chinese merchants in that year amounted to above 677,000 sterling.

(Pallas; Klaproth; Cochrane, *Pedestrian Journey, &c.*; Erman, *Annalen der Erdvölker*; *Official Statements.*)

KIDDERMINSTER, Worcestershire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Kidderminster, is situated on the river Stour, near its confluence with the Severn, in 52° 23' N. lat., 2° 14' W. long., distant 16 miles N. by W. from Worcester, and 126 miles N.W. from London by road. It is 132 miles from London by railway via Birmingham, and 135½ miles via Oxford and Worcester. The population of the borough of Kidderminster in 1851 was 18,462; that of the entire parish was 23,845. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor, and returns one member to the Imperial Parliament. The livings are in the archdeaconry and diocese of Worcester. Kidderminster Poor-Law Union contains 13 parishes and townships, with an area of 38,041 acres, and a population in 1851 of 32,984.

Kidderminster returned members to Parliament as early as the 28th of Edward I., but owing to disuse the privilege was afterwards lost. By the Reform Act it was again erected into a parliamentary borough. The earliest charter of incorporation is that of 12 Charles I.

The town is well lighted, watched, and paved under the superintendence of commissioners appointed by a local act. The prosperity of the town is chiefly dependent on the carpet manufacture, for which Kidderminster is famed. A new factory for patent beaver carpets has been established; and some of the looms used for making Brussels carpets have been applied to the manufacture of the patent tapestry carpets. The church is a handsome perpendicular structure surmounted by a fine tower: the interior contains various ancient monuments. Besides the parish church there were in March 1851 in the borough 14 places of worship, of which 4 belonged to the Establishment, 3 to Wesleyan Methodists, 2 to Primitive Methodists, and one each to Independents, Baptists, Lady Huntingdon's Connexion, Roman Catholics, and Unitarians. The number of Sunday schools in the parish was 14, with 2475 scholars. The Free Grammar school was founded prior to the charter of Charles I. The school is divided into an upper and lower school, boys who wish to learn Latin being received into the upper school. The annual income from endowment is about 580*l.*, and there are residences for the head and second masters. The number of scholars in 1852 was 50. Blakebrook Grammar school had 10 scholars in 1851. The number of day-schools in the parish in 1851 was 39, namely, 16 public schools with 2088 scholars, and 23 private schools with 640 scholars. The Kidderminster Athenæum had 31 members in 1851, and 400 volumes in its library. The dispensary has been converted into an infirmary. There is a savings bank. The market-day is Thursday; six fairs are held in the course of the year.

KIDWELLY. [CAERMARTHENSHIRE.]

KIEL, the capital of the duchy of Holstein, is situated on the Kiekerford, a bay of the Baltic, which forms an excellent harbour, and admits large ships of war to anchor near the town, in 54° 10' N. lat., 10° 8' E. long., 65 miles by railway N. by E. from Altona, and has 15,000 inhabitants including the suburbs. It is surrounded with walls, in which there are five gates; and is pretty regularly built, with straight well-paved streets. The principal structures are the palace of the Duke of Glücksborg; the church of St. Nicholas, which dates from the 13th century; the convent church; and the university buildings. The university of Kiel was founded in 1665; it has a library of 80,000 volumes, and in connection with it are an observatory and a botanic garden, a museum of natural history, and a collection of northern antiquities. The palace garden, and the environs of the city and the wooded shores of the beautiful bay, afford a good promenade. Kiel has manufactures of linen, hats, tobacco, sugar, ironmongery, machinery, &c., and some business in ship-building. The trade in corn, dried herrings, and sprats (which are celebrated) is considerable. The commerce of the town has much increased since the completion of the Kiel Canal [HOLSTEIN], and still more since the opening of the railway. The most busy time of the year is at the annual fair on the three days after Twelfth-day, which is attended not only by the farmers and merchants, but by the nobility and gentry of Sleawick and Holstein. There is an establishment for sea-bathing. Steamboats ply regularly between Kiel, Copenhagen, and other Baltic ports.

KIERTEMINDE. [FUNEN.]

KIEW (written also *Kieff*, *Kiev*, and *Kiow*), a government of Russia in Europe, lies between 48° 30' and 51° 50' N. lat., 28° 40' and 33° 25' E. long. It has an area of 19,340 square miles. The population in 1846 was estimated at 1,605,800. It is bounded N. by the government of Minsk, E. by the governments of Tchernigow and Poltava, S. by Kherson, and W. by Podolia and Volhynia. The surface of the country is undulating; the hills and high lands, which follow the course of the rivers, do not in any part attain a considerable elevation. There are many pleasing rural views, but no grand or striking natural scenery; and in general there is the sameness that is usual in flat countries. The Dnieper range of hills can only be considered as the last ramification of the Carpathians, which it joins in Podolia: in the circle of Tschigri a branch of it quits the river, and traverses the whole southern part of the province in a north-western direction. The land to the north of this branch has an extremely rich and fertile soil. On the south the soil is poorer, more sandy, and like a steppe; but still there are tracts of luxuriant corn-fields and good pastures. The chief, and in fact the only navigable, river is the Dnieper, which however is a frontier river, forming the entire north-eastern boundary between this province and Tchernigow and Poltava for nearly 250 miles. It is from 600 to 1200 feet wide, flows with rapidity, has hard muddy water, and here and there blocks of stone and eddies, which however do not obstruct the navigation. The chief rivers that flow into it are the Pripetz, which comes from Minsk, and is here joined by the Ush or Uza from Volhynia; the Tertserow, from Volhynia, which receives several streams before it falls into the Dnieper; the Irpen; the Stugena; the Ross, which rises in the west of the province, divides into two arms, and forms a large island; and the Tiamin, which comes from Kherson. There are no lakes of any consequence in the whole province: small lakes are numerous in the southern part. The climate is extremely mild and dry, and adapted to all the productions of the temperate zone, though no vines are cultivated. The rivers freeze in December and thaw in February; but in some winters there is very little snow and ice: the north wind however is always severely felt. The heat in summer is often so great that the

river are dried up. Rain seldom falls in summer. Locusts are common, and the migratory locust often does great injury.

Agriculture is the chief employment of the inhabitants. The fruitful soil produces all kinds of corn, pulse, hemp, flax, and tobacco. The millet is of a peculiar kind, bearing several ears on one stem; the grain is large, round, and of excellent quality. The gardens produce all kinds of vegetables, and likewise melons, water-melons, and various kinds of fruit. Fruit of all kinds prospers, except the vine. The country-people however do not grow much fruit, but are content with their wild wood-berries.

Kiew has more and better timber than any other province of Little Russia. Next to agriculture the breeding of cattle is the chief occupation of the inhabitants. The oxen are large and of a good breed, generally of a gray colour. Great numbers are fattened and sent to Austria, Germany, and the interior of Russia. The horses are small. Few sheep are kept, but great numbers of swine. In the forests there are foxes, a few wolves, fewer bears, but many deer; there are hares, partridges, quails, and ortolans. In the Dnieper there are beavers and otters, but they are rare, and in that and the other streams there are many kinds of river fish, though not sufficient for the consumption of the people. The only minerals made use of are clay, lime, chalk, stone for millstones, and bog-iron. With the exception of beet-root sugar factories, of which 72 were in operation in 1850, the manufactories are unimportant; they are confined to the towns, and furnish very little for exportation. The trade consists in the exportation of the produce of the province, and the importation of salt, metal, wine, manufactured goods, and colonial produce. The villages are much closer together than in Great Russia, and have a very cheerful and pleasing appearance; all the houses have gardens, in which there are at least cherry- and plum-trees. The houses in the country are made of brushwood and branches of trees, covered with clay within and without, all whitewashed and thatched, and kept very clean. The Poles are the chief landholders and nobles. Jews are everywhere numerous; they have all the public-houses, inns, and shops, and are likewise the butchers, cattle-dealers, &c. Most of the inhabitants are of the Greek Church, under the archbishop of Kiew and Galiz. Of the Poles many are Roman Catholics. Of the Germans many are Lutherans. The Jews have their synagogues and rabbis. The peasantry are almost all serfs. The only town of importance is Kiew.

KIEW, a city of Russia, capital of the government of Kiew, the residence of an archbishop and of the civil and military administrators of the government, is situated on the right bank of the Dnieper about 660 miles S. from St. Petersburg, in 50° 27' N. lat., 30° 27' 53" E. long., and has about 50,000 inhabitants. It consists of three distinct parts: Old Kiew, built on an eminence towards the north; the fortress of Petscherak on another hill towards the south; and the Podole, or new town, which covers the low ground, between the two hills and the river. Each part of the town has its own fortifications, and the whole is inclosed within vast entrenchments. The houses, in number about 8000, are built partly of wood and partly of stone; the streets, in the old part of the city, as in most old towns, are narrow and irregular.

The Old Town and the Petscherak are separated by a deep ravine. The former was the residence of the grand dukes of Kiew, and in remote ages was a great centre of the idolatrous worship of the Slavonian race. On the site of the temple of Perane, the Russian Jupiter, Vladimir the Great erected the church of St. Basil, which still remains. This part of the town is inclosed with massive earthen walls, and contains ten churches in all, the most interesting of which is the cathedral of St. Sophia, which was founded by the grand-duke Jaroslav Vladimirovitch in 1037. This splendid church is magnificently decorated and contains a marble monument of its founder. Among the other buildings in this part of Kiew may be named the archbishop's palace, which stands close to the cathedral, shaded by venerable trees; the convent of St. Michael; and the churches of St. Andrew, and the Nativity of the Blessed Virgin. This last was also built by Vladimir the Great, who had his grandmother Olga buried in it.

The Petscherak is the highest and best fortified part of Kiew. It is considered one of the strongest fortresses in the interior of Russia. Connected with the massive defences which girdle this part of the city there are a large arsenal, magazines, and military stores. In the Petscherak the civil and military governors of the province and other persons of distinction reside; it is partly inhabited also by Jews. Near the arsenal is a bazaar. The most imposing structure in this part of the town is the Petscherakoi monastery, founded by St. Anthony in the 9th century, and famous for its fine buildings and its catacombs, in which are buried several saints of the Greek Church. The monastery is entered by a splendid gate ornamented with full length figures of St. Anthony and St. Theodosius. The great attraction is the church of the Assumption, which is reached by a fine alley on each side of which are the cells of the monks. The interior of this church is richly decorated with gold and silver, and on the walls are beautiful representations of Scripture scenes. The building is surmounted by a superb belfry, above 300 feet high, and by seven turrets with gilt cupolas connected by golden chains. The Russian annalist, Nestor, was a monk of this convent. The catacombs are excavations in the precipitous limestone rock which overhangs the

river: in them are above 100 bodies of Russian saints in an admirable state of preservation. It is said that as many as 50,000 pilgrims from all parts of Russia visit the monastery and the catacombs yearly. On one side of the road leading from the Petscherak to the Podole is a crucifix backed by a stone obelisk 150 feet high, which marks the fountain in which the children of Vladimir the Great were baptised.

The Podole, the best built and largest quarter of Kiew, stands on a level with the Dnieper and is surrounded with a wall. It is built in the modern Russian style with regular wide streets interspersed with trees and gardens. In it the principal merchants and the trading part of the population reside. It contains 20 churches, an imperial palace, a town-hall, and a Greek academy, a vast and solid structure with a library of 10,000 volumes, and an attendance of above 2000 students; some authorities say there are 6000 students. The Podole enjoys the privilege of being governed by its own magistrates, a right which it obtained from the kings of Poland. It is exposed to the overflowings of the Dnieper, which is here crossed by a bridge of boats, and we believe by a suspension-bridge also of recent erection.

Besides its cathedral, 52 churches, 9 convents, and a Greek ecclesiastical academy, Kiew has a university, founded in 1834, called St. Vladimir's University, which has obtained the library and collections of the Volhynian Lyceum at Krzemniec, and is the authorised place of education for the youth of the governments of Kiew, Podolia, and Volhynia. It is endowed with about a million rubles, and has a library of 35,000 volumes and an observatory. The number of professors and teachers is about 80, and the number of students is between 500 and 600. There are considerable manufactories of earthenware, many tanneries, and a very celebrated fair, attended by 30,000 Turks, Armenians, Germans, Swiss, English, &c. There is considerable commerce with Odessa and the interior of Russia.

The date of the foundation of Kiew is unknown. According to the Polish annals it existed in A.D. 480, soon after which date it was taken from the Khozares by two chiefs named Oakold and Dir. Under the followers of Rurik it became the capital of a grand-duchy and the chief town of Southern Russia, about A.D. 882. From 1037 to 1167 it was the capital of all the Russias; during this period it is said to have been a very large and flourishing city with no less than 400 churches. In aftertimes it suffered terribly from conflagrations and wars, and was successively in the hands of Poles, the Tartars, and a khan of the Crimea. The Russians finally recovered it in 1667.

KILBARCHAN. [RENFREWSHIRE.]

KILBEGGAN. [WESTMEATH.]

KILBIRNIE. [ATYSHIRE.]

KILBRIDE, EAST. [LANARKSHIRE.]

KILBRIDE, WEST. [ATYSHIRE.]

KILCOCK. [KILDARE.]

KILCULLEN, KILCULLENBRIDGE. [KILDARE.]

KILDA, ST., the most western of the Hebrides, is situated in 57° 50' N. lat., 8° 35' W. long., and consists of an uneven mountain ridge, whose most elevated point, called Conochan, rises 1880 feet above the sea-level. The island is reckoned as belonging to the parish of Harris, in Inverness-shire. To the sea it presents lofty precipices, except at one point on the north side, where there is a rocky bay, and another on the south-east side, where there is a landing-place. The island is 2 miles in length, and 3 miles in breadth. The mildness of the air is favourable to agriculture; but the crops of bere and oats are frequently exposed to destruction from heavy storms, particularly from the west. Cultivation is therefore chiefly confined to the south-east declivity, where there is most shelter. On this side, about a quarter of a mile from the landing-place, is the village of St. Kilda, consisting of 32 houses, placed on the sloping base of a steep hill. This is the only inhabited place on St. Kilda, or the three other islands in the group. The number of the population in 1851 was 110, of whom 48 were males, and 62 females. The men are all described in the schedules as 'farmers and birdcatchers'; each 'farmer' occupies about three acres of land. Eight females are designated 'weaveresses' in 'wool.' The islands are the resort of sea-fowl, the flesh and eggs of which, with fish and the produce of the small plots of land, furnish food to the inhabitants, who would however often be in a state of starvation if the proprietor did not send every year a supply of oatmeal to the island. The dwellings of the poor people are kept in a very dirty state. There is a church and a manse, or minister's house, but no clergyman or medical man resides on the island. The great majority of the infants die of what the inhabitants call the 'eight days' illness.' In the first visitation of cholera, it proved very fatal in St. Kilda. The following curious particulars are given in the Registrar-General's Report on the Census of 1851:—Of the 110 inhabitants, all were born on the island except one woman, aged 35, the wife of a M'Donald, who was imported from Sutherlandshire. There were only 8 family names in the island, in the following proportions:—Gillies 33, M'Donald 23, M'Queen 20, Ferguson 13, M'Crimmon 9, M'Kinnon 9, Morrison 2, and M'Cleod 1. Of those under 20 years of age there were 22 males and 30 females; between the ages of 20 and 60 there were 25 males and 26 females; one man was above 70 years of age; above 60 years of age there were 6 women, of whom one was 79 years. Of married couples there were 19; of widowers 2, widows 3, with five unmarried men and five unmarried women of the age of 20 and under 46.

KILDARE, an inland county in the province of Leinster, in Ireland, is bounded N. by Meath, E. by the counties of Dublin and Wicklow, S. by the county of Carlow, and W. by the Queen's and King's counties, and Westmeath. It is situated between 52° 50' and 53° 25' N. lat., 6° 27' and 7° 10' W. long. Its greatest length from north to south is 40 miles, from east to west 27 miles. The area is 653 square miles, or 418,436 acres, of which 356,787 are arable, 51,854 uncultivated, 3288 in plantations, 490 in towns, and 1017 under water. The population in 1841 was 114,488; in 1851 it was 95,688.

Surface.—The surface of Kildare county is almost level. The only considerable elevations are the hills of Rathcoole, which form the western extremity of the range of the Dublin Mountains, and a detached group which occupies part of the southern margin of the Bog of Allen. Of this group the Hill, or Island of Allen, which is detached from the others, and terminates the range on the north-east, is surrounded by tracts of bog, and rises in a conical hill in the centre to about 300 feet above the level of the surrounding country, which is here 260 feet above the level of the sea. An open table-land extends from the southern base of this group to the acclivities of the Wicklow Mountains on the south-east, and divides the middle and southern parts of Kildare into two districts, one of which slopes gradually towards the Liffey on the east, and the other towards the Barrow on the west. North from the Dunmurry range the upland district spreads east and west, forming the southern boundary of the basin of the Boyne on the west, and the western and northern boundary of the valley of the Liffey on the east. It is here overlaid to an extent of 36,000 acres by a portion of the Bog of Allen.

The district which slopes towards the Barrow, comprising the western part of the county from the Bog of Allen to the county of Carlow, is divided into three open vales by low ranges of undulating ground extending in parallel directions from the central table-land towards the south-west. The most northern of these vales is drained by the Feagile and Little Barrow, which uniting at the lower extremity of the valley, join the Barrow near Monasterivan. At Monasterivan the Barrow is crossed by a branch of the Grand Canal, which, from Monasterivan to Athy, is carried along the right bank of the river. The country about Monasterivan, on both sides of the river, is well improved. Moore Abbey, on the left bank of the Barrow, occupies the site of a Franciscan abbey founded here by St. Abban in the 7th century, and rebuilt in the 12th century. A series of low detached hills, extending from Athy in a north-easterly direction to Old Kilcullen, bounds the basin of the Finnerly on the south and south-east. The lower part of this district is chiefly occupied by bogs. The ancient town of Kildare is situated on the elevated tract at the upper end of the vale. The surrounding country is open, and generally under tillage, with the exception of the Curragh of Kildare, a common containing about 4000 acres, which extends six miles along the table-land between the towns of Kildare and Kilcullen. This is a celebrated race-ground; the turf throughout is close and elastic, and the surface generally undulating. Southward and eastward from the above range of hills lies a fertile tract watered by the rivers Griese and Leir, which fall into the Barrow at the southern extremity of the county.

That part of the basin of the Liffey which is included within this county is formed by the western slope of the Dublin Mountains on the one side, and by the subsidence of the table-land of Kildare on the other. Much of the land in this district is in a high state of cultivation. The left bank of the river, from the point where it enters Kildare to Leixlip on the Dublin boundary, is almost wholly occupied by a succession of demesne lands surrounding numerous residences of the best class. Among these the most remarkable are Killadon, the seat of the earl of Leitrim; Castletown, the mansion of Colonel Conolly; and on the opposite side of the river, near the line of the Grand Canal, Lyons Castle, the residence of Lord Cloncurry. The banks of the Liffey in the neighbourhood of Celbridge and Leixlip are steep and well wooded, and the river for a considerable distance runs in a series of rapids. A ledge of rock, about 10 feet in height, stretching across the channel, forms a waterfall, called the Salmon Leap, which is an object of great attraction. Close to Maynooth is the fine demesne and beautiful mansion of Carton, the residence of the Duke of Leinster. The Royal Canal, crossing the Rye-water by an aqueduct a little above Leixlip, passes Maynooth and Kilcock. Westward from Kilcock, which stands in the centre of one of the most fertile and best cultivated tracts in Ireland, the Royal Canal crosses the Blackwater and Boyne rivers by aqueducts within this county. The district traversed by this canal is for the most part open and arable.

Hydrography and Communications.—The northern border of the county is traversed by the Royal Canal, which unites the Bay of Dublin to the Shannon at Tarmenbarry; by the western mail-coach road, which passes through Kilcock; and by the Dublin and Galway railway. These lines of communication run at very short distances and nearly parallel to each other, from Dublin to Mullingar. The eastern districts are drained by the Liffey, which rises in the Wicklow Mountains only about 12 miles from its mouth, entering this county a little above Ballymore Eustace; its course is nearly due west to Kilcullen Bridge; then north-west to Newbridge; afterwards north-east to Leixlip, whence it flows eastward across the county through

the city and into the Bay of Dublin, after a total course of about 50 miles. The Grand Canal runs along the valley of the Liffey as far as Sallins, where it turns to the west and crosses the Bog of Allen on its way to join the Shannon at Shannon Harbour. The Great Southern and Western railway, from Dublin to Cork, also runs up the valley of the Liffey, and at Kildare sends off a branch southward through Athy to Carlow and Waterford. The southern mail-coach road from Dublin divides at Naas into two branches, one through Kildare, leading to Cashel and Cork; another to Kilcullen Bridge, whence also two branches run, one to Athy and the other through Castle-Dermot to Carlow and Waterford.

Geology.—The clay-slate, which flanks the granite of the Dublin and Wicklow mountains, occupies about one-fourth of the surface of Kildare. It extends from the extremity of the Rathcoole group in the county of Dublin across the valley of the Liffey, whence it runs in a south-west direction towards Athy, forming the Kilcullen group, and occupies the entire valley of the Griese, with the exception of its lower extremity, where the verge of the limestone plain is interposed between it and the line of the Barrow. The granite tract of Carlow extends into the south-eastern extremity of Kildare as far as Castle-Dermot where the clay-slate passes into mica-slate along the eastern portion of their line of junction. The remainder of the county is occupied by the limestone of the great central plain, broken only by the group of Dunmurry and the Hill of Allen, which is composed of a mass of granular compact greenstone and porphyry protruded through the limestone. At the northern extremity of the Hill of Allen is a low hill called the Leap of Allen, composed of red-sandstone conglomerate, which is quarried for millstones. Indications of copper have been observed on Dunmurry Hill.

Climate, Soil, and Products.—The climate is very moist and foggy in the north-west. In the central district the air is pure and keen; and milder and more salubrious in the valleys of the Liffey and Griese. The soil is generally a rich loam, resting on limestone or clay-slate. Manure of the best description is obtained from Dublin, by means of which the lands of the central and western districts are kept in excellent condition. The chief tract of pasture-land is the Curragh, which is used as a sheep-walk. There are rich fattening lands in the north-western and north-eastern portions of the county. An improved system of agriculture has been introduced. The total extent of land under crops in 1853 was 140,837 acres, of which 13,655 acres grew wheat, 46,715 acres oats, 8853 acres barley, bere, rye, beans, and peas, 10,716 potatoes, 11,990 turnips, 2991 other green crops, and 27 acres flax: the area under meadow and clover was 45,890 acres. Of plantations there were 11,891 acres in 1841 growing chiefly oak, ash, elm, and beech. In 1852, on 8557 holdings, there were 12,533 horses, 4127 mules and asses, 62,581 cattle, 110,182 sheep, 17,966 pigs, 2757 goats, and 169,148 head of poultry; the value of the entire live stock being estimated at 662,528*l.* The wheat grown in Kildare is generally of prime quality; it is exported to Dublin and to Waterford. The milling trade is extensively carried on. There are also some woollen, cotton, and paper factories. Great quantities of turf are cut in the Bog of Allen and conveyed to Dublin by the Grand Canal.

Divisions and Towns.—Kildare is divided into 14 baronies; Carberry on the north-west; Ikeathy and Oughteran on the north; North Salt on the north-east; South Salt, which lies south of North Salt; North Naas on the east; South Naas; Kilcullen, also on the east; Narragh and Rheban East; Narragh and Rheban West; Kilkea and Moone on the south; Ophaly East; Ophaly West; Clane, immediately west of South Salt; and Connell, to the west of North and South Naas.

The following towns and villages, with their population in 1851 may be noticed:—

ATHY has been already described. *Ballymore-Eustace*, a small town of 673 inhabitants, is on the Liffey, near the eastern border of the county. It grew up about Eustace castle, built by the Eustace family shortly after the Anglo-Norman invasion, but now ruinous. Fairs are held six times a year. *Ballytore*, a neat clean little town, chiefly inhabited by Quakers, 6 miles E. from Athy on the right bank of the Griese, has 417 inhabitants. Edmund Burke received his early education here. Near Ballytore are the old forts of Mullaghmast and the demesne of Narraghmore, part of the estates of R. Latouche, Esq. Fairs are held in March, May, August, and November. *Castle-Carberry*, a small village in a fine grazing district in the north-west of the county, and near the source of the Boyne, is interesting for a ruined castle, erected in the 14th century, by the family of the Berminghams, and inhabited during the 17th and part of the 18th centuries by the ancestors of the Duke of Wellington. *Castle-Dermot*, population 1416 in 1841 and 666 in 1851, in the south of the county, on the Carlow road, claims to be a very ancient place, and contains many antiquities. The town was formerly surrounded by a wall pierced by four gates. It is now merely an agricultural village. There are some remains of a Norman castle built here in 1180. The parish church is of great antiquity; the eastern part of the building is now used as a place of worship, the rest is in ruins. An ancient ivy-clad round tower on the north side of the church is used as a belfry. In the burying-ground is a sculptured stone cross. The remains of a Franciscan abbey and its church present good specimens of architecture; the church is built in the pointed style. Near the abbey is a strong square tower, locally

called St. John's castle. A parliament was held in Castle-Dermot in 1499. There is a Roman Catholic chapel in the town. Six fairs are held in the course of the year. **CALBRIDGE.** *Clane*, population 833, a village 6 miles S.W. from Celbridge, on the left bank of the Liffey, which is here crossed by a bridge of six arches. Here are considerable remains of a Franciscan friary, erected in the 13th century. Near the village are the ruins of an old castle and some ancient earthworks. Fairs are held in April, July, and October. **KILCOCK**, population 1164, a post- and market-town, situated 19 miles W. from Dublin, on the Dublin and Galway railway and on the banks of the Royal Canal. The town has a dispensary, a church, and a Roman Catholic chapel. The environs are fertile. Near the town are Donadea Castle, and several other large mansions. Nine fairs are held in the year. **KILCULLEN**, or as it is commonly called *Old Kilcullen*, formerly a walled town, and a place of importance, but now a mere hamlet, stands 2 miles S. from Kilcullen Bridge. Fairs are held here in June and October. On the summit of a hill, inclosed by a circular wall, are the ruins of a monastery, part of a round tower, 35 feet high, and many sculptured stone crosses. The rebels were severely defeated at Old Kilcullen in 1798. **Kilcullen Bridge**, a small market-town prettily situated on the Liffey, 5 miles S. by W. from Naas, has a fever hospital, a dispensary, and 985 inhabitants. Fairs are held in February, March, June, September, and December. About 8 miles N.E. from this place is **Harristown**, before the union a parliamentary borough, now a mere hamlet. **Leixlip**, a small town finely situated at the junction of the Rye with the Liffey, 11 miles W. from Dublin, by the mail-coach road and the railway from Dublin to Galway; population, 832. It consists of a single street. The parish church is in the pointed gothic style. The Roman Catholics have a chapel. The Liffey is here crossed by a bridge. Above the town is Leixlip Castle, built by Adam de Hereford, one of Strongbow's followers. A little way beyond the castle, the Liffey forms a fine cascade, called the Salmon Leap. The town is a place of resort on account of the beautiful scenery near it. Fairs are held in May, July, and October. **MAYNOOTH.** *Monasterevan*, population 996, a post- and market-town, situated on the Barrow at the junction of the Mountmellick and Athy branches of the Grand Canal, 36 miles by railway S.W. from Dublin. The main street is built on only one side and fronts the river, which is here crossed by two bridges. The market-place is a large open area. The parish church and Roman Catholic chapel are the chief buildings. Small docks and storehouses have been built in the town, in which are a large distillery and brewery, and a dispensary. The trade is chiefly in corn and other agricultural produce. The site of the abbey of Monasterevan is now occupied by the fine mansion of Moore Abbey, the seat of the Marquis of Drogheda on the south side of the town. Fairs are held ten times in the year. **NAAS.** *Newbridge*, a small market-town of 934 inhabitants, on the Liffey, and on the railway and mail-coach road from Dublin to Cork, 25 miles S.W. from Dublin, has a large cavalry barrack, a Roman Catholic chapel, a police station, and a dispensary. The town takes its name from a bridge which here spans the Liffey. Near it are the ruins of Great Connell Abbey. Five fairs are held in the course of the year. **PROSPEROUS**, population 526 in 1841; 262 in 1851, a miserable decaying village, in which a cotton factory was established in 1780, and long ago abandoned, is situated 4 miles N.W. from the Salinas station on the Dublin and Cork railway, in a dreary, boggy, flat district. **RATHANGAN**, population 1004, a market-town on the Little Barrow and the southern branch of the Grand Canal, 5 miles N. by W. from Kildare, contains a church, a Roman Catholic chapel, a Quakers meeting-house, and a dispensary. There are several large flour-mills here. Three annual fairs are held. **ROBERTSTOWN**, 3 miles W. from Prosperous, a small village, population 314 in 1841, and 600 in 1851, is situated in the dreary region of the Bog of Allen, and is mentioned chiefly on account of its standing at the summit level of the Grand Canal. There are seven yearly fairs. **SALLINS**, a village of 308 inhabitants, is a station on the Dublin and Cork railway, 18 miles S.W. from Dublin. It stands on the Grand Canal, and near the right bank of the Liffey. A large inn and extensive stores have been erected here by the Grand Canal Company.

Prior to the Union Kildare was represented in the Irish Parliament by ten members; two for the county, and two for each of the towns Athy, Kildare, Naas, and Harristown. It is represented in the Imperial Parliament by two county members only. The assizes are held alternately at Naas and Athy, in each of which there are a county court-house and jail. The general quarter-sessions are held at Athy, Maynooth, Kildare, and Naas. Petty sessions are held at 13 places. The head-quarters of the constabulary force, consisting of 263 men and officers, are at Athy; the force is distributed among 5 districts, Naas, Athy, Rathangan, Robertstown, and Leixlip; these again are sub-divided into 45 stations. A resident magistrate is stationed at Naas. The district lunatic asylum, to which the county is entitled to send 52 patients, is at Carlow. The Union workhouses are at Athy, Celbridge, and Naas. A county infirmary is at Kildare, and fever hospitals are at Celbridge, Naas, and Athy; 18 dispensaries are established in the towns and chief villages. At Newbridge are extensive cavalry barracks, and infantry barracks are at Naas and Athy. The staff of the county militia is stationed at Johnstown. A savings bank is at Celbridge; the total amount owing to depositors on November 20th, 1852 was 15,241*l.* 4*s.* 7*d.* In September 1852

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there were 87 National schools in operation, attended by 4575 male and 4648 female children. Adjoining the town of Maynooth is the Roman Catholic College of St. Patrick, for the education of young men destined for the priesthood; and at Clongowes, near the village of Clane, is the Jesuit College for the education of the sons of the Roman Catholic gentry, which had 151 students in 1853.

Numerous earthen works, partly military and partly sepulchral, remain in this county. Of the first class, the most remarkable are the rath of Knockawley, about a mile west from Old Kilcullen; the moat of Mullaghmast, the ancient Carmon, near Ballytore; and Rath-Ardscull near Athy. There are numerous sepulchral mounds on the Curragh; and here in the time of Giraldus Cambrensis was a stone monument similar to Stonehenge. Pillar stones of large dimensions are still standing at Mullaghmast, Furnaughts, and Harristown. There are round towers at Kildare, Taghadoo, Kilcullen, Castle-Dermot, and Oughterard. Among other ancient remains are the ruins of numerous religious houses, stone crosses ornamented with curious sculptures, and a great number of feudal castles, many of which are still standing. The castles of Kilkea, Donadea, and Leixlip are still inhabited.

KILDARE, county of Kildare, Ireland, a small market and episcopal town, and previous to the Union a parliamentary borough, is situated in 53° 10' N. lat., 6° 54' W. long., on high ground half a mile W. from the Curragh of Kildare, and 30 miles S.W. from Dublin by the Dublin and Cork railway. The population in 1841 was 1629; in 1851 it was 1298. The town, which is distinguished at a considerable distance by its round tower 130 feet high, is interesting for its antiquities: these include the ruined cathedral, a small part of the chapel of St. Bridget, locally called the 'Fire-House,' in which the 'ceaseless fire,' a relic probably of the Baal worship of the ancient Irish, was maintained till 1220; the ruins of a Franciscan abbey, on the south side of the town; and the round tower before mentioned. The choir of the old cathedral is now used as the parish church and nominal cathedral. In the cathedral is the family vault of the earls of Kildare; in it the dukes of Leinster are buried. Kildare was famous as a seat of learning in the middle ages. The present town consists of one tolerably good street, on which abut several miserable lanes. The chief buildings are the Roman Catholic chapel, a nunnery or friary, the county infirmary, and the market-house, in which petty sessions are held weekly. During the Curragh races the town is well frequented. The market is held on Thursday. Quarter sessions are held twice a year. The old castle of Kildare, built soon after the Anglo-Norman invasion, and subsequently often repaired, still remains.

The see of Kildare is in the ecclesiastical province of Dublin. The diocese comprises parts of the county of Kildare and of King's and Queen's counties. The chapter consists of a dean, precentor, chancellor, archdeacon, 8 prebendaries, and 4 canons. The number of benefices is 44. The foundation of this see is ascribed to St. Conlaeth in the 6th century. The first Protestant bishop of the see was consecrated in 1550. By the Church Temporalities Act the see of Kildare is now united to that of Dublin.

KILFENORA, a bishop's see in the archiepiscopal province of Dublin in Ireland, comprises the baronies of Burrin and Corcomroe, in the county of Clare. The chapter consists of a dean, precentor, and archdeacon. The number of benefices is seven. The see was anciently called Fenabore and Cellumabrach. There is no authentic mention of it till 1265, when one Christian was bishop. Kilfenora was united to Clonfert in 1741, to Killaloe in 1752, and under the Church Temporalities Act it is now united with Killaloe, Clonfert, and Kilmacduagh. The cathedral serves as a parish church; it is a respectable building, with a massive square tower.

The episcopal city of Kilfenora, now a poor hamlet, is situated 13½ miles N.W. from Ennis, in 52° 57' N. lat., 9° 12' W. long. The population in 1841 was 621; in 1851 it was 387. Kilfenora is unquestionably of high antiquity. It is stated in the 'Ulster Annals' that the abbey and town were burned by Murtough O'Brien in 1055. A fragment of the old abbey still remains, and near it are several ancient crosses. Many ruined castles and old forts are in the vicinity of the village. The land about Kilfenora is fertile and well cultivated.

KILGERRAN. [PEMBROKESHIRE.]

KILHAM. [YORKSHIRE.]

KILIA. [BESSARABIA.]

KILKEE. [CLARE.]

KILKEEL, county of Down, Ireland, a post-town and the seat of a Poor-Law Union, in the barony of Mourne, is situated near the mouth of the river Kilkeel, in a mountainous district, in 54° 3' N. lat., 6° 1' W. long., 65 miles N. by E. from Dublin, and had in 1851 a population of 1163, besides 185 in the workhouse. Kilkeel Poor-Law Union comprises 10 electoral divisions, with an area of 81,829 acres, and a population in 1851 of 24,728. The town contains a small church, some Dissenting meeting-houses, and a few shops. Four fairs are held in the year. Near the town the Rosstrevor road skirts the extensive demesne of Mourne Park, the seat of the Earl of Kilmorey.

KILKENNY, an inland county of the province of Leinster, in Ireland, is bounded N. by Queen's County, E. by the counties of Carlow and Wexford, S. by the county of Waterford, and W. by Tipperary. It lies between 52° 13' and 52° 53' N. lat., 6° 55' and

7° 38' W. long. Its greatest length from north to south is 46 miles; its width is greatest in the north, where it measures 24 miles from east to west; across the southern districts the breadth is only 15 miles. The area is 796 square miles, or 509,732 acres, of which 470,102 are arable, 21,126 uncultivated, 13,899 in plantations, 1549 in towns, and 3056 under water. The population in 1831 was 169,945, exclusive of the city of Kilkenny; in 1841 it was 183,349; in 1851 it was 138,778.

Surface, Hydrography, and Communications.—The navigable rivers Barrow and Suir form the greater part of the eastern and the whole of the southern boundary of Kilkenny, and the Nore traverses its entire length from north to south-east. The northern part of the county between the Nore and the Barrow is hilly. The drainage of this district is carried into the Nore by the Dinan River, which rises in the north-eastern extremity of the county, passes through the town of Castlecomer, and falls into the Nore five miles north of Kilkenny city. The valley of the Nore, from the northern extremity of the county to this point, is confined between the declivities of the Castlecomer hills on the east and two groups of similar formation on the west. Between the two latter groups the low ground spreads out into a rich plain near the town of Freshford. Five miles south-east of Ballyragget, near the road from Castlecomer to Kilkenny, is the remarkable cave of Dunmore. The entrance is by a picturesque hollow clothed with brushwood, at the extremity of which the cavern opens by a natural arch fifty feet high. There are several chambers within encrusted with stalactites and traversed by a subterranean stream.

Southward from these hilly districts the valley of the Nore, which to this extent is confined to a narrow strip on each side of the river, expands across the entire central part of the county, spreading into Tipperary on one side and Carlow on the other, with an open undulating surface, characteristic of the great limestone field of which it forms a part. The banks of the Nore in the neighbourhood of Thomastown are steep and wooded, and the open country on each side to a great extent is under demesne. The open district to the west is traversed by the Owenree, or King's River, running eastward from the Tipperary boundary to the Nore, which it joins 3½ miles above Thomastown. The Munster River, which joins the Owenree from the north, forms the boundary between Tipperary and Kilkenny counties for several miles. Beyond this central district the southern part of the county is occupied with hilly and mountainous tracts. On entering this district the Nore changes its course from south to south-east, and runs along a deep valley to the Barrow, which it joins about 15 miles above the junction of their united streams with the Suir. The hilly district included between the Nore and Barrow, and the open country extending from Gowran to Thomastown, is bounded westward by the Coppinagh hills, and towards the Barrow by a range of hills rising as they go southward, and reaching their culminating point in Mount Brandon, which attains a height of 1696 feet near the town of Graigue-na-managh on the Barrow. The scenery on both sides of the Nore from Thomastown to the Barrow, a distance of 13 miles, is in the highest degree picturesque. Between the ranges of Coppinagh and Brandon are several extensive valleys opening towards the Nore, which receives the Clodagh River from this side. A tongue of alluvial land called the Roer, or Rower, extending above two miles in length, spreads out near the junction of the Nore and Barrow; with the exception of this spot, the right bank of the Barrow from Graigue-na-managh to the Nore is precipitous, and in some places clothed with natural wood. Southward from the Nore the banks of the Barrow slope more gradually, and are highly cultivated.

The hilly district west of the Nore and the Barrow rises into mountains of considerable height and extent, of which the principal group, called the Walsh Mountains, lies between the Argula River, running northward into the Nore above Innistioge, and the Kilmaoow River, which runs southward into the Suir above Waterford. This district is chiefly occupied by dairy-farmers. The space between the southern declivities of the Walsh Mountains and the other groups ranging towards Tipperary and the Suir, is occupied to a breadth of from two to five miles by a level tract of rich land. Several fine modern mansions, and ruins of ancient castles and seats, are in this district.

The Suir is navigable for vessels of 120 tons up to the bridge of Carrick, which is situated in Tipperary close to the western limits of this county. At the bridge of Waterford it is in some places eight fathoms deep at low water. Ships of 800 tons ascend the Barrow to New Ross, and small vessels can ply as high as St. Mullins, where the tide ends, and the Barrow navigation for lighters commences. The Nore throughout the upper part of its course from Durrow to Thomastown runs rapidly, and is subject to violent floods, having a fall of about 13 feet in a mile. From Thomastown to the Barrow it is navigable for boats carrying 15 tons. Vessels of 80 tons and upwards have been built at and below Innistioge, at which town the influence of the tide ends.

The county is traversed by a great number of roads, the principal of which are—the Dublin and Cashel mail-coach road, which passes through Urlingford in the north-west of this county; and the mail-coach roads which connect the city of Kilkenny with Dublin, Waterford, Carrick-on-Suir, and Clonmel. A branch railway to Carlow from the Great Southern and Western line has been continued to Kilkenny, a

distance of 25 miles; the Waterford and Kilkenny railway, 28½ miles, has been in operation for some time past.

Geology.—With the exception of the mountain groups of the south, the entire surface of Kilkenny is occupied by the stratified limestone of the central plain of Ireland, overlaid in the hilly districts north of Kilkenny city by the shale and sandstone of the Castlecomer and Killenaule coal-tracts. The coal-formations are nearly co-extensive with the hilly districts. The strata composing the coal-districts consist of alternations of shale with argillaceous ironstone, compact quartzose sandstone, and sandstone slate. Each district constitutes a separate basin, the strata in that of Castlecomer dipping from the edge towards the centre, so that the undermost strata appear on the outer edge and the uppermost in the interior of the district. The coal raised from these beds is anthracite. It is accompanied with culm, which is used extensively for burning lime; the coal itself is used for domestic purposes and malting. The principal works are at Castlecomer, Clough, and Newtown. The limestone border generally follows the foot of these hills, but in some places it rises half way up the acclivity, and in one or two instances forms considerable hills on the exterior. The general colour of the limestone is a bluish-gray: the best for burning is of a blackish colour, and is found near Kilkenny and Thomastown. Iron, manganese, and siliceous are generally diffused through the limestone rock towards the borders of the coal tract, and prevent it from burning. Near Kilkenny it passes into a fine black marble, containing a great variety of impressions of madrepores and of bivalve and turbate shells. These beds are extensively quarried, and the blocks dressed on the spot by a saw-mill driven by the water of the Nore. The marble is manufactured into chimney-pieces, tombstones, &c.; it bears a very high polish, and can be raised in large blocks. Black primitive limestone also occurs at Ballyragget. The tract of limestone skirting the northern bank of the Suir is decomposed along its northern boundary for a distance of several miles into a friable marly rubble, which is extensively used for manure. Marl is found in large deposits in various other parts of the county. The mountain tract occupying the south of Kilkenny consists, with the exception of the primitive group of Brandon, of clay-slate surrounded by sandstone. There are chalybeate springs at Ballyspellin, Kilkenny city, Castlecomer, and several other places in the county. The Ballyspellin spa was celebrated in the last century, and is still used with benefit in cutaneous diseases.

Climate, Soil, and Produce.—The general slope of the surface is to the south-east. Surface waters run off rapidly, and there is very little bog; the air is consequently dry and healthy. Myrtles and the arbutus grow luxuriantly in the southern parts of the county. Only a small portion of Kilkenny is unfit for tillage. In the northern part of the Castlecomer coal-tract the soil is a moory turf lying over a stiff whitish clay. From Castlecomer southward the soil is light and friable as far as Kilkenny, and becomes deep, rich, and capable of any tillage towards Gowran and thence to Thomastown. The neighbourhoods of Durrow and Johnstown contain good tillage lands, and the valley of Freshford has some of the best ground in the county. The soil of the hilly tract south of Freshford is fitter for pasture, and this is also the character of the right bank of the Nore from Kilkenny to Bennett's Bridge. The district watered by the Owenree has an excellent soil, and yields great crops of wheat. The soil of the hilly country on the south is dry and easily cultivated, but it is badly inclosed, and destitute of shelter. Some of the best wheat and meadow lands in the south of Ireland are situated in the level tract along the Suir.

In 1853 there were 24,988 acres producing wheat; 64,002 oats; 11,622 barley, bere, rye, peas, and beans; 22,045 potatoes; 13,135 turnips; 3561 mangels, carrots, parsnips, and other green crops; 81 flax; and 44,479 meadow and clover; making a total of 183,918 acres under crops. The plantations, including an equivalent for detached trees, cover about 18,000 acres, yielding oak, ash, elm, beech, fir, &c. In 1852 on 14,510 holdings there were 15,871 horses, 4758 mules and asses, 78,278 head of cattle, 61,922 sheep, 48,077 pigs, 8876 goats, and 241,176 head of poultry; the total value of the live stock was estimated at 783,015*l.*

The occupations of the people are chiefly agricultural. Flour and leather are the only industrial products of importance. There are breweries and distilleries in the county. The woollen manufactures which formerly flourished in the city of Kilkenny are now extinct. A coarse frieze for home consumption is made among the peasantry.

Divisions and Towns.—Kilkenny is divided into 10 baronies:—Callan south-west, Crannagh west, Fassadinin north-east, Galmoy north-west, Gowran east, Ida south-east, Iverk south, Kells south-west, Knocktopher south and central, and Shillelogher west. The principal towns are CALLAN, Graigue-na-managh, THOMASTOWN, Freshford, CASTLECOMER, URLINGFORD, and Ballyragget. Callan, Castlecomer, Thomastown, and Urlingford are elsewhere described; the others we notice here. The county of the city of Kilkenny forms a separate division.

Ballyragget, population 1170 in 1851, a small town on the left bank of the Nore, 11 miles N. from Kilkenny, has a barrack and a dispensary. The town owes its origin to Ballyragget Castle, the ancient fortified residence of the Viscounts Mountgarret, the ruins of which are of considerable extent. Near the town are Ballyragget

Hall; and Ballyconra, the seat of the Earl of Kilkenny. Ten fairs are held in the year.

Freshford, a small town, situated within a mile of the right bank of the Nore in a fertile country, 9 miles N.W. from Kilkenny, had 2075 inhabitants in 1841, but only 1076 in 1851. The principal part of the town is built in the form of a square around the fair green. Freshford has a fever hospital, a dispensary, a large Roman Catholic chapel, and a very ancient church, which belonged to an abbey founded here by St. Lactan in the 7th century. Fairs are held in August and December.

Gowran, before the Union a parliamentary borough, now a small but improving town of 1000 inhabitants, is situated 7 miles E. from Kilkenny. It was a place of importance for several centuries in consequence of the strong castle of Gowran, built here by the Butlers, dukes of Ormonde. The ruins of the old church, which belonged to an ancient monastery, are interesting from their architecture and the monuments they contain. Five yearly fairs are held.

Graigie-na-managh, or *Graigie*, a town of 1710 inhabitants, is beautifully situated on the right bank of the Barrow, and nearly environed by offshoots from the Brandon Mountains, 13 miles S.E. from Kilkenny. The Earl of Pembroke founded a Cistercian abbey here in 1212, very interesting ruins of which still remain. The transept of the abbey church has been fitted up as a Roman Catholic chapel. A small church crowns a neighbouring hill. The ruined castle of Tinnahinch, once a seat of the Butlers, is situated opposite the town on the Carlow side of the river. Graigue has good weekly markets and a considerable retail trade; it is also much benefited by being a station on the Barrow navigation. In the town is a dispensary. Several fine seats are in the vicinity. Fairs are held seven times in the year.

Innistogue, before the Union a parliamentary borough, now a small but neat town of 725 inhabitants, stands on the left bank of the Nore, 13 miles S. by E. from Kilkenny. It is built in the form of a square, in the centre of which is part of an ancient stone cross. The houses are slated and have lime-trees planted before them. Here are the ruins of a large Augustinian priory. A handsome bridge of 10 arches spans the Nore. Near the town is the demesne and mansion of Woodstock. Ten fairs are held yearly.

Johnstown, a neat little town, 16 miles N.W. from Kilkenny, population 876, contains a church and a Roman Catholic chapel. East of the town is the range of the Culla hills, which near the chalybeate spa of Ballyspellan attain a height of 1156 feet. West of Johnstown the country is flat, dreary, and in many parts boggy.

Piltown, population 606, a pretty little town half a mile long, situated in the centre of the richest part of the valley of the Suir, and about a mile from the left bank of that river, 20 miles S. from Kilkenny. It is watered by a little stream, up which the tide-water of the Suir ascends: all such little estuaries are locally called 'pilla,' hence the name of the town. The houses are neatly built, and each has in front a small flower-garden inclosed with evergreens and other shrubs. The village contains a church, a Roman Catholic chapel, school-house, market-house, dispensary, and police station. Vessels of 70 tons come up to the quay. In the upper part of the market-house is a small museum.

The following villages may be mentioned: the populations are those of the Census of 1851. *Bennett's Bridge*, population 274, is situated on the river Nore, 5 miles S.W. by S. from Gowran, and has its name from a bridge over the Nore at this place. Several ruined castles and modern mansions are in the vicinity. Four fairs are held yearly. *Clogh*, population 486, is situated about 4 miles N.N.E. from Castlecomer, of which parish it forms a part. The Roman Catholics have a chapel. Brewing is carried on. *Glanmora*, 6 miles from New Ross on the road to Waterford, is a small place, containing a large Roman Catholic chapel and a dispensary. *Goresbridge*, population 921 in 1841, reduced to 419 in 1851, is 10 miles E. from Kilkenny; it stands on the right bank of the Barrow. Fairs are held here four times in the course of the year. In the town is a Roman Catholic chapel. *Kells*, a poor place of 419 inhabitants, was formerly a town of importance, and still attracts notice for the ruins of its abbey. It is situated 7 miles S. from Kilkenny, on the banks of the King's River, which flows through a fertile and beautiful valley between Callan and the Nore. The abbey was founded in 1193, and flourished till the reign of Henry VIII. The ruins comprise two large squares, with portions of several towers, and the cloisters, which are in a state of good preservation; the area is still inclosed. The abbot of Kells was a lord of parliament. A fair is held at Kells on July 13th. *Kilmacow*, population 157, is a small hamlet on the Blackwater, a feeder of the Suir. Near the Waterford and Carrick-on-Suir road, are the extensive ruins of Grandison, or as they are now called Graney Castle, which was built by the 8th earl of Ormonde, and taken by the parliamentary forces in the great civil war. *Kilmaganny*, population 462, is 12 miles S.S.W. from Kilkenny, on the road to Carrick-on-Suir; it is situated at the foot of a range of hills which attain a height of 968 feet. It is a neat village, and contains a church, a Roman Catholic chapel, and a dispensary. In its vicinity are the ruins of Clone Castle, Castlehill, and Kerehill, which were originally fortified residences of the Walshes. *Knocktopher*, a poor village of 347 inhabitants, situated 10 miles S. from Kilkenny on the road to Limerick, was formerly a parliamentary borough. The town and

neighbourhood anciently belonged to the Ormonde family, who built here one of their strongholds called Knocktopher Castle. This castle was besieged, taken, and demolished in 1649 in Cromwell's invasion, and is now a heap of ruins. There are some remains of a Carmelite convent, founded by the second earl of Ormonde in 1356; and one of those ancient mounds locally called moats, or duns. The village contains a neat parish church, a Roman Catholic chapel, and a school. *Mooncoin*, population 664, situated near the river Suir, about 4 miles S.E. from Piltown, has a Roman Catholic chapel, a cemetery, and a National school. *Mullinavat*, population 552, on the road to Waterford, 18 miles S. from Kilkenny, contains a Roman Catholic chapel. A little south-east of it is a remarkable conical elevation, called Tory Hill, which is a conspicuous object in this part of the county, and serves for a landmark to sailors. Six fairs are held yearly. *Rosbercon*, a village of 276 inhabitants, is situated on the left bank of the Barrow, opposite New Ross. It has extensive stores and quays along the river, and occupies a favourable situation for trade. Adjacent to it are the picturesque remains of Rosbercon Abbey, the restored chancel of which serves for the parish church. The abbey was a united foundation of the Walshes and Graces in 1267. The tower of the abbey church and part of the wall of the south aisle still remain. The village contains a Roman Catholic chapel, a police barrack, a large distillery, and several schools. Rosbercon is connected with New Ross by a wooden bridge 358 feet long, and a causeway of 150 feet; in the centre of the bridge is a small draw-bridge for the convenience of vessels navigating the river. Six fairs are held in the course of the year. *Stoneyford*, population 500, 8 miles S. from Kilkenny on the King's River, contains a dispensary, a Roman Catholic chapel, and a police barrack. Near Stoneyford is Mount Juliet, the fine seat and demesne of the Earl of Carrick; in the grounds are the ruins of Ballylinch Castle, the old residence of the earls of Carrick.

Kilkenny returns three members to the House of Commons—two for the county and one for the city of Kilkenny. The assizes are held in Kilkenny, and quarter sessions in Kilkenny, Callan, Castlecomer, Piltown, Thomastown, and Urlingford. The county court-house and jail are in Kilkenny, and there are bridewells in Callan, Graigue Thomastown, and Urlingford. Petty sessions are held in 19 places. The police force, consisting of 500 men and officers, is distributed over 8 districts, comprising 61 stations, of which Kilkenny is headquarters. The district lunatic asylum, to which the county is entitled to send 31 patients, is at Carlow. The county infirmary is at Kilkenny, and there are fever hospitals at Kilkenny, Castlecomer, Callan, Ida, Freshford, Kilmaganny, Rosbercon, and Stoneyford, with 20 dispensaries in the towns and chief villages. A savings bank is established in Kilkenny; the total amount owing to depositors on November 20th 1852 was 17,850*l.* 1*s.* The Union workhouses are at Kilkenny, Callan, Castlecomer, Thomastown, and Urlingford. Kilkenny is headquarters of a military district which comprises parts of Tipperary, Wicklow, Waterford, Wexford, Queen's County, and Carlow. There are barrack stations at Callan and Castlecomer. In September 1852, there were 138 National schools in operation, attended by 8125 male and 7579 female children.

History and Antiquities.—On the partition of Leinster among the daughters of William earl of Pembroke, 1247, Kilkenny was allotted to Isabella, the third daughter, who married Gilbert de Clare, earl of Gloucester and Hertford; by him she had issue, among other children, Eleanor, who married Hugh le Despenser the younger, whose grandson Thomas le Spenser sold his castle and manor of Kilkenny to James Butler, third earl of Ormonde, in 1391. The other great proprietors were the families of Grace and Walsh, who lost their estates in the war of the Revolution of 1688. The early history of the county is chiefly occupied with the feuds of the Ormondes, the house of Desmond, and the Graces. On the breaking out of the rebellion of 1641 the county of Kilkenny fell into the hands of the Irish with little opposition, Lord Mountgarret, an influential member of the Butler family, taking the lead among the insurgents. The defection in this county on the accession of king William III. was very general.

Circular stone inclosures of the Pagan era remain on the summits of the hills near Freshford and Kilmacow, and there are various cromlechs and cairns in the county. The remains of raths and earthen tumuli are also of frequent occurrence. There are five round towers, one adjoining the cathedral church of St. Canice in Kilkenny, the others at Kilree, Tullocherin, Fertagh, and Aghavillar. Of the monastic ruins, the most extensive and interesting are those of Jaspont Abbey on the Nore, two miles from Thomastown. This abbey was founded by Donogh, king of Ossory, in 1180, for Cistercian monks, and was liberally endowed. The ruins occupy three acres, and are a fine specimen of Anglo-Norman architecture. The more modern portions of the building are in the pointed style of the 13th century, and are distinguished by their elegance and lightness. The tombs of the founder and of several ecclesiastics still remain. The remains of a Cistercian abbey at Graigue have been already noticed. There are considerable remains of a Dominican convent at Thomastown, of an Augustinian monastery at Innistogie, and of Augustinian priories at Kells and Callan. Of the numerous castles founded by the Anglo-Norman lords, the most considerable is Grandison Castle in Iverk, an ancient seat of the Butlers. It has three round towers towards the

Suir and two courtyards. The castles of Balleen, Ballyragget, Knocktopher, Gowran, Callan, Urlingford, and several others belong to the same family. Courtstown Castle, the chief seat of the Graces, was a building of great extent and splendour; but the ruins have now nearly disappeared. In the barony of Gowran are numerous castles founded by the Puroella. In Knocktopher barony 15 castles of the Walshes are enumerated; and throughout the county are the remains of various other fortalices belonging to the families of Brennan, Cantwell, Morris, Curry, Shortall, and Fitzgerald.

KILKENNY, Ireland, the capital of the county of Kilkenny, a city and county of a city, a market-town, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the river Nore, in 52° 37' N. lat., 7° 13' W. long., 81 miles S.S.W. from Dublin by the Great Southern and Western railway. The population of the city in 1841 was 19,071; in 1851 it was 19,973. The county of the city comprises an area of 17,012 acres, of which 921 acres are in the city, and 16,091 in the rural districts or liberties. The parliamentary borough, which is co-extensive with the county of the city, returns one member to the Imperial Parliament. The borough is governed by 6 aldermen and 18 councillors, of whom one is mayor. Kilkenny Poor-Law Union comprises 21 electoral divisions, with an area of 110,943 acres, and a population in 1841 of 53,384; in 1851 of 46,710.

Kilkenny, signifying the church of Kenny or Canice, takes its name from the cathedral church of the diocese of Ossory, founded here about the end of the 12th century. The place was selected by the early Anglo-Norman invaders for the site of a castle, which when partially built was destroyed by Donald O'Brien, king of Thomond, in 1193. William Marshal, earl of Pembroke, founded the present castle in 1195. The castle occupies a commanding site on the right bank of the Nore, which is about 40 feet high, and faced with masonry. The cathedral is seated on a gentle eminence on the same side of the river, at the northern extremity of the city. The small river Bregah running into the Nore about midway between these points divides the city of Kilkenny proper from Iriestown, or St. Canice; Kilkenny having originally been dependant on the castle, Iriestown on the cathedral. A large suburb occupies the opposite side of the river, and is connected with Kilkenny proper and Iriestown by two handsome bridges. Several religious houses were founded here in the 13th and 14th centuries. Kilkenny was then a place of great importance as a frontier town of the Pale, and a place of assembly for councils and parliaments. At the parliament held here in 1367, before Lionel duke of Clarence, was passed the celebrated statute of Kilkenny, by which the ancient Irish code called the Brehon Law was abolished, although it continued practically in operation until the time of James I. The title of earl of Ormonde and the Kilkenny estate have been in the family of the Butlers since 1391. The town was walled in by Robert Talbot, a nephew of the Earl of Ormonde, in 1400. Parliaments and vice-royal courts continued to be held in Kilkenny until the breaking out of the rebellion of 1641, when it became the head-quarters of the Roman Catholic party. On the 23rd of March 1650 the Parliamentary army, commanded by Oliver Cromwell, appeared before the town, which was garrisoned for the Roman Catholic party by Colonel Walter Butler. Cromwell, having been thrice repulsed in his assaults on the town, was about to abandon the siege when the mayor and townsmen admitted his forces into Iriestown. On the 28th of March Ireton came up with 1500 men, on which the garrison surrendered on honourable terms, Cromwell himself complimenting them on their gallantry.

The cathedral church of St. Canice is a cruciform building surmounted by a low tower. It extends from east to west 226 feet, and from north to south 123 feet. The chapel of St. Mary, in the north transept, serves as the parish church. The oldest portions of the building date from the early part of the 13th century. The nave is divided from the aisles by pointed arches springing from black marble columns, between which are numerous altar-tombs. The choir, with the chancel, is 77 feet in length; it has oak fittings and a noble east window. Of the original castle there remain three massive towers worked into large additions, in the French taste of the 17th century, made by James duke of Ormonde in 1682. The building occupies three sides of a quadrangle, having a garden and fountain in front, and a lofty terrace towards the Nore. The principal apartment is the picture gallery, 180 feet in length, which contains numerous portraits of historical interest. This apartment commands magnificent views of Kilkenny and the valley of the Nore. The abbey church of St. John's has been converted into a parish church, and retains a good deal of the character of the original building. Black Abbey has been partly restored and converted into a Roman Catholic church.

Kilkenny was first incorporated by William Marshal the elder, and Iriestown by King Edward IV. Their governing charters are respectively of the 3rd and the 7th James I. By the provisions of the Municipal Reform Act they were formed into one borough. Prior to the Union of Great Britain and Ireland, Kilkenny and Iriestown returned two members each to the Irish Parliament. Assizes for the county and quarter and petty sessions are held in the town. The city jail is a small building; but that for the county, situated on the west of the town, is spacious and well constructed.

The town is well built, and has a busy and cheerful appearance, particularly that portion of it which constitutes Kilkenny proper. The building material is usually stone whitened or dashed with rough-cast. The principal buildings besides those already noticed are the two parish churches, seven Roman Catholic chapels, two monasteries, a presentation convent, a Presbyterian and a Methodist meeting-house, the infirmary, the Fever hospital, the Union workhouse (which has accommodation for 1500 inmates), and the barracks. Along the bank of the river there is a fine promenade called the Mall, which is above a mile in length, and has been much improved within the last few years. The city is head-quarters of a military district, the station of a resident magistrate, and the head-quarters of the district police. There is a savings bank. Fairs, all toll free, are held on March 28th for cattle, Thursday after Whitsuntide for frieze, Thursday after Trinity Sunday for cattle, November 10th, and on the first Thursday of every month; markets are held on Wednesday and Saturday.

The manufacture of blankets, coarse woollens and linens, and whisky has declined; the chief industrial establishments are flour-mills, breweries, and tan-yards. The provision trade is carried on extensively. Coal and black marble are raised in the neighbourhood. The coal is sulphurous, and burns without smoke or flame. The marble is much used for chimney-pieces and ornamental purposes; the streets of Kilkenny are paved with it.

The establishments for superior education are the Roman Catholic college of St. Kyran in the Cork Road, which had 60 scholars in 1852, and the Endowed Grammar school, which is also called the College. The Grammar school was founded by Pierce Butler, earl of Ormonde and Ossory, and his wife, the lady Margaret Fitzgerald, in the 16th century; it was further endowed by the duke of Ormonde in 1684. The number of scholars in 1853 was 76. Large schools are attached to the convent; there are also several other schools and a subscription library in the town.

KILKHAMPTON. [CORNWALL.]

KILLADYSERT, or **KILDYSERT**, Clare county, Ireland, a village and the seat of a Poor-Law Union, is situated on the right shore of the estuary of the Fergus, opposite the island of Innisherk, 12 miles S. by W. from Ennis. The population in 1841 was 604; in 1851 it was 440, besides 522 inmates of the Union workhouse. Killadysert Poor-Law Union comprises 11 electoral divisions, with an area of 62,817 acres, and a population of 24,018 in 1841, and 16,807 in 1851. A landing-pier and quay have been erected here by the commissioners for the improvement of the Shannon.

KILLALA, county of Mayo, Ireland, a small market and episcopal town, and the seat of a Poor-Law Union, is situated at the mouth of the river Moy, on the left shore of Killala Bay, 7 miles S. by E. from Ballina, in 54° 12' N. lat., 9° 11' W. long. The population in 1851 was 970, besides 1079 in the workhouse. Killala Poor-Law Union contains 8 electoral divisions, with an area of 104,882 acres, and a population in 1841 of 25,249; in 1851 of 14,120.

The town consists chiefly of three streets diverging from the summit of a flat-topped hill, on which stands the old cathedral dedicated to St. Patrick, a small plain structure, near which is an ancient round tower. The other places of worship are a large Roman Catholic chapel and a small Methodist chapel. The fisheries employ many of the inhabitants. In the French invasion of Ireland in 1798 the town of Killala was held for a month by the French and the insurgents who joined them. The market is held on Saturday, and fairs are held on May 6th, August 17th, and November 8th.

The bishopric of Killala was founded by St. Patrick; it has been united to the see of Achonry since 1607, and to that of Tuam since 1833. It lies chiefly in the county of Mayo, and partly in that of Sligo, and contains 14 benefices. The chapter consists of a dean, archdeacon, precentor, and five prebendaries. The old episcopal palace is now occupied as a private residence.

KILLALOE, county of Clare, Ireland, a market and episcopal town, is situated on the right bank of the Shannon, which is here crossed by a bridge of 19 arches, connecting the town with Ballina on the Tipperary side of the river, in 52° 48' N. lat., 8° 27' W. long., at a distance of 23 miles E. from Ennis, and 12 miles N. by E. from Limerick. The population in 1851 (including the suburb of Ballina, in the county of Tipperary) was 2230.

Killaloe is a place of great antiquity, and was for a long time the capital of the royal O'Briens of Thomond, one of whom in 1054 erected a timber bridge here over the Shannon. Brian Boroihme and many of his ancestors and successors resided at Kincoora, a mile north of Killaloe, on the south shore of Lough Derg. The town consists mainly of long lines of poor houses scattered along the slopes of hills and towards the new pier. It is a principal station of the Inland Steam Navigation Company. The works for the improvement of the Shannon have facilitated the navigation, which is now open between Limerick and the northern extremity of Lough Allen, a distance of 158 miles. Of this distance, 129 miles, from Killaloe to Leitrim, are navigable by large steamers. The communication with Limerick is by packet and passenger boats. Quays, docks, and warehouses have been erected at Killaloe. There is a considerable traffic along this line of navigation in the conveyance of passengers and of agricultural and mineral produce. The public buildings are—the Roman Catholic chapel, the barracks, the hotel, and the cathedral. There are marble-mills, a

slate-yard, a station and docks for the Limerick packets, and a steam-boat pier and docks. Killaloe was formerly of some importance as commanding an important pass: here in 1691 Sarsfield intercepted the artillery of William III. on its way to the siege of Limerick. Markets are held in Killaloe every Tuesday between Christmas and Easter, and fairs on Easter Tuesday, Whit-Tuesday, September 3rd, and October 20th.

The diocese of Killaloe comprises portions of the counties of Clare, Tipperary, King's County, Galway, and Limerick; and includes 70 benefices. The chapter consists of a dean, precentor, chancellor, treasurer, archdeacon, and six prebendaries. The income of the bishop is 3870*l.* St. Flannan, a disciple of St. Lua, or St. Molua (who founded a cell or chapel here in the beginning of the 7th century, and from whom the name of the town is said to be derived), was consecrated at Rome first bishop of this see about the year 639. In 1762 the see of Kilfenora was united to that of Killaloe. Under the Church Temporalities Act the united sees of Clonfert and Kilmacduagh have been also annexed to Killaloe. Of the united sees Killaloe and Kilfenora belong to the archiepiscopal province of Dublin; Clonfert and Kilmacduagh to the province of Armagh. The cathedral, which was rebuilt by Donald O'Brien, king of Thomond, in 1160, is a cruciform structure with a square tower, situated in an open space close to the river. The episcopal palace is a handsome residence in a well-planted demesne. The stone-roofed cell of St. Lua stands near the cathedral. It is remarkable as a specimen of the building of the 7th century. On an island below the bridge, and in front of the bishop's grounds, is another stone-roofed church of still higher antiquity.

KILLAMARSH. [DERBYSHIRE.]

KILLARNEY, county of Kerry, Ireland, a market-town and the seat of a Poor-Law Union, is situated on a level tract a mile and a half distant from the eastern shore of the Lower Lake of Killarney, in 52° 4' N. lat., 9° 30' W. long., at a distance of 17 miles S. by E. from Tralee, and 186 miles S.W. from Dublin by the Great Southern and Western railway. The population of the town in 1841 was 7127; in 1851 it was 5962, besides 4425 inmates of the workhouses. Killarney Poor-Law Union contains 31 electoral divisions, with an area of 251,287 acres, and a population in 1851 of 49,720.

The town consists of two principal streets at right angles, with several smaller streets. The best part of the town is called Kenmare-place, near which is the entrance to Lord Kenmare's demesne, a finely-timbered park. Besides the church there are a large Roman Catholic chapel, a nunnery, and two reading-rooms. The general appearance of the town is neat, and, during the summer and autumn, it becomes very animated in consequence of the influx of tourists who flock from all parts to enjoy the beautiful scenery of the famous lakes of Killarney. Quarter-sessions and weekly petty-sessions are held here. The court-house is a handsome stone edifice, having a bridewell attached. The market-house is an old building, now chiefly appropriated to the sale of linens. There are a fever hospital, a dispensary, an almshouse for aged women, a Roman Catholic Free school, a Free school connected with the Established Church, and a National school.

KILLARNEY, LAKES OF. [KERRY.]

KILLASHANDRA. [CAVAN.]

KILLASHEE. [LONGFORD.]

KILLENAULE. [TIPPERARY.]

KILLIECRANKIE. [PERTSHIRE.]

KILLILEAGH. [DOWN.]

KILLINEY. [DUBLIN, County of.]

KILLLOUGH. [DOWN.]

KILLYBEGS. [DORSET.]

KILMACDUAGH, a bishop's see in the archiepiscopal province of Armagh, in Ireland, lies wholly within the county of Galway, and contains four benefices. The chapter consists of a dean, provost, archdeacon, and prebendary.

The see was founded by St. Colman, surnamed Mac Duagh, about the end of the 6th century. It was united to the see of Clonfert in 1582; and under the Church Temporalities Act these united dioceses are now annexed to the sees of Killaloe and Kilfenora. The ruined cathedral, some remains of the abbey founded by St. Colman, a round tower which leans remarkably from the perpendicular, and some other old ecclesiastical buildings are situated about 2½ miles S.W. from Gort, near the boundary of the county Clare.

KILMACTHOMAS, county of Waterford, Ireland, a post-town and the seat of a Poor-Law Union, is situated on the slope of a steep hill above the river Mahon, 12 miles W. by S. from the city of Waterford, in 52° 12' N. lat., 7° 24' W. long. The population in 1851 was 1057. Kilmacthomas Poor-Law Union contains 16 electoral divisions, with an area of 64,478 acres, and a population in 1851 of 18,722. The mail-coach road from Waterford to Cork and Youghal formerly passed through Kilmacthomas, but in order to avoid the steep hill on which it stands, a new line of road has been opened, which leaves the town considerably to the northward. Kilmacthomas has a dispensary; petty sessions are held in the town; fairs are held on May 12th, August 12th, and December 6th.

KILMAINHAM. [DUBLIN, County of.]

KILMALLOCK, county of Limerick, Ireland, a market-town and the seat of a Poor-Law Union, is situated at the junction of the high roads from Limerick and Cashel to Charleville, 19 miles S. by E. from

Limerick by road, and 39 miles by the Limerick and Waterford, and Great Southern and Western railways; in 52° 23' N. lat., 8° 33' W. long.: the population in 1851 was 1074. Kilmallock Poor-Law Union is partly in the county of Cork and partly in the county of Limerick, and comprises 27 electoral divisions, with an area of 140,357 acres, and a population in 1851 of 48,779.

Kilmallock is one of the oldest towns in Ireland; it is said to have sprung up around a monastery founded here by St. Malachi in the 6th century, and of which a portion still remains. It is particularly associated with the history of the Desmond branch of the Geraldines, who made it their chief town and rendered it a place of great strength and splendour. Of its now ruined mansions none were erected later than the reign of James I.; the castles, gates, and walls date from the time of the Geraldines; the ecclesiastical remains claim a much earlier origin. The walls were strengthened with towers and pierced with four lofty castellated gate-entrances opening upon the extremities of the two principal streets, which were uniformly built and crossed each other at right angles. Two of these gates, several of the towers, and a considerable portion of the walls are still standing. Before the Union Kilmallock returned two members to the Irish House of Commons. The present town consists of a single street, which contains many houses of ancient date externally unaltered. These houses are built of hewn limestone, and are three stories high; they are ornamented with battlements, mullioned windows set in tasteful mouldings, and arched doorways. Of the larger mansions or castles two only remain. Of the ecclesiastical remains the most ancient is the abbey church of St. Peter and St. Paul, which stands on the bank of a little river within the town walls; the choir is now used for the parish church, and is the only portion of the structure that has a roof. Of the Dominican abbey, which was founded in 1291, and stood outside the walls, only the roofless church and part of the cloisters remain. This church is a large cruciform structure of massive but graceful architecture. A tall steeple rises over the intersection of the nave and transept: in the choir is the tomb of the branch of the Fitzgeralds who called themselves White Knights. In modern times the remains of this fine old town have served as a quarry, and many of the houses have been disfigured or reduced in their proportions. The town, though advantageously situated, has little trade. Fairs are held on March 25th, Whit-Tuesday, July 6th, November 8th, and December 4th.

KILMARNOCK, Ayrshire, Scotland, a municipal and parliamentary burgh and market-town, in the district of Cunningham, is situated in 55° 38' N. lat., 4° 30' W. long., 22 miles S.W. from Glasgow by road, and 3½ miles by the Glasgow and South-Western railway. The population of the municipal burgh in 1851 was 19,201: that of the parliamentary burgh was 21,443. The burgh is governed by a provost and 15 councillors; and conjointly with Dumbarton, Port-Glasgow, Renfrew, and Rutherglen, it returns one member to the Imperial Parliament.

Kilmarnock is situated in a fertile and populous district, and is well supplied with coal from the numerous mines in the vicinity. During this century several Acts of Parliament have been passed for cleansing, lighting, and paving the streets, and the town now contains many handsome streets and public buildings. The inhabitants were formerly engaged in the manufacture of 'broad bonnets.' The town is now the principal manufacturing town of Ayrshire for woollen and cotton goods, and is noted for the weaving of shawls and carpets, of which it exports a very large quantity.

In the centre of the town is a handsome cross, with a marble statue of Sir James Shaw, Bart. In March 1851 there were 18 places of worship in the town, of which 4 belonged to the United Presbyterian Church, 3 to the Established Church, 3 to the Free Church, and 1 each to Original Seceders, Independents, Baptists, the Evangelical Union, and Roman Catholics. Besides other schools Kilmarnock has a flourishing academy, founded in 1727, and of which the present building was erected in 1807. Its revenue from endowment is 59*l.* a year: the number of scholars in 1851 was 360. The town library is rich in the various branches of history. There are a mechanics institute, philosophical institution, and an Athenæum, which together in 1851 had 497 members, and 2100 volumes in the libraries attached to them. The public have access to a gallery of paintings containing the works of the native artists, John and William Tannock, and many fine paintings by the old masters. Near the town are the ruins of Dean Castle and Craufurdland Castle.

KILMAURS. [AYRSHIRE.]

KILMORE, a bishop's see in the archiepiscopal province of Armagh, in Ireland, comprises portions of the counties of Fermanagh, Leitrim, and Cavan, and a small part of the county of Meath, and contains 50 benefices. It has a dean and archdeacon but no chapter.

The see was founded in the 13th century, the bishops taking their title from a small village named Triburna. In 1454 the parish church of Kilmore was made a cathedral, and gave title to the bishop. The see is now united to those of Ardagh and Elphin. Kilmore House, the residence of the bishop, is a large mansion situated in a fine demesne three miles south-west from Cavan. Adjoining the palace is the very small village of Kilmore, from which the see is named.

KILPATRICK. [DUMBARTONSHIRE.]

KILREA. [LONDONDERRY.]

KILRENNY. [FIFESHIRE.]

KILRUSH, county of Clare, Ireland, a sea-port town and the seat of a Poor-Law Union, is situated at the head of a small bay on the north shore of the estuary of the Shannon, 26 miles S.W. from Ennis, 145 miles W.S.W. from Dublin, in 52° 33' N. lat., 9° 29' W. long. The population in 1851 was 4471, besides 4796 inmates of the workhouses. Kilrush Poor-Law Union contains 27 electoral divisions, with an area of 136,788 acres, and a population in 1851 of 51,247.

Kilrush Harbour is the first above the mouth of the Shannon, and the roadstead opposite it, sheltered by Scatterry Island, is the first secure anchorage from westerly gales. The pier, which projects in the direction of Hog Island from the entrance of the creek, has been recently extended, and affords shelter and accommodation to sailing-craft and steamers. Kilrush is a market for the sale of the in-shore and deep-sea fisheries of the Milltown Malbay fishing district. Large quantities of fish are shipped to Limerick. A considerable trade is also carried on with Limerick in turf, cut in the extensive bog which extends northward from Kilrush to Dunbeg Bay. The town is much resorted to for the benefit of sea-bathing. It has a good weekly market on Saturday, and annual fairs on May 10th and October 12th. The town consists mainly of two wide streets running along two sides of a large square, the centre of which is occupied by a handsome market-house. There are a new church, a spacious Roman Catholic chapel, a custom-house, a bridewell, police barracks, fever hospital, workhouse, and several large corn-stores. The Methodists have a chapel, and there are several schools. Quarter and petty sessions are held in the town. The island of Scatterry abounds in ancient ecclesiastical remains, among which is a round tower 120 feet high. The mansion and extensive demesne of C. M. Vandaleur, Esq., the proprietor of Kilrush, are close to the town. Steamers ply regularly between Kilrush and Limerick. Kilrush is one of the stations of the Royal Western Yacht Club.

KILSYTH. [STIRLINGSHIRE.]

KILWINNING. [AYRESHIRE.]

KILWORTH. [CORK.]

KIMBOLTON. [HUNTINGDONSHIRE.]

KINCARDINE. [KINCARDINESHIRE; PERTHSHIRE.]

KINCARDINESHIRE, sometimes called the Mearns, a maritime county in the east of Scotland, lying between 56° 46' and 57° 9' N. lat., 2° 3' and 2° 47' W. long., and bounded N. and N.W. by Aberdeenshire, S. and S.W. by Forfarshire, and E. by the ocean. Its greatest length along the sea-shore, from the Bay of Aberdeen on the north to the mouth of the Esk on the south, is about 30 miles; and it stretches inland 22 miles. Its area is 262,250 acres, or 394 square miles. The population in 1841 was 33,075; in 1851 it was 34,598. The county returns one member to the Imperial Parliament.

Coast-line.—The coast from the mouth of the North Esk to Bervie is generally low; all along it are rocks, mostly covered at high water. *Johnshaven*, on this part of the coast, is a small fishing village in Benholm parish, with a small harbour, to which belong a few sloops engaged chiefly in importing coal and exporting grain. A mile south of Bervie is the village of *Gourdon*, where is an excellent harbour, at which large quantities of grain are annually shipped. There are 17 feet of water here at high tide, and a good quay, to which vessels drawing 12 feet of water may come at low tide. Several fishing-boats belong to Gourdon. From Bervie to Stonehaven the coast is formed of a chain of cliffs, which rise from 150 to 300 feet out of the sea. There is no beach except where there are occasional breaks in the cliffs, forming little bays with a coarse gravelly shore. In *Dunnottar* parish are some remarkable caves, and the cliffs here are much frequented by sea-fowl. In this part of the coast are two small fishing villages, *Catterline* and *Crawston*, at each of which are small harbours. From Stonehaven northward the coast continues bold and rocky, but the indentations in the rocks and occasional level shores are more frequent and extensive, and there are in this part of the county many natural harbours. *Skateraw*, *Portlethen*, and the *Cove* may be mentioned as small harbours, chiefly for fishing boats.

Surface, Hydrography, and Communications.—The Grampian range, the extremity of which forms the promontory of Girdleness in this county, occupies the western, central, and more northern parts of Kincardineshire. To the south of the Grampians the county descends into what is locally termed the 'How or Hollow of the Mearns,' which is the eastern extremity of Strathmore. Strathmore commences at Stonehaven in this county, and extends in a south-westerly direction a distance of 80 miles. [GREAT BRITAIN.] There are high grounds all along the southern part of the coast, a little way inland, the more important of which are the Hills of Garvock, Bruxy Hill, and Langmuir Law.

The principal rivers are the Dee on the north [ABERDEENSHIRE] and the North Esk on the south [FORFARSHIRE]. The Bervie River rises in the Grampians, and after a winding course in a south-eastern direction falls into the sea at Bervie. The rivers Cowie and Carron both traverse that part of Strathmore immediately north of the district watered by the Bervie. The northern part of the county is abundantly watered by the tributaries of the North Esk. The river Aven is part of the north-western boundary of the county. The Dye, formed by the numerous mountain streams of the Grampians in the north-west, joins the Aven a few miles before it falls into the Dee.

In all these streams there are salmon fisheries. The roads of the county are numerous and kept in fair order. The Aberdeen railway crosses the Esk near Marykirk, and traverses the county by Laurencekirk and Fordoun to Stonehaven, after which it follows the line of the northern part of the coast. By the southern lines in connection with this railway the county has direct communication with all parts of the kingdom.

Geology, Mineralogy.—On the coast the prevailing rock is gneiss. Porphyry is occasionally found, and quarries of it are worked in *Dunnottar* and *Arbuthnot*. Granite is found on the coast, and south of Stonehaven there is a great deal of conglomerate. Sandstone is found occasionally. In the northern part of the county granite prevails. In the south specimens of red-freestone, quartz, felspar, granite, mica, porphyry, whinstone, and limestone are to be found in every kind of position and variety. Percelein clay of fine quality is found on the banks of some of the smaller streams in this part of the county. Iron-ore has been found near the village of Dalboy. In the parish of Laurencekirk and many other places there are quarries of limestone.

Climate, Soil, Agriculture.—The prevailing winds are the north and north-east in winter, the south and south-east in spring, and south-south-west and north-west in summer and autumn. The climate is generally salubrious.

Strathmore contains about 50,000 acres of comparatively low, fertile, and generally well-cultivated land, comprising about 8000 acres of thriving plantations. Along the coast, from the North Esk River to Stonehaven, the soil consists chiefly of a deep strong loam on a clay bottom, and a large portion of this district is in a high state of cultivation, the remainder being occupied with pasture, moor, and woodland. A third arable district is comprised within the narrow valley of the Dee. Cattle and sheep are extensively raised in Strathmore and on the high lands in the north-west of the county. Of late years the agriculture has been much improved, and there has in consequence been a very considerable rise in the value of land. The ordinary term of agricultural leases is 19 years. Farm buildings are but indifferent, and there is a deficiency of inclosures throughout the county.

Divisions, Towns, &c.—The county is divided into 19 parishes. The principal towns are Bervie and Stonehaven.

Stonehaven or *Stonehove Marischall* is the county-town and is reputed a burgh of barony. It is conveniently situated near the mouth and on both sides of the river Carron, about 16 miles S. from Aberdeen, in 56° 56' N. lat., 2° 12' W. long. The population in 1851 was 3240. Stonehaven has a small but convenient harbour. There is little trade except that of importing coal. About 70 or 80 fishing boats belong to the place. The town is well supplied with water and is lighted with gas. The episcopal chapel, which is in the form of a Greek cross, is one of the oldest in Scotland. The Episcopalians have recently erected handsome schools. There are two chapels of the Free Church, and one chapel for United Presbyterians, which have schools attached, besides which there is Donaldson's Free school. The public buildings are the county court-house, and the jail. At Stonehaven is a station of the Aberdeen railway. The place is frequented as a summer resort by sea-bathers. Jews-harps and tobacco-pipes are made here, and there are a fish-curing establishment, a brewery, and a power-loom linen weaving factory. Hand-loom weaving is carried on. The old market-cross bears the armorials of the Earls Marischall. Near the town, in Feteresso parish, is the tomb of Malcolm I.

The following are the only villages which require to be noticed besides those already mentioned on the coast; the populations are those of 1851:—

Kincardine, in the parish of Fordoun, was at one time the county-town, and had its chapel, its cross and its ports or gates, but is now a poor place having only a few houses. In the neighbourhood are traces of the Castle of Kincardine, where Kenneth III. is said to have been murdered, and where Baliol resigned the crown to Edward I. *Laurencekirk*, population of the village, which is a burgh of barony, 1611, is 30 miles S.W. from Aberdeen. Several fairs are held here in the course of the year. In addition to linen fabrics it produces the well-known snuff-boxes which bear its name. There are the parochial school and two Free schools, an episcopal chapel, three public libraries, and several friendly societies. At Laurencekirk is a station of the Aberdeen railway.

History, Antiquities, &c.—Kincardineshire has been the scene of few events of national interest. The Romans were defeated in Strathmore by Galgacus. David II. landed at Bervie. The duke of Cumberland traversed and occupied this part of the country in 1745. In nearly every part of the county are to be found cairns, memorial stones, stone circles, and other vestiges of the aboriginal inhabitants of our island. There are several traces also of Roman camps; and Roman coins and arms have been found. Of the antiquities of more modern times there remain towers and castles of the barons and landowners of the feudal age. *Dunnottar Castle*, in the parish of *Dunnottar*, once a strong fortress, is almost surrounded by the German Ocean. In the reign of James II. it was used for some time by the Scottish Privy Council as a place of confinement for nonconformists, 160 of whom were imprisoned at one time in a large dungeon, having a window opening to the sea over a high precipice. In this dungeon many of them died and a tomb-stone in the neighbouring

churchyard still preserves their names. It was in this churchyard, and while repairing the above tombstone, that Paterson the prototype of 'Old Mortality' was first met by Sir Walter Scott.

Industry, &c.—The cod and ling fishery along the coast commences in October and closes in July; and the haddock, skates, and turbot fishery, which is carried on with great activity, usually begins on the first of May, and closes about the middle of July. The haddock fishery is also carried on successfully in the winter months; the greater portion of the fish are smoke-dried and exported. The herring-fishery has declined. The weaving of dowlas, household linen, &c., is the chief manufacture of the county, the goods being made mostly for the merchants in Aberdeen and Dundee.

Religious Worship and Education.—According to the 'Returns of the Census' taken in March 1851 there were then in Kincardineshire 48 places of worship, of which 18 belonged to the Established Church, 16 to the Free Church, 7 to Episcopalians, 3 to United Presbyterians, 2 to Independents, and 2 to Baptists. The total number of sittings provided was 23,775. The number of Sabbath schools was 90, of which 36 were connected with the Free Church, 32 with the Established Church, 6 were supported by Episcopalians, 3 by United Presbyterians, 3 by Independents, and 2 by Baptists. The number of Sabbath scholars was 4732. Of day schools there were in the county 124, namely, 77 public schools with 3825 scholars, and 47 private schools with 1331 scholars. There were 3 evening schools for adults attended by 42 pupils, a useful knowledge society with 40 members, and a literary society which had 1400 volumes in its library.

Savings Banks.—In 1852 there were two savings banks in the county at Fordoun and Stonehaven. The amount due to depositors on 20th November 1852 was 29,397*l.* 12*s.* 11*d.*

KINETON. [WARWICKSHIRE.]

KING GEORGE'S SOUND. [AUSTRALIA.]

KING-TCHEOU. [CHINA.]

KING-TE-CHING. [CHINA.]

KINGHORN. [FFRSHIRE.]

KINGSBRIDGE, Devonshire, a market-town and the seat of a Poor-Law Union, in the parish of Kingsbridge, is situated at the head of an estuary of the English Channel, in 51° 17' N. lat., 3° 46' W. long., distant 32 miles S. by W. from Exeter, and 208 miles S.W. from London. The population of the parish of Kingsbridge in 1851 was 1679. The living is a vicarage annexed to the vicarage of Churchstow, in the archdeaconry of Totnes and diocese of Exeter. Kingsbridge Poor-Law Union contains 26 parishes and townships, with an area of 71,323 acres, and a population in 1851 of 21,377.

Kingsbridge is united with the small town of Dodbrooke by a bridge, the two places forming in effect one town. Kingsbridge consists chiefly of one street, built on a hill on the Modbury and Plymouth road; Dodbrooke, also of one street, on the Exeter road. The harbour gives accommodation to small vessels. In Kingsbridge are places of worship for Independents, Baptists, Wesleyan Methodists, and Quakers; a Free school, a National school, Crispin's Free Grammar school for 20 boys, which has four exhibitions of 50*l.* each, and in 1853 had 40 scholars; and other educational institutions. The exports consist chiefly of cider, corn, malt, and slate; coal is the principal article of import. The market is held weekly on Saturday, for corn, butchers' meat, and provisions; the corn-market is one of the largest in the county. An annual fair is held in July.

KINGSCLERE, Hampshire, a market-town and the seat of a Poor-Law Union, in the parish of Kingsclere, is situated in 51° 19' N. lat., 1° 14' W. long., distant 32 miles N.N.E. from Southampton, and 54 miles W.S.W. from London by road. The population of the parish of Kingsclere in 1851 was 2885. The living is a vicarage in the archdeaconry and diocese of Winchester. Kingsclere Poor-Law Union contains 15 parishes, with an area of 43,306 acres, and a population in 1851 of 8903. Kingsclere is a small town of mean appearance. The parish church, a cruciform edifice of Norman character, with a central tower, was restored in 1848-49. The Free school for boys was endowed by Sir James Lancaster in 1618, with 20*l.* per annum. There is a National school for girls. Some trade in malt is carried on: a small corn market is held on Tuesday, and there are two fairs in the year. At Kingsclere was anciently a residence of the West Saxon kings; and a royal residence was in the neighbourhood in the time of King John.

KINGSCLIFFE. [NORTHAMPTONSHIRE.]

KING'S COUNTY, Ireland, an inland county of the province of Leinster, is bounded N. by Westmeath, E. by the county of Kildare, S. by Queen's County and Tipperary, and W. by the river Shannon, which separates it from the counties of Galway and Roscommon. Its greatest length from east to west is 40 miles; from south to north, 39 miles. It lies between 52° 51' and 53° 26' N. lat., 6° 59' and 8° 3' W. long. The area contains 493,985 acres, of which 337,256 are arable, 145,836 uncultivated, 8258 under plantations, 902 in towns, and 1733 under water. The population in 1831 was 144,225; in 1841 it was 146,857; and in 1851, 112,080.

Surface and Hydrography.—The county is very irregular in its outline; it extends east and west from Kildare to the Shannon, and thence southward to the Slieve-Bloom and the northern offshoots of the Devil's Bit Mountains. A series of low limestone hills, running in a north-easterly direction from the northern extremity of the Slieve Bloom by Geashill, divides the northern portion of the county into

two districts of unequal area, of which one slopes eastward to the Barrow, and the other westward to the Shannon. In the north-eastern part of the county the conical hill of Croghan rises 500 feet above the surrounding country. From the northern and eastern declivities of Croghan Hill the ground slopes towards the basin of the Boyne.

From Croghan and the Yellow River to the Boyne, which forms the north-eastern boundary of the county, is a tract of well-cultivated country, containing the market-town of Edenderry. A branch from the Grand Canal is carried to this town, which is situated above half a mile north from the main line. The district south of the Grand Canal, between Geashill and the county of Kildare, is occupied by a portion of the Bog of Allen. This tract, extending about twelve miles every way, is divided into two basins by the Philipstown and Cushina rivers, which discharge themselves through the Feagile and Little Barrow rivers into the Great Barrow, which forms the southern boundary of the district. Each of the rivers just mentioned has margin of arable land varying from half a mile to three miles in breadth. The valley of the Barrow is highly cultivated, and to a considerable extent occupied by the demesnes of the resident gentry. At Port-arlington the Barrow is shallow and rapid, having a fall of 16 feet between this place and its junction with the Little Barrow.

West from the range of Geashill the country slopes to the valley of the Brosna, which, flowing from Lough Ennil in West Meath, traverses the north-western portion of the county, and after receiving the Clodagh and the Broughill, or Silver River, from the district between Geashill and the Shannon, flows into that river at Shannon Harbour. The line of the Grand Canal, which joins the Shannon at the same point, is nearly parallel to the course of the Brosna after its junction with the Clodagh. The bogs which stretch along the southern side of the Grand Canal occupy an area of 11,588 acres. They are disposed in three principal tracts, separated from one another by low hills of limestone-gravel, and bounded on the south by the hill of Clodagh. South of the hill of Clodagh five principal fields of bog extend over an area of about 24,000 acres. This tract is drained by the Broughill River, which is formed by two streams, one issuing from Lough Annagh on the borders of Queen's County, and the other from the western end of a depression in the Slieve-Bloom called the Black Gap, near the small town of Kinnitty. The Broughill River, passing under the Grand Canal, runs into the Brosna about three miles below the junction of the Brosna with the Clodagh, which also passes under the canal. The valley of the Brosna is well cultivated. The river winds between undulating banks which form a margin of considerable breadth on each side free from bog, and towards West Meath spread into a well-cultivated open country about the town of Clara, which is situated on the river near the border of the county. The district between the Brosna and West Meath, with the exception of the arable margin of the river, is almost wholly occupied by bogs, the most eastern of which, the bog of Kilmaleady, now generally known as the 'moving bog,' in the year 1821 flowed nearly a mile and a half down an adjoining valley. A margin of arable land borders the Shannon also, and several elevated tracts of limestone-gravel separate the several districts of bog from each other.

The remaining portion of the county, included between the western declivities of the Slieve-Bloom Mountains, Tipperary, and the Shannon, has a general slope towards the Little Brosna, which forms the boundary between King's County and Tipperary. There are fortifications at both ends of the bridge across the Shannon at this place commanding the approaches, and about a quarter of a mile farther down, on the King's County side, is a circular redoubt mounting six pieces of cannon. The banks of the Shannon are here richly clothed with meadow, but liable to frequent floods. The valley of the Little Brosna from the Shannon to Birr, and thence to the Slieve-Bloom and the borders of the county of Tipperary, is an undulating well-inhabited district containing extensive tracts of pasture, and towards the mountains abounding with varied and pleasing scenery. The highest elevation of the Slieve-Bloom Mountains is 1639 feet. They extend in a line from north-east to south-west for a distance of 15 miles along the Queen's and King's counties. A narrow pass called the Gap of Glandine, near the northern extremity of the range, is the only point of communication throughout this line available for purposes of general traffic. A continuation of the Devil's Bit range forms the more southerly part of the boundary-line bordering on Tipperary. These mountains, although of no great altitude, present a varied and picturesque outline, and abound with scenes of much natural beauty.

That part of the river Shannon which borders on this county is included within the division of the Middle Shannon. The navigation is partly by the river and partly by short lateral canals. The Little Brosna is navigable for small boats.

Communications.—The completion of the works under the commissioners for the improvement of the Shannon, has rendered that fine river navigable for large steamers from Lough Allen to Killaloe; and steamers of 300 tons burden ply daily up and down the river from Shannon Harbour, at the terminus of the Grand Canal. The Grand Canal crosses the county from east to west with branches to Edenderry and Kilbeggan, and a continuation on the Connaught side of the Shannon to Ballinasloe. As yet no railways traverse any part of this county; the Midland Great Western between Dublin and Galway runs at a little distance from the northern boundary, and the

Great Southern and Western from Dublin to Cork passes near the southern border. The most important highways are the mail road from Dublin to Birr, and the mail-coach roads from Dublin to Galway and Limerick, which respectively cross the north-western and south-western districts of the county. There are also numerous good cross-roads.

Geology.—The stratified limestone of the central plain of Ireland spreads over the entire area of the county, except the portions occupied by the Slieve-Bloom chain and the hill of Croghan. The Slieve-Bloom range consists of clay-slate, supporting flanks of very compact sandstone in which the clay-slate is enveloped on all the declivities. The strata of the clay-slate vary from one foot to three feet in thickness, and in some places afford excellent flags. Croghan Hill consists of trap conglomerate. The limestone of the surrounding plain appears tilted up and supported on the north-western and south-western sides of the greenstone tabular masses. Calcareous matter is generally diffused through this rock, which varies from a pale lavender colour to a grayish-black. The rock is very easily decomposed, and forms an uncommonly rich and friable soil. The hill is almost all under cultivation, and yields the most abundant white and green crops. Massy strata of greenstone appear also between Croghan Hill and Philipstown.

Climate, Soil, and Agriculture.—Notwithstanding the extent of wet ground on the surface of King's County, the climate is neither damp nor unwholesome. This is partly accounted for by the antiseptic quality of the peat-bog, and partly by the county lying comparatively high and open. The bogs, which occupy so large a portion of the county, generally repose on limestone gravel. The soil in general is not naturally fertile, but can be made to yield very good crops in the arable districts, by manuring with the lime and bog-mud. Near the middle of the Slieve-Bloom range are some fertile and extensive pastures. In the district lying between these mountains and Tipperary the soil is generally a light gravel, easily tilled, and tolerably fertile. The banks of the Shannon where they are occasionally overflowed afford considerable tracts of fine meadow, and the eskers and derries, as the open spots of dry ground in and between the bogs are termed, have generally a rich friable soil. The chief grazing districts in the county lie on the borders of West Meath, where the pastures are considered very favourable to wool-growing. Throughout the central division the soil, where unincumbered with bog, is almost wholly in tillage. The best ground in the county is in the northern division, from Croghan Hill to the boundary of Meath.

The number of acres under crops in 1853 was 132,098, of which 13,939 produced wheat; 37,370 oats; 8340 barley, bere, rye, peas, and beans; 17,891 potatoes; 10,678 turnips; 3302 mangolds, carrots, cabbage, and green crops; 195 flax; and 39,883 acres were in meadow and clover. Including an estimate for detached trees, in 1841 there were 11,185 acres growing timber, chiefly oak, ash, elm, and beech. On 12,960 holdings there were 12,466 horses; 5555 mules and asses; 48,553 horned-cattle; 379 deer; 78,230 sheep; 19,477 pigs; 4667 goats; and 162,296 head of poultry.

The occupations are entirely agricultural; the fabrics, such as household linen, frieze, and serge, made by the peasantry, being merely for family use.

Divisions and Towns.—King's County is divided into 12 baronies—Ballyboy, south and centre; Ballybrit, south-west; Ballycowan, central; Clonlisk, south-south-west; Coolestown, east; Egliah, Garrycastle, west; Geashill, south and east of centre; Kilcoursey, north-west; Philipstown Lower, north, and Upper, south-east; and Warrentown, north-east. The chief towns are Tullamore; Birr, or Parsonstown; Banagher; Portarlington; and Edenderry; all of which are noticed under their proper heads.

The other more important places are the following, with the population of each in 1851:—

Clara, 7 miles N.W. from Tullamore, population 996, is a neat little town on the Brosna, which here drives several large corn-mills. The town has a church, a Roman Catholic chapel, a Methodist meeting-house, and a dispensary. A corn-market is held weekly on Wednesday, and ten fairs are held in the course of the year.

Frankford, population 956, on the Broughill River, 15 miles S.W. from Tullamore, has a large Roman Catholic chapel and a dispensary. A corn-market is held here weekly on Saturday. Near the town are several handsome country seats, among which are Broughill Castle, the residence of N. Fitzsimon, Esq., and Temora, the ancient seat of the counts Magawley.

Kinnitty, population 452, a neat village, containing a church, a Roman Catholic chapel, a dispensary, and a National school, is situated at the foot of the Slieve Bloom Mountains, 18 miles S. by W. from Tullamore. Close to the town is Bernard Castle, the seat of Captain Bernard. At a short distance east of the village are Knocknahan and Carroll's Hill, summits of the Slieve-Bloom, which rise respectively to 1113 feet and 1584 feet above the sea, and afford extensive views over the great central plain of Ireland. A few miles W. of Kinnitty are the ecclesiastical ruins and ancient burying-ground of Seir-Kieran, or St-Kieran. Among the ruins is a small round tower 20 feet high, with a conical stone roof.

Moneygall, population 631, situated in the most southern part of the county, at the foot of the Devil's Bit Mountains, and 36 miles S.S.W.

from Tullamore, has a dispensary. In this part of the county there are extensive plantations and numerous country seats. Fairs are held in May, August, and November.

Philipstown, population 748, a market-town, formerly a parliamentary borough, and till 1833 the assize town of the county, situated on the Grand Canal, 8 miles E. by N. from Tullamore, consists chiefly of one street, and is altogether an ill-built place. The old name of the town was *Dangan*, which was changed to Philipstown in honour of Philip II. of Spain, husband of Queen Mary; it returned two members to the Irish House of Commons. The public buildings are a sessions-house, a jail, a cavalry barrack, a Roman Catholic chapel, a church, and the remains of Fort Castle, in which King Philip resided during his visit. The town has a dispensary and two schools. A weekly market is held on Thursday.

Shinrone, population 873, about 6 miles W. by N. from Roscrea, has a neat church, a large Roman Catholic chapel, a small chapel for Methodists, a fever hospital, a dispensary, and a National school. Petty sessions are held weekly. Fairs are held in Shinrone on July 9th and November 21st.

Besides the places already noticed the following may be mentioned. The populations are those of 1851.

Ballyboy, population 219, situated on the Broughill River, 13 miles S.W. from Tullamore, has a neat church. About a mile south of it is the hill of Knock, which attains a height of 499 feet above the adjacent flat country. *Ballycumber*, population 156, a village 8 miles W. from Tullamore, stands on the Brosna, which is here crossed by a good stone bridge. In the vicinity are several handsome seats, forming with the village an agreeable contrast to the dreary expanse of bog. *Cloghan*, population 563, 16 miles W.S.W. from Tullamore, on the road to Banagher, is a village situated in a level country, about a mile W. from the beautiful green hill of Cloghan. In the village are a church and a Roman Catholic chapel, and a few miles south of it is Cloghan Castle, the residence of G. O. Moore, Esq., which is one of the oldest inhabited castles in Ireland. *Crinkill*, population 556, forms a suburb of the town of Birr, and has a police station. *Ferbane*, population 641, on the right bank of the Brosna, 14 miles W. from Tullamore, is situated in a flat country, with large tracts of bog near the town. It contains a church, a Roman Catholic chapel, several schools, a dispensary, and a small inn. *Geashill*, 7 miles E.S.E. from Tullamore, population 326, is situated on the road from Philipstown to Portarlington. The village stands on the summit of a ridge of hills, which is crowned with the parish church, the parsonage, and the ruins of the old castle of Geashill. *Killeigh*, population 182, a small village containing a chapel of ease and a large Roman Catholic chapel, is situated 5 miles S. from Tullamore, on the road to Mountmellick. This place is of considerable antiquity, and once had three monasteries, remains of one of which still exist. *Shannon-Bridge*, population 395, is situated on the left bank of the Shannon, 24 miles W. from Tullamore, on the road to Ballinasloe. It is one of the three fortified passes still maintained upon the Shannon, the other two being Banagher and Athlone. The bridge which here crosses the Shannon consists of 16 arches, with two additional arches across a short lateral canal cut to avoid a fall of about a foot in the current of the river. At the Roscommon or Connaught end of the bridge is a tête-de-pont, capable of accommodating a small garrison. The public road runs between the barracks and fort, passing through a strong gate. The fortifications resemble those at Banagher, but the barracks are larger and the battery is more conspicuous. *Shannon-Harbour*, population 152, stands on the Grand Canal, 7 miles S.E. from Shannon-Bridge, half a mile E. from the Shannon. It contains a large inn and stores originally constructed by the Canal company, but now partially occupied as a police barrack. A steamer runs between Shannon-Harbour and Killaloe. A fine quarry of dove-marble is worked near the village.

King's County is in the dioceses of Kildare, Meath, Killaloe, Ossory, and Clonfert. There were 84 National schools in operation in September 1852, attended by 4434 male and 5147 female children. The county returns two members to the Imperial Parliament. Assizes are held at Tullamore. Quarter sessions are held at Tullamore, Birr, and Philipstown, in each of which is a court-house and jail; that at Tullamore being the county jail, and the others bridewells. Petty sessions are held in 16 places. The district lunatic asylum, to which King's County is entitled to send 48 patients, is at Maryborough, in Queen's County. A county infirmary is at Tullamore; fever-hospitals are at Shinrone and Birr, and dispensaries in all the chief towns and villages. Savings banks are established at Tullamore and Birr. There are Union workhouses at Tullamore, Edenderry, and Birr. The county is partly in the military district of Dublin and partly in that of Limerick: there are barracks at Banagher, Birr, Shannon Bridge, Tullamore, and Philipstown. The staff of the county militia is stationed at Birr. The police force of the county, consisting of 412 men and officers, has its head-quarters at Tullamore, and is distributed among 6 districts, comprising 56 stations. The districts are Tullamore, Edenderry, Ferbane, Birr, Shinrone, and Frankford. Resident magistrates are stationed at Tullamore and Birr.

History and Antiquities.—This district was not made a distinct county until 1557. Before that period it was generally designated Western Glenmalery, to distinguish it from Eastern Glenmalery, the

present Queen's County. The fort of Dangan, an old seat of the O'Connors, princes of Offaly, was at the same time made the shire town, and called Philipstown, in compliment to the king consort.

The ruins of the seven churches of Clonmacnoise, situated on the left bank of the Shannon, in the north-western part of this county, form one of the most interesting groups of ecclesiastical remains in Ireland. St. Kieran of Clonard founded the abbey of Clonmacnoise A.D. 548. It was subsequently raised to the rank of a cathedral church, and so continued till 1568, when the see of Clonmacnoise was united to that of Meath. The ruins are inclosed by a wall, at two of the angles of which are ancient round towers. The buildings within the precincts are chiefly chapels, erected over family burying-places by various Irish kings and chieftains. The place exhibits more numerous remains of ancient monuments than any other cemetery in Ireland. Two monumental crosses, richly carved, stand near the western door of the chapel called Temple MacDermot. One of these, 15 feet in height, is formed of a single stone. The remains of several other religious houses are in the immediate vicinity. The entire group occupies a gently swelling bank, rising from the Shannon. Twenty-eight other religious houses are enumerated in this county, of which the chief were—Birr; Durrow, founded in 550; Gallen on the Brosna, founded in the 5th century; Monastercoras, near Edenderry, founded by John Bermingham, earl of Louth, in the year 1325; and Seirkieran, near Birr, founded in 402, by St. Kieran the Elder, and for some time a cathedral church. There are numerous remains of feudal castles, chiefly of the Elizabethan era. Leap Castle, situated on a declivity of Slieve Bloom, in a strong and commanding position, is still inhabited; as are also Cloghan Castle and the castle of Birr.

KINGSCOURT, county of Cavan, Ireland, a small town consisting of one long straggling street, is situated 24 miles E. by S. from Cavan; the population in 1851 was 1143. The town stands on a neck of land where the counties of Meath, Cavan, Louth, and Monaghan meet. It contains several good houses, a neat church, and a large Roman Catholic chapel. There is a good weekly market on Tuesday for agricultural produce; thirteen fairs are held in the year. A resident magistrate is stationed in the town, which has a dispensary and a loan fund. Petty sessions are held here.

KING'S LYNN. [LYNN.]

KING'S NORTON, Worcestershire, a village and the seat of a Poor-Law Union, in the parish of King's Norton, is situated in 52° 24' N. lat., 1° 56' W. long., distant 24 miles N.E. by N. from Worcester, 114 miles N.W. from London by road, and 119 miles by the London and North-Western railway. The population of the parish of King's Norton was 7759 in 1851. The living is a perpetual curacy in the archdeaconry and diocese of Worcester. King's Norton Poor-Law Union contains five parishes, with an area of 27,666 acres, and a population in 1851 of 30,871.

The parish of King's Norton is of considerable extent, covering an area of 11,970 acres, but there is little to notice in the village. The parish church, an ancient structure, perpendicular in style, with a handsome spire, is commodious, and contains some interesting monuments. There are two chapels for Methodists, and one each for Baptists and Unitarians. King Edward VI.'s Free school had 15 scholars on the foundation and 25 other scholars in 1852. Gunmaking is carried on in the village and neighbourhood. An annual fair is held on May 6th. Some very old overhanging half-timber houses are in the village. The Birmingham and Worcester Canal passes through a tunnel about two miles long a short distance southward from King's Norton.

KINGSTHORPE. [NORTHAMPTONSHIRE.]

KINGSTON. [ELGINSHIRE.]

KINGSTON. [CANADA; JAMAICA.]

KINGSTON-UPON-HULL. [HULL.]

KINGSTON-UPON-THAMES, Surrey, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Kingston, is situated on the right bank of the Thames, in 51° 24' N. lat., 0° 18' W. long., distant 17 miles N.E. from Guildford, 13 miles S.W. from London by road, and 12 miles by the London and South-Western railway. The population of the town of Kingston-upon-Thames in 1851 was 6279. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor. The living is a vicarage with the vicarage of Richmond annexed, in the archdeaconry of Surrey and diocese of Winchester. Kingston Poor-Law Union contains 13 parishes and townships, with an area of 25,080 acres, and a population in 1851 of 26,788.

Kingston is a place of great antiquity. Many Roman antiquities have been found near the town, and some antiquaries have contended for this being the spot where Cæsar crossed the Thames. It was a place of note in the Anglo-Saxon times: seven of the Anglo-Saxon princes were crowned here. A stone, believed to be that on which the Saxon monarchs sat at their coronation, formerly stood by the church; in 1850 it was removed to an open space near the assize-courts, and mounted on an ornamental granite pedestal, on the base of which is inscribed the names and dates of the kings crowned at Kingston. A railing with pillars at the seven angles surrounds the stone. The first charter granted to the town was by John, in 1199. Kingston sent members to Parliament in the reigns of Edward II. and Edward III., but not since.

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Kingston extends about half a mile along the Thames, and about a quarter of a mile inland, at the junction of the Hog's Mill River with the Thames. It is irregularly laid out; the streets are lighted with gas. The parish church is an ancient building, but has undergone numerous alterations and repairs: it is cruciform, with a central tower. In the interior are several interesting monuments. At Surbiton, or New Kingston, is a district church, erected in 1845 at the expense of Miss Coutts. There is a chapel for Independents, a county court-house, and a county house of correction. The town-hall, which was erected in 1838 in the centre of the market-place, is a handsome building. Queen Elizabeth's Free Grammar school, founded in 1561, is held in an ancient edifice formerly a chapel dedicated to St. Mary Magdalen: the income from endowment is 65*l.* a year; the number of scholars in 1853 was 50; the school is free to none. There are large National schools, a Blue-Coat school, and an Infant school, almshouses for six aged men and six aged women, some parochial charities, and a savings bank. The bridge over the Thames is of stone, with five arches; it was erected in 1827, at an expense of 40,000*l.*, in place of the ancient wooden bridge which previously stood here. The chief business of the town is malting; there is also a considerable coal trade. There are brick- and tile-works and market-gardens round the town, and breweries and oil-mills in it. A market is held on Saturday for corn, cattle, pigs, and provisions. There are three yearly fairs; the chief fair is one for cattle, sheep, and horses, held on November 13th and seven following days. General and petty sessions are held in the town; the Michaelmas quarter sessions and the Lent assizes for the county are held here, also a county court.

KINGSTOWN, county of Dublin, Ireland, a sea-port town and the mail-packet station of the city of Dublin, is situated in the parish of Monkstown, barony of Rathdown, distant 6 miles E.S.E. by railway from Dublin. The population in 1851 was 10,458. This place was called Dunleary till September 3rd, 1821, when the name was changed to Kingstown to commemorate the embarkation of George IV. for England, which circumstance is recorded on a granite obelisk near the wharf. Although an ancient place, it was a mere fishing village and collier haven till the new harbour-works were commenced in 1817. Since then the town has been greatly extended, so that Kingstown may now be said to include not only Dunleary, but also Monkstown, Bullock, and Dalkey. The harbour, the formation of which has already cost above 700,000*l.*, is described in the article DUBLIN County. The harbour has not proved so useful as was expected, owing to the anchorage being very much exposed. The number of vessels that entered Kingstown harbour in 1851 was 2126, of the aggregate burden of 257,367 tons, exclusive of men-of-war, cruisers, and mail packets; of this number 1117 were vessels trading to or from the port of Dublin. The city of Dublin royal mail steam-packets sail twice a day with the mail and government despatches to Holyhead; there is besides daily communication by steamers with Cork, Liverpool, Holyhead, and Chester, and packets sail regularly to London and other important towns. The chief exports are cattle, corn, lead-ore, and granite; the imports consist chiefly of coal, iron, and timber. The beauty of the situation, the salubrity of the air, the picturesque country around the town, the arrival and departure of the steam-vessels, and the bustle connected with the shipping, have contributed to make Kingstown a place of great resort: it is also much frequented as a watering-place. The principal street is George's-street, extending above half a mile in length. There are numerous avenues, terraces, and parades, some of which are uniformly built, and present a handsome appearance. Besides the parish church, which is at Monkstown, there are a large and handsome Roman Catholic chapel, St. Mary's convent, a Free church, the Mariners church, and places of worship for Presbyterians, Methodists, and Quakers. The Kingstown terminus of the railway to Dublin, and the tunnel of the atmospheric railway to Dalkey, are in front of the harbour. There are a petty sessions court-house, police and coast-guard stations, a savings bank, lying-in hospital, dispensary, National and other schools, and commodious baths. The town is lighted with gas. The paving and lighting of the town is managed by a board of 18 commissioners. There are remains of old castles at Monkstown and Bullock, and of three in the village of Dalkey. Kingstown is the station of the Royal St. George's Yacht Club.

KINGSTOWN. [VINCENT, ST.]

KINGTON, Herefordshire, a market-town and the seat of a Poor-Law Union, in the parish of Kington, is situated in 52° 12' N. lat., 3° 1' W. long., distant 19 miles N.W. by W. from Hereford, and 154 miles W.N.W. from London. The population of the joint township of Old and New Kington in 1851 was 1939. The town is governed by a bailiff. The living is a vicarage in the archdeaconry and diocese of Hereford. Kington Poor-Law Union contains 26 parishes and townships, with an area of 70,957 acres, and a population in 1851 of 11,653.

Kington is pleasantly situated on the river Arrow; the greater part of the town is on the left bank. The town is lighted with gas. The church is a fine but irregular structure, chiefly of the decorated style; it was dedicated by Bishop Orleton to the Virgin Mary on the 18th of April, 1325. The Independents, Baptists, and Wesleyan and Primitive Methodists have places of worship. Lady Hawkins's Free school, which has an income of 210*l.* a year, had 30 scholars in 1850. There are National schools and a savings bank. A county court is

held in the town. The market-day is Wednesday: eight fairs are held in the course of the year.

KINNOUL. [PERTHSHIRE.]

KINROSS, Kinross-shire, Scotland, a market-town and the capital of the county, is situated on the western bank of Loch Leven, in 56° 13' N. lat., 3° 24' W. long.; distant 28 miles N.W. from Edinburgh. The population of the town in 1851 was 2590. The town contains many handsome houses, and is well lighted with gas. Besides the parish school there are a Free Church school, two Foundation schools, and others of minor importance; also a savings bank. The manufacture of tartan shawls is the chief occupation, and in connection with it spinning, scouring, dyeing, &c., are carried on. In the town are a flour-mill and a tan-work. The fishery in the loch employs several persons. The parish church, built in 1832, is a handsome gothic structure. There are two chapels for United Presbyterians and one Free church. The county-hall is an elegant building, built in 1826, and contains a court-room with offices for county business, and a jail. In the vicinity is Kinross House, originally built as a residence for the Duke of York, afterwards James II., in the event of the Exclusion Bill becoming law.

KINROSS-SHIRE, Scotland, a small inland county, bounded E. and S. by Fifeshire, and W. and N. by Perthshire, between 56° 8' and 56° 18' N. lat., 3° 14' and 3° 35' W. long. Its length from east to west is about 12 miles, and its width from north to south barely 10 miles. Its area is 49,531 statute acres. The population was 8763 in 1841 and 8924 in 1851. Conjointly with Clackmannanshire this county returns one member to the Imperial Parliament.

Surface, Hydrography, and Communications.—On the southern boundary of the county are the Cleish Hills; on the northern boundary are the Ochils; the south-eastern boundary runs partly along the summit of the hill of Binnarty and partly along the flat ground to a point on Kelty Burn, which stream, having its source in the Cleish Hills, forms the southern boundary. The western Lomonds are in the eastern part of the shire. The boundaries are chiefly hilly, but a level opens from the south at Blair Adam; a similar level opens to the west towards Stirling, at the Crook of Devon; and a third level to the north-east, between the Ochil and Lomond hills, leading towards Cupar in Fife. There is, in addition, a narrow passage on the east, through which flows the river Leven.

This county contains several fresh-water lakes, which are well stocked with fish. By far the most important is Loch Leven, a noble piece of water, covering a surface of near 3300 acres. Its height above the level of the sea is about 300 feet. Its greatest depth is from 80 to 90 feet. It contains four islands, the largest of which is called the Inch. The lake abounds in fish, and the trout, which are considered a great delicacy, are sent to the Edinburgh market. The level of the lake has been considerably reduced for the purpose of reclaiming a part of its basin. Upon a small island at the north-west end of Loch Leven are the ruins of the castle of Loch Leven, a fortress of great antiquity, long used as a royal residence, and noted as the prison in which Queen Mary was retained a prisoner. The ancient monastery of Portmoak, on the left bank of the Leven, near the lake, is said to have been built by a Pictish king, and to have been the first place in Scotland given to the Culdees after the conversion of the Picts to Christianity. On the Inch in Loch Leven, called St. Serf's, or St. Servanus Isle, once stood a priory, but no traces of it remain.

The chief streams are the Gairney, and the South and the North Queich. The Gairney rises among the Cleish Hills; the North and the South Queich have their sources among the Ochils, and all three fall into Loch Leven, the overflow of which forms the river Leven. The county is well provided with roads, which are kept in good repair; it is traversed from south to north by the great north road.

Geology.—Coal is found on the south, where the county joins the borders of Fifeshire. There are quarries of good sandstone in that quarter. To the north of Kinross red-sandstone is the geological formation of the district. The formation of the Ochil and Lomond hills will be found respectively under CLACKMANNANSHIRE and FIFESHIRE; the general geological character of the whole district is described under GREAT BRITAIN.

Soil, Climate, Agriculture.—The interior of the county, comprising about one-half of the whole, may be regarded as a plain slightly varied by gentle undulations. The soil is various, chiefly inclining to gravel. To the north and west of Loch Leven it is clayey, tolerably fertile, and produces early crops; in the more elevated parts it consists of moor, forming however excellent pasture. The climate, though cold and wet, owing to the general elevation of the land, has been much improved by extensive drainage. Upon the whole the county is healthy, and the people are vigorous, and subject to few distempers. Frost sets in sooner and continues longer than in the adjacent country to the south, yet agriculture has been so much improved that the seed-time and harvest are seldom behind those of the neighbouring districts. The farms are mostly occupied by resident owners. Of the grains which are cultivated the chief attention is given to oats. The district is well suited for turnip husbandry and the rearing of sheep stock.

Divisions, Towns, &c.—Kinross-shire includes four parishes and small portions of three adjoining parishes, the principal parts of which are in Perthshire. KINROSS is described elsewhere; the only other

place worthy of mention is *Milnathort*, population 1606, a thriving village, in the parish of Orwell, about 2 miles N. from Kinross. It is lighted with gas, possesses a chapel of ease, a United Presbyterian and a Free Church, a savings bank, and a public library, said to be the oldest in Scotland. The inhabitants are chiefly engaged in the manufacture of tartan shawls. A weekly corn-market is held in the village.

History, Antiquities, &c.—The only historical events connected with this county are the defence of Loch Leven Castle by Alan de Vipont against an adherent of Baliol, and the subsequent imprisonment of Queen Mary and her escape from the castle. There are so-called druidical remains in the parish of Orwell, and several vestiges of the feudal and ecclesiastical periods of national history throughout the county, but none of importance.

Religious Worship and Education.—According to the returns of the Census taken in March 1851, it appears that there were then in the county 14 places of worship, of which 6 belonged to the Free Church, 4 to the Established Church, and 4 to the United Presbyterian Church. The total number of sittings provided was 6125. The number of Sabbath schools in the county was 14, of which 4 belonged to the Established Church, 4 to the Free Church, and 4 to the United Presbyterian Church. The total number of scholars was 956. The number of day-schools in the county was 23, namely, 14 public schools, with 1033 scholars, and 9 private schools, with 889 scholars. There was 1 evening school for adults, with 31 scholars.

KINSALE, county of Cork, Ireland, a sea-port town, parliamentary borough, and the seat of a Poor-Law Union, is situated on the south coast of Ireland in 51° 41' N. lat., 8° 31' W. long., on the left bank of the estuary of the Bandon River, which forms Kinsale harbour, at a distance of about 4 miles from the sea, 14 miles S. from Cork, and 177 miles S.W. from Dublin. The population in 1851 was 5506, besides 984 inmates of the workhouse. The borough is governed by 13 town commissioners, and returns one member to the Imperial Parliament. Kinsale Poor-Law Union contains 19 electoral divisions, with an area of 79,651 acres, and a population in 1851 of 28,948.

The town is built partly on the slope of Compass Hill, and partly on level ground between it and the harbour. In the level part of the town are a few good spacious streets. Many of the houses in Kinsale are of considerable antiquity, and built with bay windows connected in the upper stories by balconies after the Spanish fashion. The chief public buildings are the church of St. Multosia, a spacious cruciform structure of the 14th century; a large Roman Catholic chapel; a Carmelite convent with a chapel attached to it; the infantry barracks; the assembly-rooms; the court-house and town-hall; the prison; and the Union workhouse, which is built on Compass Hill. The town also contains two chapels for Methodists, a fever hospital, a brewery, and several flour-mills. The harbour, which is completely landlocked, has a depth of 6 to 8 fathoms, within a cable's length of the shore, and is capable of accommodating 300 ships. The entrance to the harbour has a depth of 14 feet at spring ebbs. Fort Charles, a mile east of the town, was erected for the protection of the harbour, but is now used as a barrack. Within the borough limits are the villages of Cove and Scilly, both of which are thronged during the summer with sea-bathing visitors. The fisheries average 600L a week; the fish are mostly conveyed direct from the fisheries to the Cork market. Besides the usual round and flat fish, lobsters, oysters, and crabs are abundant. The exports of Kinsale are agricultural produce; the imports are coal, timber, iron, &c.; but the trade of the port is small. Petty sessions are held in the town, which is also the headquarters of a police district. Fairs are held on May 4th, September 4th, and November 21st; markets on Wednesdays, Fridays, and Saturdays. On the south shore of the estuary of the Bandon, which is reached by a ferry, and nearly opposite the town are the extensive remains of the old fortress of Castle-na Park, and also the ruins of Ringrone Castle, an old seat of the De Courceys.

Kinsale is the centre of a fishing district which comprises 60 miles of coast extending from Flat Head to the east side of Inchy Bridge. The fishermen of the district are deemed the most skilful in Ireland, both in their own calling and as pilots: in 1850 they had 798 vessels, employing altogether 4132 men and boys. The boats of the Kinsale fishermen average from 12 to 20 tons, and are called hookers. There is a lighthouse on the Old Head of Kinsale.

Kinsale is an old town. It gives title to the premier baron in the Irish peerage, Miles de Courcey, John de Courcey's son having been created Baron of Kinsale in 1181. The title has existed in the family ever since. Kinsale has witnessed several important engagements both by sea and land. Here the McCarthy More was defeated by John de Courcey in the 12th century; and in the harbour an English fleet defeated a squadron of French and Spanish galleys in 1380. In 1601 it was for some time occupied by a Spanish force, who were obliged by Sir G. Carew to surrender. In 1688 Kinsale was held for James II., and here that king, in 1689, landed from Brest on his foolish attempt to regain his crown.

KINTORE, Aberdeenshire, Scotland, a very ancient royal and parliamentary burgh in the parish of Kintore, in the district of Garioch, 12 miles N.W. from Aberdeen, in 57° 15' N. lat., 2° 22' W. long. The population of the burgh in 1851 was 476. The town is governed by a provost and 12 councillors, and conjointly with

Benff, Cullen, Elgin, Inverury, and Peterhead, returns one member to the Imperial Parliament. The town consists chiefly of one street, on the bank of the Tuach-Burn, which here falls into the river Don. Besides the parish church there is a Free church. The town-house is a respectable building. Lime is brought up to Port Elphinstone near Kintore by the Aberdeen Canal, and granite is carried down in return. There are a library and a savings bank.

KIOOSIOO. [JAPAN.]

KIPPEN. [STIRLINGSHIRE.]

KIRATZA. [ABYSSINIA.]

KIRBY-LE-SOKEN. [ESSEX.]

KIRK BURTON. [YORKSHIRE.]

KIRKALDY, Fifeshire, Scotland, a royal and parliamentary burgh, sea-port and market-town in the parish of Kirkaldy, is situated in 56° 7' N. lat., 3° 9' W. long., on the shore of the Frith of Forth, about 12 miles E. from Dunfermline. The population of the municipal burgh in 1851 was 5093, that of the parliamentary burgh 10,475. It is governed by a provost and 20 councillors, and unites with Burntisland, Dysart, and Kinghorn in returning one member to the Imperial Parliament. Kirkaldy consists of one rather handsome street, nearly two miles long (from which it gets the designation of the 'Lang Toun,' or Long Town), with several smaller streets branching from it. Near the northern extremity of the High-street is the large village of Pathhead. Kirkaldy has an elegant modern church, and town-house; with assembly-rooms, mason lodge, library, reading-rooms, and public Grammar school. The town is lighted with gas. The market, which is well supplied, is held weekly on Saturday. Many visitors resort to the town as a bathing-place. The harbour has been rendered very commodious. Coal, corn, potatoes, sheep, and pigs are largely exported. The number of vessels registered as belonging to the port on December 31st, 1853, were:—Under 50 tons, 63, tonnage 2020; above 50 tons, 36, tonnage 7096; and one steam-vessel of 62 tons. During the year 1853 there entered the port 643 vessels of 42,604 tons aggregate burden, and there cleared 1213 vessels of 71,117 tons aggregate burden, with 4 steam-vessels of 262 tons. Vessels from the north of Europe trade to the town. Coarse linen fabrics are extensively manufactured, and there are several flax-mills, a foundry, tanneries, a distillery, breweries, &c. Besides the parish church, there are two chapels for United Presbyterians, one for the Free Church, and one each for Independents and Episcopalians. The subscription library in 1851 had 178 members and upwards of 7000 volumes; the Kirkaldy Institution had 60 members and 1420 volumes; and the Scientific Association had 100 members.

Kirkaldy was anciently a seat of the Keldees, or Culdees, whence the name is said to be formed by the prefix of the word kirk. It belonged to the abbots of Dunfermline as a burgh of regality in 1334. At what time it became a royal burgh is not known, but Charles I. in 1644 confirmed it as such, and made it a free port with additional privileges and jurisdiction. At this period it possessed 100 ships, and the population is said to have been larger than at present.

KIRKBY LONSDALE. [WESTMORLAND.]

KIRKBY MOORSIDE, North Riding of Yorkshire, a market-town and the seat of a Poor-Law Union, in the parish of Kirkby Moorside, is situated in 54° 16' N. lat., 0° 55' W. long., distant 25 miles N. by E. from York, and 228 miles N. by W. from London. The population of the township of Kirkby Moorside in 1851 was 1836. The living is a vicarage in the archdeaconry of Cleveland and diocese of York. Kirkby Moorside Poor-Law Union contains 23 townships, with an area of 47,490 acres, and a population in 1851 of 5624.

Kirkby Moorside is a small irregularly-built town, picturesquely situated in a deep valley on the right bank of the river Dove. The parish church, dedicated to All Saints, an ancient structure, has sittings for 514 persons; the chancel contains some curious monuments. In the town are chapels for Wesleyan and Primitive Methodists, Independents and Quakers. There is a Free school. Near the town are quarries, coal-mines, and some corn-mills; and malting is carried on. The prosperity of the town has been seriously affected by the introduction of railways into the district. A small market is held on Wednesday; fairs are held on Whit-Wednesday and September 18th. In former times Kirkby Moorside derived some importance from its two baronial castles, vestiges of which yet remain.

KIRKBY-STEPHEN. [WESTMORLAND.]

KIRKCUDBRIGHT, in the shire or stewartry of Kirkcudbright, Scotland, a royal and parliamentary burgh and market-town, and the chief town of the stewartry, is situated on the left bank of the estuary of the Dee, about 5 miles from the mouth of the Bay of Kirkcudbright, 100 miles S.W. from Edinburgh, in 54° 48' N. lat., 4° 49' W. long. The population of the parliamentary burgh in 1851 was 2687; that of the municipal burgh 2778. The town is governed by a provost and 16 councillors, and unites with Annan, Dumfries, Lochmaben, and Sanquhar in returning one member to the Imperial Parliament.

Kirkcudbright was anciently a burgh of barony under the Douglasses when they were lords of Galloway. Upon the fall of that family it was erected by James II. into a burgh of regality. Charles II. made it a royal burgh. The town consists chiefly of two streets at right angles to each other. The public buildings are the court-house, the parish church, a handsome cruciform gothic building, the academy, and the jail; a Free church and a chapel for United Presbyterians.

There are an academy or burgh-school, two subscription schools, a well-endowed charity school, and a public library. The town has been greatly improved of late years.

In the vicinity of the town are vestiges of the ancient castle of Kirkcudbright. The harbour affords good anchorage and shelter. At the head of it is a beautiful and nearly insulated spot called St. Mary's Isle, the seat of the Earl of Selkirk. The river opposite the harbour is 500 feet broad and the depth of water at spring tides is 30 feet. There is constant communication with Liverpool by steamers; and several vessels belong to the port. Coal, lime, freestone, and slates are imported; grain, potatoes, sheep, and black cattle are exported.

KIRKCUDBRIGHT, THE STEWARTRY OF, is a maritime county in the south-west of Scotland, bounded N. and N.W. by Ayrshire; E. and N.E. by Dumfriesshire, from which it is in part separated by the river Nith; S.W. by Wigtownshire and Wigtown Bay; and S. and S.E. by the Solway Frith. It lies between 54° 48' and 55° 20' N. lat., 3° 38' and 4° 38' W. long. Its length varies from 40 to 48 miles, and its width from 17 to 30 miles. The area is about 610,734 acres, and it comprises the greater portion of the ancient district of Galloway. The population of the county in 1851 was 43,121. It returns one member to the Imperial Parliament.

Coast-line.—The coast, except in the upper part of Wigtown Bay, is generally bold and precipitous. It is flat on the eastern boundary. All along the coast, where the streams of the county fall into the Frith, there are natural harbours. The most important of these, on the eastern shore, are Urr Water Mouth, and Auchencairn Bay, at the bottom of which is the thriving village of *Auchencairn*, which is clean and well built, and near which, on the bay, is *Balcomry*, a free port. In the same parish, a little way westward, are two other free ports, both capable of great improvement, Port Mary and Mullock Bay. Kirkcudbright Bay affords good accommodation to vessels. The most important bay in the western part of the coast is Fleet Bay, so called from the river which discharges itself into it, and which is navigable to the town of Gatehouse for vessels of 160 tons.

Surface, Hydrography, and Communications.—The surface of Kirkcudbrightshire is rugged and barren, more particularly towards the sea-coast; but of late years great improvements have taken place in the arable husbandry of the shire, and considerable tracts of land which were formerly unproductive have been brought into cultivation. The arable lands now form about one-fourth of the entire surface. The whole northern part of the county is extremely mountainous. The chief elevations are Blacklurg in the north, which rises to the height of 1970 feet, and Cairnmuir in the west 2600 feet. [GREAT BRITAIN.]

The absence of plantations, which are essential to the proper protection of grazing districts, was formerly a subject of regret; of late years however planting has been considerably extended, and drainage has been carried on to a considerable extent. The Earl of Galloway's plantations, which stretch around Galloway House for miles, are rich in most varieties of useful and ornamental timber.

Numerous small lakes are distributed over the county. The eastern boundary of the county is formed by the river Nith [DUMFRIESHIRE], the western boundary by the Cree Water, which is formed from several small lakes on the borders of Ayrshire and Wigtownshire; in its course southward the Cree receives the Minnoch Water, and the waters of several other small lakes in the north-west of Kirkcudbright, after which it forms Loch Cree, and issuing from the loch, runs for about 6 miles, when it falls into Wigtown Bay. The two principal streams in the county are the Dee and the Urr. The Dee has its source near the north-western boundary of the county. It pursues a south-east direction, receiving numerous mountain streams, contributes its waters to those of Loch Ken, from which it issues at the southern extremity of the loch, and finally falls into the bay of Kirkcudbright. The salmon-fisheries on this river are valuable. The river Ken collects the waters of all the mountain streams in the north of the county, and forms the loch of the same name. The Urr rises in a lake of the same name on the borders of Dumfriesshire; it also receives numerous tributaries, the most important of which is Kirkgunzeon Burn, which drains the extreme east of the county and soon after falls into the Solway Frith, where it forms a small bay. The Fleet Water is a short stream 6 or 7 miles in length, which discharges itself into Fleet Bay, a small estuary on the east side of Wigtown Bay.

The county is in most parts intersected with well-made and tolerably level roads, which are kept in excellent repair.

There is communication by steam-vessels between Kirkcudbright and Liverpool, and numerous coasting vessels carry on the small home trade of the county.

Geology, Mineralogy, &c.—The county contains a variety of minerals, but they have been only in few instances turned to any profitable account, owing to the absence of coal and the general scarcity of other fuel. Lime, coal, and freestone are imported from the opposite coast of Cumberland. Lead is the mineral mainly wrought. The lead mines at Blackcraigs and Cairnmuir are at present in full operation. Some copper has been found.

Climate, Soil, and Agriculture.—The climate is salubrious. In the mountainous district it is cold and bleak the greater part of the year, though the ground is not long covered with snow. The climate of the low grounds near the Solway is warmer. It is from the number of streams rather moist, and spring is generally late. The west and

south winds prevail, except in late winter and spring, when cold east or northerly winds are most frequent.

The prevailing soil is a thin brown earth resting either upon a gravel bottom, or upon a rock of a rotten slaty substance, which is readily pulverised. It is but slightly retentive of moisture, and its average depth does not exceed four inches. The chief object of cultivation is oats. The potato crops are considerable, and constitute a principal article of export to England. Till within the last thirty-five years green-crop husbandry was little known in Kirkcudbright and Wigtownshire. Now however the cultivation of turnips is universal. Leases are generally from 14 to 19 years, with breaks in many of them alike available to landlord and tenant. The peculiar breed of horses which this and the adjoining county of Wigtown formerly possessed, and which was known by the name of the Galloway breed, has nearly disappeared, its place having been supplied by horses of a larger size and better adapted to draught. The sheep upon the moors and high grounds are mostly of the black-faced breed, but those in the lower districts are mostly Cheviots and Leicesters. The attention of the farmer is chiefly directed to the rearing of cattle for the Norfolk fairs, where they are sold to graziers by whom they are fattened for the London market. The lands of this county, together with those of the adjoining county of Wigtown, were inclosed in the early part of the last century by stone walls, generally known as Galloway dykes. Of late years the farms in Kirkcudbrightshire have been gradually increased in size, so as to afford proper scope for rotation of crops, now that summer fallowing is rarely if ever practised.

Divisions, Towns, &c.—The county is divided into 23 parishes. There are two royal burghs—KIRKCUDBRIGHT and New Galloway. Kirkcudbright has been already described; New Galloway with the market-town of Castle Douglas we notice here.

New Galloway, in the parish of Kells, is a royal and parliamentary burgh, 20 miles N. from Kirkcudbright, and near Loch Ken: the population of the burgh in 1851 was 447. The town is governed by a provost and 17 councillors, though its burgh revenues, it is said, amount to only 16s. annually. It was made a royal burgh by Charles I., and now unites with Stranraer, Whithorn, and Wigtown in the return of one member to the Imperial Parliament. In the neighbourhood is a fine granite bridge over the river Ken. Kenmore Castle stands near the town.

Castle Douglas is a market-town and a burgh of barony in the parish of Kelton, about 9 miles from Kirkcudbright, on the road to Dumfries: population, 1992. It is governed by a provost, 2 bailies, and a town-council of 7, elected by householders in the burgh. The town is regularly built, clean, neat, and thriving. A weekly market is held, and there are several annual fairs. In the town are a savings bank, a library, and several schools. The town-house, parish church, and chapels for the Free Church and the United Presbyterians, are the public buildings. Castle Douglas has risen into importance within the present century. A handsome granite bridge crosses the Dee near the town.

The following villages may be mentioned, with the population of each in 1851:—

Creetown, a village and a burgh of barony, 6 miles S.E. from Newton Stewart, on the bay of Wigtown: population, 1803. There is here a small carpet manufactory. The harbour at Creetown is frequented by a few coasters. The burgh has a town-hall and lock-up house. *Gatehouse, or Gatehouse of Fleet*, in the parish of Girthon, a populous village and burgh of barony situated on the Water of Fleet: population, 1750. There is a small harbour. There are an Endowed school and a savings bank. Cotton works were erected here in 1790. Tanning and brewing are carried on; oysters are obtained in the river Fleet, and the bay affords good fishing. *Kirkpatrick, or Kirkpatrick-Durham*, about 16 miles N. by E. from Kirkcudbright: population of the parish, 1508. Besides the parish church, which was erected in 1748, there is a Free Church. Three public schools are in the parish. A small fair is held annually in March. In Kirkpatrick the last remaining members of the sect of Buchanites took up their abode, enjoying a community of goods, and refraining from marriage. The last members of the sect were chiefly distinguished from their neighbours by the simplicity of their demeanour.

History, Antiquities, &c.—Before its subjugation by Agricola, A.D. 85, this county was possessed by the Selgova, of whom and of the races which preceded them numerous remains have been found here; and cairns, tumuli, circles of stones, &c., still exist in every part of the county. Nor are the marks of the Roman occupation less rare. Arms, coins, and utensils of that people have been found in various parts of the county. To the Romans are attributed the original formation of many of the roads. This county was part of the Bialii property, and part also of the extensive estates of the Douglas. Of Threave Castle, the chief seat of the Douglas family, considerable ruins still remain on the island in the river Dee, on which it stands. It was for the siege of this fortress in 1455 that 'Mons Meg,' the great cannon in Edinburgh Castle was manufactured. Edward I. held Kirkcudbright for some time, and was followed here by his court. Wallace embarked for France from the port. Henry VI. took refuge and resided at Kirkcudbright with his queen, and the Duke of Albany landed here in 1523. Queen Mary resided at Kirkcudbright for some days before applying for refuge to Elizabeth. A

visit from James VI., a riot on the attempt to thrust on the town an episcopalian curate in 1663, the pursuit and death of several of the Scottish martyrs, a visit from the fleet of William III. on its way to Ireland, and one from Paul Jones in 1768, when this American admiral robbed the house of Lord Selkirk, complete the list of events of any interest in which Kirkcudbright has participated. Besides Threave Castle, before referred to, should be mentioned the abbey of Dundrennan, in Berwick parish, and the college of Lincluden, in Terregles parish, both of which are fine specimens of ancient ecclesiastical grandeur. There are also numerous remains of fortalices, of small ecclesiastical buildings, and other relics of the middle ages.

Religious Worship and Education.—According to the Returns of the Census of March 1851 it appears that there were then in the stewartry 54 places of worship, of which 23 belonged to the Established Church, 17 to the Free Church, 7 to the United Presbyterian Church, 3 to Roman Catholics, and 2 to Reformed Presbyterians. The total number of sittings provided was 23,980. The number of Sabbath schools was 57, of which 30 belonged to the Established Church, 21 to the Free Church, and 4 to the United Presbyterian Church. The number of scholars was 3705. There were 107 day-schools, namely, 83 public schools with 5987 scholars, and 24 private schools with 582 scholars. Of evening schools for adults there were 3, with 74 scholars.

In 1852 there was one savings bank in the stewartry, at Castle Douglas. The amount owing to depositors on November 20th 1852 was 3762l. 0s. 2d.

KIRKHAM, Lancashire, a market-town in the parish of Kirkham, is situated in 53° 47' N. lat., 2° 52' W. long., distant 29 miles S. by W. from Lancaster, 225 miles N.W. by N. from London by road, and 219½ miles by the London and North-Western railway. The population of the town of Kirkham in 1851 was 2777. The living is a vicarage in the archdeaconry of Lancaster and diocese of Manchester.

Kirkham is situated on the left bank of a streamlet which flows into the estuary of the Ribble. The cotton manufacture, flax-spinning, and the manufacture of sail-cloth and soaking are the chief sources of employment. The parish church was rebuilt in 1822, except the Norman tower, which still remains. The Independents, Wesleyan Methodists, and Roman Catholics have places of worship. The Free Grammar school, founded in 1658, has an endowment of 340l. a year, and had 85 scholars in 1851. There are also a Blue-Coat school for girls, National and Infant schools, a Roman Catholic Charity school, and a savings bank. A county court is held. Many Roman remains have been found in the neighbourhood. The market was granted to the town by Henry II. Kirkham had a charter of incorporation from Queen Elizabeth, but the borough does not appear ever to have sent members to Parliament.

KIRKINTILLOCH. [DUMFRIESSHIRE.]

KIRKMICHAEL. [PERTSHIRE.]

KIRKOSWALD. [CUMBERLAND.]

KIRKPATRICK. [KIRKCUDBRIGHT; MAN, ISLE OF.]

KIRKSTALL. [YORKSHIRE.]

KIRKWALL. [ORKNEY ISLANDS.]

KIRRIEMUIR. [FORFARSHIRE.]

KIRTON. [LINCOLNSHIRE.]

KISCHENEFF, or KICHENEV, a town in European Russia, capital of the government of Bessarabia, is situated on the Byk, or Bouk, a feeder of the Dniester, 40 miles N.W. from Bender and Tiraspol, on the latter river, 70 miles E. from Jassy. It was a small place with narrow dirty streets darkened by the projecting roofs of the houses, and a population of about 4000 when it came into the possession of Russia in 1812. Since then the town has been enlarged so as to cover three adjacent hills, and it now contains 15 churches, a synagogue, a Greek theological seminary, a gymnasium, several schools, and a public library. In 1838 the population had reached 13,000. The town is adorned with handsome marble fountains, and has a fine public garden. The inhabitants, who consist of Russians, Cossaks, Poles, Jews, Germans, Armenians, Bulgarians, Greeks, and gipsies, carry on a considerable trade in corn, cattle, sheep, flax, hemp, tobacco, fruit, wine, &c. The principal industrial products are brandy, leather, soap, candles, some woollen stuffs, &c.

KISHM. [PERSLA.]

KISTNA, RIVER. [HINDUSTAN.]

KITT'S, ST. [CHRISTOPHER'S, ST.]

KIZIL-IRMAK. [ANATOLIA.]

KLAGENFURT (Zelany), the capital of the crownland of Carinthia, in Austria, is situated on the river Glan, a small feeder of the Drave, in an extensive plain between the Noric and the Carnic Alps, at an elevation of 1554 feet above the sea, in 46° 12' 0" N. lat., 14° 1' 25" E. long., 145 miles in a straight line S.W. from Vienna, and has about 15,000 inhabitants including the suburbs. It is the residence of the bishop of Gurk, and the seat of a court of appeal. The town was the property of the crown till 1518, when the emperor Maximilian I. gave it to the states of Carinthia for the purpose of erecting a fortress for the defence of the country. Soon afterwards the canal from the lake Wörth, 3 miles west from the town, was opened at the expense of the citizens, and the fortifications extended as the town was enlarged—especially after the great conflagrations in 1535, 1723, and 1796, to which the town is indebted for its present fine and regular appearance. The ramparts, gates, and ditches were levelled

in 1809, and on their site there is now an agreeable promenade. The town is in the form of a square, and is adorned with many handsome public buildings, the palaces of Princes Rosenberg and Porcia, and of the bishop of Gurk; which last contains fine collections of paintings, minerals, &c. The streets are wide and regularly built. There are five public squares, three of which are embellished with monuments—a marble equestrian statue of Leopold I., a statue in lead of Maria Theresa, and an obelisk erected by the bishop of Gurk in honour of the emperor Francis I. The other buildings of note are the Burg, or old castle of Klagenfurt, the landhaus, or house of assembly for the states of Carinthia, the law courts, the lyceum and library, the gymnasium, and the theatre. There is also an Ursuline convent, a normal school, an agricultural society, two hospitals, a lunatic asylum, a house of industry, a workhouse, and house of correction. Of the seven churches in the town, the civic church is remarkable for its fine bold tower, the gallery of which commands an extensive prospect over the town and its picturesque environs. The manufactures of Klagenfurt comprise muslin, fine woollens, silks, and white lead. There is also a considerable transit trade. The high road up the valley of the Drave passes through Klagenfurt and Villach. There is a road south from Klagenfurt to Laybach by the Leobel Pass in the Carnic Alps; the distance is above 40 miles.

KNARESBOROUGH, West Riding of Yorkshire, a market-town and parliamentary borough in the parish of Knareborough, is situated on the left bank of the river Nidd, in 54° 1' N. lat., 1° 28' W. long., distant 18 miles W. by N. from York, 202 miles N.N.W. from London, and 209 miles by the Great Northern and East and West Yorkshire railways. The population of the parliamentary borough of Knareborough in 1851 was 5536. Knareborough is under the government of local magistrates and town commissioners, and returns 2 members to the Imperial Parliament. The living is a vicarage in the archdeaconry of Richmond and diocese of Ripon.

The town is situated on the side of a rocky hill, which rises from the bank of the river Nidd. The river is here crossed by two bridges, one at each end of the town. The houses are in general well built of stone, and the town is lighted with gas. The market-place is commodious. The parish church, an ancient gothic edifice, will accommodate 1200 persons. The Wesleyan and Primitive Methodist, Baptist, Independents, and Roman Catholics have places of worship in the town. The Grammar school, founded about 1617, had 35 scholars in 1852. There are also National and Infant schools; a Charity school; Independent and Roman Catholic schools; a literary institute, which had 240 members in 1851, and 907 volumes in its library; a savings bank; and a dispensary. The cotton and linen manufactures are carried on; and woollen rugs are made. Several flour-mills are in the vicinity. The market on Wednesday is well supplied with provisions, and the corn-market is well attended. A cattle fair is held fortnightly. A county court and sessions for the West Riding are held here.

Knareborough has returned two members to parliament since the 1st of Queen Mary, 1558. The ruins of Knareborough Castle stand on a rocky height about midway between the two bridges. This fortress, originally built by Serlo de Burgh, one of the Conqueror's Norman adherents, was a place of great strength, but was dismantled by order of the parliament in 1648. About half a mile down the river are the ruins of a priory for friars of the order of the Holy Trinity, which was founded by Richard Plantagenet, brother of Henry III. There are some curious dwellings excavated in the rock; also St. Robert's chapel, which is said to have been formed in the 13th century by a hermit, son of the mayor of York, and St. Robert's Cave, which is supposed to have been his residence. This cave has been made notorious by the peculiar circumstances of the murder committed there in 1744 by Eugene Aram. On the north-west bank of the river, opposite the ruins of the castle, is a curious petrifying spring, called the Dropping Well.

KNIGHTON, Radnorshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Knighton, is situated on the left bank of the river Teme, in 52° 20' N. lat., 3° 1' W. long., distant 6 miles N. by W. from Presteign, and 165 miles W.N.W. from London. The population of the municipal borough in 1851 was 1388. A Local Board of Health manages the sanitary arrangements of the town. The borough, in conjunction with Radnor and four other boroughs, returns one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry of Salop and diocese of Hereford. Knighton Poor-Law Union contains 20 parishes and townships, with a population in 1851 of 9480.

Knighton is rather picturesquely situated on the side of a steep hill on the border of the county, commanding fine views of the valley of the Teme. According to the 'Report on the Borough of Knighton,' presented to the General Board of Health by Mr. Lee, the superintending Inspector, the "rate of health is very low in Knighton;" and "goitre is very common, about one-third of the females being afflicted with it." The market on Thursday is well attended. Fairs are held on the Thursday before Easter, May 17th, October 2nd, the last Thursday in October, and the Thursday before November 12th. The parish church is a small edifice, situated close to the river Teme. In the town are a National school and 6 almshouses.

KNOWSLEY. [LANCASHIRE.]

KNUTSFORD, Cheshire, a market-town in the parish of Knutsford, is situated on the great road from London to Liverpool, in 53° 18' N. lat., 2° 21' W. long., distant 24 miles E.N.E. from Chester, and 172 miles N.W. from London. The population of the town of Knutsford in 1851 was 3127. The living is a vicarage in the archdeaconry and diocese of Chester.

The name of the town is said to be derived from Canute, or Knute, the Dane, who forded with his army the small branch of the Bollin, which runs through the town. In Lower or Nether Knutsford there are a spacious county prison, a handsome town-hall, and the market-place. A county court, and Midsummer and Michaelmas quarter-sessions for the county, are held in Knutsford. The parish church, erected in 1744, is constructed of brick and stone, and has a square tower. The Baptists, Independents, Wesleyan and Primitive Methodists, Roman Catholics, and Unitarians have places of worship. The Free school, founded in 1548, is free to 9 boys: the number of scholars in 1851 was 20. There are 2 Infant schools, and a school for boys and girls; a working-man's library, and a savings bank. The market, which is chiefly for butter and eggs, with some poultry and fruit, is held on Saturday. Fairs are held on April 23rd, Whit-Tuesday, and November 8th. Thread, worsted, and leather are the principal manufactures. Races are held near the town in the month of July.

KOH-I-BABA MOUNTAINS. [AFGHANISTAN.]

KOHISTAN. [BELOOCHISTAN.]

KOKAND. [TURKISTAN.]

KOLLIN. [COLLIN.]

KÖLN. [COLOGNE.]

KOMMOTAU. [EGER.]

KONG MOUNTAINS are situated in the western part of Northern Africa. Between 9° and 10° N. lat., 9° and 10° W. long. there seems to exist a high table-land, or perhaps mountain-knot, in which the Joliba, Quorra, or Niger, the Gambia, the Rokelle, and the upper feeders of the Senegal take their rise. From this same plateau one mountain range runs north-east, forming the watershed between the basins of the Niger and the Senegal; another takes a north-western direction, dividing the feeders of the Senegal from those of the Gambia; while a third range runs nearly east along the parallel of 9° N. lat. to the northward of the territories of the Mandingoes, the Foola, and the Ashantees. To this last range the name of the Kong Mountains has been given, from the word 'kong,' which, in the dialect of the Mandingoes, is said by Park to mean a mountain. In the kingdom of Yarriba the range is said to turn south-east, and to terminate on the banks of the Niger, near the confluence of the Tohadda with that river. But of this range, if it forms one continuous mass, very little is known. Nothing definite has been ascertained regarding its length, width, or height. [SENEGAMBIA.] The highest known parts of it are said not to exceed 2500 feet above the sea. The Kong Mountains seen by Mungo Park however must attain a much higher elevation, as they are seen from a great distance. According to the information obtained by Mollien from the natives, mountains occur between 7° and 10° W. long., 8° and 9° N. lat., which are covered with snow all the year round. But Caillié, who traversed them from west to east, near 10° N. lat., did not observe snow on the mountains; he found that the moderate ridges which lay in his way were separated from one another by fertile, well-watered, and extensive plains, and that the valleys were not numerous, and comparatively short.

(Mungo Park; Mollien; Clapperton and Lander; and Caillié, *Travels through Central Africa*.)

KONGSBERG. [AGGERHUUS.]

KÖNIGSBERG, one of the two governments into which the province of East Prussia is divided, is bounded N. by the Baltic, N.E. by Russia, E. by the government of Gumbinnen, S. by Posen, and W. by the governments of Marienwerder and Danzig. Its area is 8636 square miles, including the large bay called the Frisches Haff, and the population at the end of 1849 was 847,538, of whom 525 were Jews; 385 Mennonites, and the rest Evangelicals and Catholics, in the ratio of 4 to 1. The government borders on the Baltic from the Gulf of Danzig to the Russian frontier. The coast is low and indented by two extensive shallow fresh-water bays, which communicate with the Baltic each by a narrow strait towards its eastern extremity. These are the Curisches-Haff and the Frisches-Haff, which are described in separate articles. Several arms of the Vistula, the Passarge, which is navigable, and many other rivers, fall into the Frisches-Haff. [DANZIG; VISTULA.] The surface of the interior of the government is a flat agricultural country, with some extensive forests. Wheat, rye, flax, hemp, &c., are the chief products. Cattle and sheep are numerous.

The chief town of the government of Königsberg is **KÖNIGSBERG**. *Memel*, the most northern town in Prussia, is situated at the mouth of the Dange, and on the eastern side of the strait that joins the Curisches-Haff to the Baltic. It is fortified and well built, and has a safe harbour defended by a citadel. The entrance to the harbour is crossed by a bar, on which there is from 13 to 18 feet water. The town is well situated for commerce. The exports consist of timber, hemp, flax, corn, tow, staves, linseed, oil, oil-cake, rags, hides, tallow, bristles, &c., most of which are brought from Poland and Russia. The imports are chiefly salt, coals, herrings, colonial produce, and manufactured goods. The number of ships that arrived in 1849 was 1074, about half of which were in ballast; the departures numbered 1072. In

the town there are several breweries, distilleries, soap factories, oil and saw-mills, ship-building yards, woollen factories, &c. The population is about 10,000. On the north-east side of the entrance of the harbour is a lighthouse, 128 feet high, in 55° 43' 7" N. lat., 21° 6' 2" E. long. A great part of the town was destroyed by fire October 4, 1854.

Rastenburg, on the Guber, a feeder of the Alle, about 60 miles S.E. from Königsberg, has about 6000 inhabitants, and a gymnasium, with 11 professors and about 190 pupils.

Braunsberg, a busy commercial town on the Passarge, and near the entrance of that river into the Frisches-Haff, has a population of 8500, who manufacture cloth, leather, and yarn, and export corn and timber. Braunsberg is occasionally the residence of the Catholic bishop of Ermeland, and has a Catholic theological college, and a Catholic gymnasium, with 13 professors and 322 pupils (in 1850). A railway passing through Braunsberg connects Königsberg with Danzig.

KÖNIGSBERG, the capital of the province of East Prussia, is situated in 54° 42' 12" N. lat., 20° 29' 15" E. long., on the navigable river Pregel, which falls into the Frisches-Haff about four miles below the city, 340 miles in a straight line N.E. from Berlin, but 420 miles by railway through Stettin, Woldenberg, and Bromberg; and has a population of 75,284. The river, running from east to west, approaches the city in two arms, which unite and form an island. Königsberg is built on both sides of the river, and on this island. It consists of three parts, called the Old Town, Löbenicht, and the Kneiphof, besides the royal palace and the citadel Friedericksberg, and four large suburbs and ten smaller ones called Liberties. The Old Town and Löbenicht, both of which are on the north side of the river, are built on seven hills, and the Kneiphof on the island, the soil of which is swampy, and the houses are erected on piles.

Königsberg originated in a wooden fort erected by the Teutonic Knights in 1256 on the eminence, near the Pregel, where the palace now stands. In 1257 another fort was built of stone, surrounded with double walls, nine towers, and a moat. The infant town was plundered and burned in 1264, and the inhabitants who escaped death or slavery settled in the valley between the palace and the river. This was the origin of the present Old Town. In 1300 the Löbenicht, till then a village, obtained the privilege of a town, and in 1327 the Kneiphof was founded. Thus Königsberg consisted originally of three towns, each of which had its own magistrates and jurisdiction. The suburbs were gradually added, and the city became one of the most important commercial places of the north. In 1365 it joined the Hanseatic League, and in 1457, when Marienberg was betrayed to the Poles, Königsberg was chosen for the residence of the grand master of the Teutonic order, and so remained till Prussia was transformed into a duchy in 1528, some time previous to which the Reformation had made great progress in that province. In 1657 Prussia was ceded by the peace of Wehlau to the elector of Brandenburg, who built the citadel to overawe the citizens. In 1701 Frederick III. was crowned here as the first king of Prussia. In the Seven Years' War Königsberg was occupied from 1758 to 1764 by the Russians, who governed the country in the name of the empress Elizabeth; and it again suffered severely from the exactions of the French, who occupied it in 1807, after the disastrous battle of Friedland.

The want of regularity in plan, and the mean appearance of the streets, which are generally narrow and often crooked, make an unfavourable impression on a stranger: the few handsome public and private edifices are scattered over the whole city. There are seven wooden bridges over the Pregel. The castle, or royal palace, has been gradually enlarged and beautified till it has obtained its present form. The most interesting parts of it are the church, the Muscovite hall (274 feet long and 59 feet wide without pillars), and the tower (240 feet high, 278 feet above the Pregel), from the top of which there is a fine prospect of the city and environs. The most remarkable building is the cathedral of St. Nicholas, founded in 1332, and containing a fine organ with 6000 pipes, many excellent paintings, and monuments of the grand masters of the Teutonic Knights and of the dukes of Prussia. The Albrecht University, founded by Albrecht first duke of Prussia in 1544, has 49 professors and lecturers, and 384 students. It has four faculties—Protestant theology, law, medicine, and philosophy. Connected with the university are a library of 45,000 volumes, a botanic garden, and an astronomical observatory. There are likewise three gymnasia—one in the Friedericksberg, with 16 professors and 218 pupils in 1850; one in the Altstadt, with 18 professors and 367 pupils; and one in the Kneiphof, with 14 professors and 272 pupils. There are also very numerous schools, many charitable institutions, an exchange, a town-hall, and a theatre. Königsberg has many manufactories of woollens, linen, silk, leather, tobacco, soap, and sugar; it has celebrated breweries and spirit distilleries, ship-building yards, and an extensive trade in corn, &c. Its geographical position has long made it an important place of trade. Only vessels of light draft can come up to the town; large vessels discharge and load by lighters at Pillau, at the mouth of the Frisches-Haff, in the Gulf of Danzig. During 1849 622 vessels entered Königsberg and Pillau, 219 of which were in ballast; the rest brought wine, fruits, coal, salt, sugar, herrings, fish, train-oil, iron, &c. The departures were 566 vessels laden with grain, oil-cake, rape, and flax-seed, flax, timber, &c. Beer, hemp, tallow and wax, bristles and quills, are likewise exported.

KÖNIGSBERG. [BRANDENBURG; EGWA.]

KONIOOSHL [ALBUTIAN ISLANDS.]

KONIYEH (Koniah, Koniah), a city in Asia Minor, capital of the pashalic of Karassan, which includes the greater part of Phrygia and Pamphylia, is situated in a wide plain in 37° 54' N. lat., 32° 40' E. long., 305 miles E. by S. from Smyrna, and the same distance S.E. from Constantinople: population, 80,000. The town is surrounded by walls built with well-cut blocks of stone, and strengthened by square towers, some of them richly ornamented with cornices, arabesques, lions' heads, and Arabic inscriptions. The walls rise from the brink of a wide fosse, and are pierced by handsome gateways, some of which are constructed with fragments of ancient structures. Within the city, when seen by Hamilton, presented little except ruin and decay; large spaces lay covered with heaps of dilapidated mosques and deserted houses. The modern town and the bazars occupy the more eastern part of the site, where also is the konak, or palace of the pasha. The houses are low, and mostly built of sun-dried bricks and wood. The old castle, which stands in the centre of the town, is crumbling to pieces, its stone-facings having been removed to build the pasha's konak. Koniyeh contains many beautiful remains of Saracenic architecture, among which may be mentioned the mosque of Sultan Alettin on the castle hill, and the Injemi Minareh Djami (Mosque with the Minaret reaching to the Stars), which is exquisitely adorned with delicate tracery, fretwork, and mouldings. The minarets are chiefly of glazed tiles and bricks of various colours, red and blue prevailing. The old Turkish prison, which forms part of the western wall, is an interesting half-ruined structure, bearing some resemblance to a gothic castle with its ruined towers, battlements, and keep. The pasha's konak is a large straggling building approached by a raised esplanade between extensive burial-grounds, part of the site being now used as a cemetery. The other objects of note in the town are its large bazars, several medresseh, or colleges, several sepulchral chapels, a few Armenian churches, the public baths and khans, and the tomb of a Moalem saint venerated all over Turkey. The manufactures are confined to carpets and blue and yellow marocco leather. Cotton, wool, and skins are sent to Smyrna. The immediate neighbourhood of the town is belted by a small breadth of garden-ground, which is kept in a state of verdure by irrigation. The rest of the plain in summer is a dusty desert; in winter flooded and impassable. The city is supplied with fruit and vegetables chiefly from the Greek village of *Zilick*, which is two hours distant, and situated in a gorge among the trachytic hills westward of Koniyeh. This village is inhabited by about 5000 Greeks, descendants of the ancient inhabitants of Koniyeh, who were driven out and obliged to settle here by the Turks when they captured the city.

Koniyeh is the ancient *Iconium*, which Xenophon says ('Anab.' i. 2) was in Phrygia; in later times it was considered the capital of Lycaonia. Under the Romans it seems to have risen in importance. Cicero spent ten days in Iconium on his way to Cilicia ('Epist. ad Atticum,' v. 20). In the first age of Christianity it is described as a populous city inhabited by Greeks and Jews. St. Paul and St. Barnabas preached in the synagogue of Iconium. Under the Greek emperors the city continued to be the metropolis of Lycaonia; but it was wrested from them first by the Saracens, and afterwards by the Seljukian Turks about A.D. 1075, who made it the capital of their dominions. Under the Seljukian sultans, and during the period of the Crusades, Iconium acquired its greatest celebrity. The Seljukian dynasty and power terminated in 1294. After a period of anarchy the city was seized by Othman, the founder of the Ottoman empire in Asia, which had Brusa for its capital. From this time Koniyeh declined rapidly. Ibrahim Pasha, commander of the Egyptian army, completely defeated the Turks near Koniyeh, December 20, 1832.

A Christian synod held at Iconium about A.D. 280 pronounced against the validity of heretical baptism. Koniyeh is looked upon by the Moslems as a sacred city; many dervishes reside in it, and it is visited by many pilgrims.

(Hamilton, *Researches in Asia Minor*; *Dictionary of Greek and Roman Geography*; *London Geographical Journal*, vols. viii. and x.; *Conversations-Lexicon*; *L'Art de Vérifier les Dates*.)

KOBA. [GEORGIA.]

KOOM. [PERSIA.]

KOORAM RIVER. [AFGHANISTAN.]

KOOTAIS. [GEORGIA.]

KOPREINITZA. [CROATIA.]

KORDOFAN, a country in Africa to the south of Nubia, extends from about 15° 20' to 10° N. lat., 28° to 32° E. long. It is divided from Dar-Fur, which lies to the west, and from Nubia, by deserts. On the east it extends to the Bahr-el-Abiad, or White Nile, which divides it from Sennar. Its southern boundary-line is stated to be formed by extensive forests covering the northern declivity of the Deir or Tuggala Mountains, and inhabited by negroes.

The southern districts as far north as 12° N. lat., have a broken surface, and the hills rise in some parts to a considerable height. This part of the country contains many springs and wells. The country north of 12° N. lat. may be considered as an elevated and mostly level plain, on which several isolated groups of hills rise at considerable distances from one another. These hills are the only places which are inhabited, because it is only in their neighbourhood that wells are found that yield water all the year round. Certain wandering

tribes visit some depressions in the plain, where, in the rainy season, temporary lakes are formed, which preserve the water during the greater part of the year. The plain itself is partly covered with grass and partly with low thorny bushes; in a few places forest-trees occur, among which is the baobab, or *Adansonia*. The rainy season lasts from April to September. In the dry season the plain is changed into a desert. No river traverses this country, with the exception of the Bahr-el-Abiad.

Agriculture does not extend beyond the neighbourhood of the inhabited places. The principal objects of cultivation are two kinds of millet, called durrha and doghen, and samsim or sesamum. In a few places wheat and barley are grown. The wandering Beduin tribes have herds of cattle, horses, and camels. The horses are of an excellent breed, and the cattle have a hunch of fat. The tribes of negroes inhabiting the southern hilly country keep a great number of cattle, sheep, and goats, but few camels and horses. Among the wild animals Rüppell mentions elephants, giraffes, and several kinds of antelopes. The principal exports to Egypt are gold and silver, cattle-hides, sheep-skins, gum-arabic, and cattle. Of gum-arabic as much as 5000 camel-loads have been sent to Cairo in the course of a year. Iron is abundant and worked.

Kordofan was subject to the sovereign of Sennaar up to the beginning of the present century. It was then taken from him by the king of Dar-Fur, in whose possession it remained to the year 1820, when it was conquered by Mehemet Ali, pasha of Egypt. At the time when the country was under the king of Dar-Fur, Obeid, its capital, was a considerable town, and regular caravans resorted to it for slaves, ivory, gold-dust, gum-arabic, ostrich feathers, tamarinds, and honey; but on the occupation of the Egyptian Turks the town was destroyed, and Rüppell estimates its population at about 5000. He mentions a place, Shabun, which is a kind of entrepôt for the caravans that traverse eastern Sudan from east to west, and connect it with Sennaar and Habesh. Two roads lead from Sennaar to Obeid, two others from the last-mentioned place to Dabbe in Dongola, and three to Cobbe in Dar-Fur.

(Rüppell, *Reisen in Nubien, Kordofan, und dem Petraischen Arabien*.)

KORONI. [COBON.]

KÖSLIN. [CÖSLIN.]

KOSTENDJE, or KUSTENDJI, a sea-port town or rather village of Turkey in Europe, is situated in the Dobrudscha at the eastern termination of the fortification called Trajan's Wall, 225 miles in a straight line nearly due north from Constantinople, and about 40 miles E. from Rassova. The town, which consists of about 500 houses, is built on the west shore of the Black Sea on a peninsular projection of limestone rock, which rises precipitously from the sea to the height of about 100 feet, and shelters the harbour on the northern side. The harbour is exposed, except on the north side, and ill adapted for large ships, having in places only 7 feet water. Kostendje occupies the site of an ancient town, *Constantiana*, which is said to have been founded and named from Constantine the Great. It retains in its ruined mole traces of Roman masonry. The town has some trade in corn. The project of opening a channel for the Danube across the Dobrudscha by the chain of lakes called Kara-Su into the harbour of Kostendje has been often mooted. [DOBRUDSCHA.]

KOSTROMA. [COSTROMA.]

KÖTHEN, the capital of the duchy of Anhalt-Köthen, is situated on a fertile spot near the Zittau, in 51° 46' N. lat., 12° 3' E. long., at the junction of railways from Berlin, Magdeburg, Bernburg, and Leipzig, from which it is respectively distant 93, 32, 12, and 40 miles. It was founded by the Slavonians, and was devastated in A.D. 927 by Henry I. The streets are broad and well paved, and the town presents a neat and pleasing appearance; it is about half a league in circumference, and surrounded with high walls. It is divided into the old and new town; the chief buildings are the ducal palace and castle, town-hall, one Reformed, one Lutheran, and one Roman Catholic church. It also possesses various charitable institutions; a normal school, a public library and museum of natural history, picture gallery, a theatre, and some linen and woollen manufactures. Köthen carries on some trade in corn and wool.

KOTTBUS. [BRANDENBURG.]

KOZLOFF, GEUSLEV, or EUPATORIA, a sea-port town in the Russian government of Taurida, on the west coast of the Crimea, is situated on the north shores of the Bay of Kalamita, in about 45° 14' N. lat., 33° 25' E. long., 40 miles N.W. from Simferopol the capital of the Crimea, and 45 miles N. by W. in a straight line from Sevastopol. The population according to the census of 1851 was 8200, chiefly Tartars and Karaitic Jews, with a few Greek and Armenians. The port is shallow admitting only vessels of about 8 feet draught, but tolerably safe and never frozen up. The bay forms an excellent roadstead, and ships may approach within cable's length of the shore, but it is exposed to the west and south winds which cause a heavy surf all along the coast. The town which is surrounded by an old crumbling wall is ill-built; the streets are narrow, crooked, and dirty; the houses, low and built of bricks and clay, open upon courts or gardens in the Turkish fashion, but present to the street only low dead walls. The principal buildings are a Russo-Greek church, several mosques, an Armenian church, two pretty synagogues belonging to the Karaitic

Jews, a bazaar, several khans, and the house in which the governor of the district resides. The principal industrial products are leather, felt stuffs, and wood-work. The town is famous for the preparation of the black lambkins, known in England as 'Astrakhans.' There are several shore-lakes to the south-east of the town on which a good deal of salt is gathered in summer. The water in the town and neighbourhood is bad. Before the Russian occupation of the Crimea, Kozloff, it is said, had a population of 30,000, and was the centre of all the export trade of the country. In order to restore the prosperity of the place it was made a free-port for a limited period from the year 1798, and its trade partially recovered, but subsequently dwindled away on the rise of Odessa. It still carries on some trade in salt, corn, flour, bar-iron, wool, hides, butter, wax, hairskins, &c. There is a quarantine station at Kozloff.

Kozloff is said to occupy the site of the ancient *Eupatoria*, or *Eupatorium*, founded by Mithridates Eupator and named after him. The Russians call it Eupatoria, but this is no proof that the two places are identical. Some authors say that the site of the ancient Eupatoria is marked by the village of Inkerman on the north shore of the Bay of Sevastopol, where there are ancient ruins. Be this as it may, Kozloff under the Tartars was one of the most important and populous towns in the Crimea. The Russians took it in 1736, 1771, and in 1783, when with the whole of the Crimea it came into the power of the Czars. In the Anglo-French invasion of the Crimea the town was occupied by the Allies Sept. 13, 1854.

KRAIN, or CARNIOLA, a crownland of the Austrian empire, is bounded N. by Carinthia, E. by Styria and Croatia, S. by Croatia and the Küstenland, and W. by Friuli and the circle of Görz. The area is 3838 square miles, and the population, according to the census of 1850-51, was 463,956.

The surface is extremely rugged and mountainous. The principal chain of the Carnic Alps penetrates into the north-west of the crownland, where it terminates in the mass of Mount Terglou, the highest point of which rises to 10,800 feet above the level of the sea. The northern boundary is formed by an offset or continuation of the Carnic Alps, which springs from the main chain near the village of Weissenfels in the north-western angle of the crownland, forming the watershed between the Drave and the Save, and running in a general south-east direction between Carinthia and Carniola, through Croatia and Slavonia, where it terminates in the valley of the Danube. This range, which is distinguished by different names, covers with its ramifications all that part of the crownland which lies north of the Save, its highest points being the Loibalberg (5477 feet), the Sattelberg, farther east, and the Steiner Alps to the north of the village of Stein, which rise 10,000 feet above the level of the sea. These mountains are distinguished by their singular forms, and consist of steep, rugged, and for the most part naked masses of limestone, with but scanty vegetation and little timber. They are crossed by three roads, one from Villach to Laybach by the Wurzen Pass and the Upper Sathal; a second from Klagenfurt to Laybach by the Leobel or Loibel Pass (4032 feet); and a third from Marburg and Cilli to Laybach by the Trojana Pass, which is also traversed by the Vienna-Trieste railway, now open as far as Laybach. In the angle between the main chain of the Carnic Alps and the chain that forms their continuation south-eastward, the Save has its rise in the glaciers that cover the northern flanks of Mount Terglou.

The central and southern parts of the crownland are covered by the Julian, or Krainer Alps, and their ramifications. The Julian Alps run south-east from Mount Terglou between the Upper Save, and the Isonzo to Mount Kleck in Croatia, reaching the height of 7458 feet above the sea in the Snianik, or Schneeberg, close to the Croatian frontier. A branch runs southward from the main chain near Idria along the northern and eastern edge of the peninsula of Istria; and along the western side of this ridge to the south of the Wippach extends a stony wilderness called the Karst, which is a plateau of limestone rocks abounding with strange chasms and fissures and funnel-shaped cavities, infested by furious winds, and almost entirely destitute of vegetation. In all this region there is not a single tree; in a few sheltered spots a little corn is grown, and the vine is seen to creep along the crevices of the rocks. The Karst is connected by the Nanas Mountains (4000 feet) near Wippach with the main chain of the Julian Alps, here called Birnbaumerwald. From the Schneeberg a branch of the Julian Alps runs between the Kulpa and the Gurlk, reaching in the summit of Jauernig an elevation of above 6000 feet, and stretching up to the Save in the most eastern part of the crownland. The Julian Alps consist of granulous limestone which is shattered into rugged fragments, rent by chasms, and full of grottoes, caverns, and underground passages, abounding with the most beautiful stalactites. The rain that falls and the snow that melts upon them, form streams, which for the most part flow in subterranean channels, and the want of moisture at the surface gives these mountains an aspect of the most repulsive barrenness. It is said that there are above 1000 grottoes and caverns in the Julian Alps, the most celebrated of which are those in the neighbourhood of ADELSBERG. Innumerable rivulets disappear in the calcareous soil, and periodical fountains spring forth; even large streams plunge more than once into the chasms, which intersect the surface of the region, and pursue for a time an underground course. Nevertheless, some of the valleys present picturesque scenery,

especially those of the Save and its feeders, and the Wippach. The principal roads that cross the Julian Alps in Carniola lead from Laybach to Idria, and from Laybach by the Adelsberg Pass (2159 feet) across the Karst to Trieste. This last is intersected by a road from Görz through St. Veit and Senoetach to Fiume.

Except in the river-valleys which form a comparatively small portion of the surface, the soil is very unfruitful, naked mountains, rocky levels, marahas, or sandy flats being the prevailing characters of the country. The climate on the mountains and uplands is sharp; the winters severe and long; snow disappears from the mountain tops only in the height of summer. The Bora, or north-east winds, at times sweep the Karst and the more exposed parts of the country with furious violence. In the glens and valleys the soil is better, in many parts fertile, the climate much milder, and the vine, the chestnut, and maize flourish. Rye, barley, oats, some wheat, potatoes, pulse, flax, hops, and fruit are grown. In some parts the mountain slopes are clothed with pine, oak, and beech forests, but they have been considerably thinned for the use of the smelting-furnaces. On the mountains many rare Alpine plants, medicinal herbs and roots are found. Horned cattle and horses are small; swine and poultry abound. Among the wild animals are deer, wild boars, the chamois goat, foxes, &c. Bears and wolves are rare. Birds of prey are numerous. Of game fowl the principal kinds are pheasants, bustards, partridges, snipes, and water-fowl. Among the minerals the most important are iron, quicksilver, copper, lead, cinnabar, alum, coal, marble, gypsum, rock-crystal, &c. The great quicksilver mines of Idria in the west of the crown land, have been long famous; the entrance to them is in the middle of the town of Idria; they formerly yielded 16,000 cwt. yearly. The industrial products comprise chiefly bar-iron, iron and steel articles, such as scythes, sickles, nails, files, &c.; copper articles, woollen-cloth, leather, linen, lace, pottery, paper, straw-hats, canvases, horse-hair sieves, tiles, German tinder, &c. A good number of the population is employed in mining and metallurgy. There is a considerable trade in timber and firewood.

The principal rivers are the Save and the Isonzo. The *Save*, or *Sava*, rises on the northern flank of Mount Terglou, and runs first eastward along that mountain mass, and then southward for a short distance to its junction with the Savenitza; its course is then south-south-east to the neighbourhood of Laybach, in which the river Laybach joins it on its right bank. The river then runs eastward till it reaches the boundary, along which it runs in a south-east direction till it enters Croatia a few miles below its junction with the Gurk, which passes Neustädtl. The *Isonzo* (the ancient *Sontius*) rises on the southern slope of Mount Terglou, from which it runs southward through the western part of Carniola and the circle of Görz in the Kustenland. At a short distance above Aquileia the Isonzo divides into two branches, the Isonzato and the Scobbo, which inclose the isle of Morosina, and after their re-union enter the Gulf of Trieste. The principal feeders of the Isonzo are, on the right, the Torre, which drains a part of the province of Friuli, and on the left the Idria and the Wippach, both of which flow in a north-west direction, the former passing the town of Idria and entering the Isonzo above Canal, the latter falling into it between Görz and Gradiaca. Both the Save and the Isonzo are subject to inundations on the melting of the snow in spring and after the autumnal rains. The Save is navigable in Carniola, and a river-port has been formed at Steinbruck, a station on the Vienna-Trieste railway to the south of Cilli. The Isonzo is navigable for small vessels for about 10 miles above its mouth. Both streams are available for floating timber down from the mountain forests. The Isonzo formed part of the eastern boundary of Italy under the French empire. The *Laybach*, above mentioned, rises near Adelsberg under the name of *Poik*; this stream loses itself in the grotto of Adelsberg and re-appears in the *Unz*, which again sinks below the surface, but re-appears at the village of Ober-Laybach, where it becomes navigable for boats. The remarkable Lake of Czirknitz, or Zirknitz, is noticed in a separate article. [CZIRKNITZ.]

The crownland is divided into 10 circles. With the exception of Laybach and Idria the towns are small. *Laybach*, or *Laiabach*, the capital of the crownland, is situated in 46° 1' 48" N. lat., 14° 30' E. long., 258 miles S. by E. from Vienna by the Vienna-Trieste railway; in an extensive valley near the mouth of the navigable river Laybach, which divides the city into two parts, connected by five bridges; and has with its eight suburbs about 18,000 inhabitants. It is a bishop's see, and has a fine cathedral, twelve other churches, a lycœum, a gymnasium, and many other public institutions. The chief industrial products of Laybach are porcelain, linen, and refined sugar; there is an active transit-trade from the interior to Trieste, in which direction a railway is in course of construction. The citadel, situated on a commanding eminence, is now used as a prison. At a short distance to the north of the town there is a stone bridge of 11 arches, 540 paces in length, over the Save. Laybach is celebrated for the congress held there in 1821. The other towns are Stein, which gives its name to the Steiner Alps, from the summits of which, 10,274 feet above the level of the sea, there is a magnificent prospect over Carniola; Krainburg, with the castle of Kieselstein; Neumarkt, famous for the manufacture of scythes, sickles, &c.; none of these towns have so many as 2000 inhabitants.

Neustädtl, the capital of a circle, is beautifully situated on the river

Gurk, 38 miles E.S.E. from Laybach. It is a very pretty regularly-built town, with three churches, a gymnasium, a Franciscan convent, and about 2000 inhabitants.

The only other place of importance is *Idria*, a mining town, famous for its quicksilver mines, which were accidentally discovered by a peasant in the year 1497. It is situated partly at the bottom of a narrow valley, surrounded by high mountains, 22 miles W. from Laybach, on the banks of the little river Idria, and partly on several low hills, of which that called Mount Calvary is distinguished by its height and picturesque form. The town consists of between 400 and 500 houses, and has about 5000 inhabitants, who subsist partly by lace-making and straw-plaiting; but the greater part are employed in the mines and works. A large building called *Schloss*, in the middle of the town, contains the offices of the managers of the mines; close to it is the entrance to the mine by a large iron gate, which opens to a horizontal passage hewn in the solid rock, leading to a flight of 757 steps cut in the limestone rock, which are kept in perfect order and provided with a hand-rail. At the foot of this staircase there is a small aisle serving as a chapel, where the miners perform their devotions before they proceed into the mine, and where a couple of tapers burning on the altar help to cheer the gloom that reigns in these subterranean caverns. The visitor proceeding from this chapel soon reaches various adits running in all directions, and would soon be bewildered in the labyrinth without a guide. This mine is one of the greatest curiosities in the Austrian empire, and unequalled for the order, beauty, and safety which are remarked in every part. The noxious exhalations of the quicksilver, which sensibly affect respiration, and the suffocating heat, soon make the visitor anxious to return to the light of day, to which he ascends by a perpendicular shaft in a kind of box or case, which lands him on the surface of the earth at a great distance from the spot at which he entered. The greatest depth of the mine is 750 feet. About 150 tons of mercury are produced annually. The stamping-mills, washing-houses, furnaces, and roasting-houses for the refinement of the mercurial ore are at a short distance below the town. Besides the quicksilver-works there is a manufactory of cinnabar, which produces 1800 cwt. annually. In the vicinity there are marble, jasper, and freestone. All the establishments for smelting, refining, &c., are admirably arranged, and there are various benevolent institutions for the poor miners, whose health is most dreadfully impaired by the deleterious atmosphere in which they ply their sickly trade. These mines, the grottoes of Adelsberg, and the Lake of Czirknitz, are celebrated as 'the three sights of Carniola.'

Carniola was, until the recent political arrangement of the Austrian empire in 1849, divided into the three circles of Laybach, Neustädtl, and Adelsberg, which corresponded with the older divisions of Upper, Lower, and Inner Krain respectively, and formed the government of Laybach. Krain was early inhabited by a people of Slavonic stock, and formed in the 10th century an independent margraviate, which at a later period the dukes of Austria and Carinthia divided between them, and which was raised in the 12th century to a dukedom. The duchy on the death of the Earl of Tyrol in 1335 fell to the Earl of Görz, from whom it came, through failure of male issue, to the house of Austria in 1364. By the treaty of Vienna in 1809 Krain was ceded to France, and constituted part of the Illyrian provinces. In 1813 it again came into the possession of Austria, and formed part of the kingdom of Illyria. [ILLYRIA.]

Turkish Croatia is sometimes (we know not whether correctly)

called Krain, or Kraina. [BOSNIA.]
KRASNOI-YAR. [ASTRAKHAN.]
KREMNITZ. [HUNGARY.]
KREMS, KREMSMÜNSTER. [ENS.]
KREUZNACH. [CREUZNACH.]
KRYCI ISLANDS. [ALEUTIAN ISLANDS.]
KUBA. [DAGHESTAN.]

KUBAN (called *Kubin* by the Abassians, *Priash* by the Circassians), is a river in Russia, which originates in Mount Caucasus, between the principal range and Mount Elbrook. Having skirted the southern and western declivities of that snow-capped peak, it turns to the north, and afterwards to the west, and again to the north before it leaves the mountain range near Grigoriopol. It then turns again to the west and flows along the northern offsets of the Caucasus, which it divides from the steppes of the Tchernomorion Cossaks. Towards its mouth it enters a low flat country, and along its banks salt reed-marshes extend to a considerable distance. In this plain the river divides into two branches, and forms an island called the Island of Taman. One shallow branch, called by the Russians Tchernaya Protoka, runs nearly due north, and falls into the Sea of Azof. The other branch, which preserves the name of Kuban, continues its western course and falls into the shore-lake called Kubanskoi Liman, which is united to the Black Sea by a shallow passage scarcely 100 fathoms wide. The Kuban runs nearly 400 miles, and with a rapid current between steep rocky banks in the mountains; in the plain too the bed of the river is considerably (12 to 18 feet) below the surrounding surface, so that the river never overflows its banks. The Kuban carries down all the drainage of the northern slope of the western Caucasus, from which a large number of streams flow into it on the left bank. Among them are the Zelenchuk, the Ourop, the Laba,

which receives the Tchalmik, the Einansau, and other streams,) the Chagouta, or Chahadgaha, the Spaga, the Soup, and the Kara-Kuban, or Aâpa. On the right bank it receives no stream worth naming. The river abounds with fish. It is navigable for river-barges up to the town of Yekaterinodar, and on its thinly inhabited banks a number of small fortresses have been erected to protect the level country from the incursions of the mountaineers of the Caucasus.

KUMANIA. [CUMANIA.]

KUNAWUR. [BUSSAHER.]

KUNDUZ. [TURKISTAN.]

KUOPIO. [FINLAND.]

KUR, the ancient Cyrus, a river of Armenia, rises near 41° N. lat., 42° 35' E. long., in the mountains north-west of Kara, at a distance of about 12 miles S.S.W. from Ardahan in the Turkish pashalic of Kara. After flowing through the plain of Ardahan in the direction of north by east it runs in a general northern course to the latitude of Akhalzikh, which town it leaves a little to the west, and then turning to north-east it enters Russian Georgia, where it gradually declines to the east-south-east, and receives from the southern declivity of Mount Caucasus the *Arakui*, or *Aragbor*, a rapid river, which brings down a great mass of water. Below this junction the Kur is a very considerable river, and runs nearly south, passing the large town of Tiflis. So far its course is bordered by high, steep, and rocky banks, and it traverses a hilly country. Below Tiflis it enters the Plain of Kara, where its banks are alternately low and high, the plain being considerably elevated above its bed, so that the water of the river cannot be used for irrigating any part of it. In this plain several springs of petroleum occur. The Kur runs through the plain mostly in an east-south-eastern direction, and at its termination its waters are increased by those of the *Alazan*, another powerful river, descending from the southern declivity of Mount Caucasus. The *Alazan* is the ancient *Alazonius*; the country between it and the Kur is drained by the *Yori*, or *Gori*, the ancient *Cambyses*, up which Pompey marched in pursuit of Mithridates, B.C. 65, and which joins the *Alazan* a few miles above its junction with the Kur. From its junction with the *Alazan* the Kur traverses a hilly country of some extent, and then enters that extensive plain which extends along the Caspian Sea from Baku to the Bay of Kizil Agatch. This extensive plain is broken by isolated hills and numerous salt-marshes. Some of the hills along its northern border are mud-volcanoes, and in many places springs of petroleum occur. Near the banks of the Kur the country is subject to inundations, and overgrown with reeds to a considerable distance. The districts nearest the sea-coast have a soil impregnated either with salt or petroleum, and are completely sterile; but towards the hills and mountains which surround the plain the soil is tolerably fertile. About 70 miles from its mouth the Kur receives the *Aras* on the right bank [ARAS] and becomes navigable for moderate-sized vessels, and is about 140 yards wide. About 20 miles from the sea the river divides into several branches, of which the outermost are the largest. On the left main branch is *Salian*, a collection of villages rather than a town, but a wealthy place, on account of the productive fishery which is carried on by the inhabitants in the river, and at its mouth. The fish taken here are the same species which are caught at Astrakhan—sturgeon, pike, salmon, shad, &c. The delta of the Kur projects several miles into the Caspian Sea. The whole course of the river is about 560 miles. The district between the Kur and the *Aras* formerly belonged to Persia; the watershed between the two rivers is formed by the *Karabagh* and *Alighez* Mountains. (Reinegg and Biberstein; *London Geographical Journal*, vols. iii. and iv.; *Dictionary of Greek and Roman Geography*.)

KURDISTAN comprehends the larger portion of that mountain region which divides the elevated table-land of Iran (Persia) from the low plains of Mesopotamia, or Al-Jezireh. The name signifies 'Land of the Kurds,' and as this lawless people have spread themselves over a large part of Armenia and even into the eastern parts of Asia Minor, the term is frequently used in a loose sense so as to include a much wider range of country than that to which it properly applies. The mountain range of the *Erdesh-Dagh*, or *Arjerash-Dagh* (38° 20' N. lat.), constitutes the boundary line between Armenia and Kurdistan. From this range Kurdistan extends in a south-eastern direction to the Persian province of Luristan, or to about 34° N. lat. The greatest width of this mountain-region is about 130 miles, and the area of the whole may be about 28,000 square miles. About three-fourths of it are under the dominion of the sultan, and form portions of the *eyalets* of Baghdad, Mosul, and Van; the remainder belongs to Persia, and constitutes the province of Kurdistan, of which *Kermanahah* is the capital.

The higher mountain region occupies the northern portion, and extends from the *Erdosh-Tagh* to a range which on the west approaches the left bank of the *Tigris* south of *Jezireh-ibn-Omar*, and extends thence in an east-by-south direction across the whole region, being overtopped near the boundary-line of Persia by the elevated peak of *Rowandiz* (10,120 feet above the sea-level). This range is called at its western extremity, where it hardly rises 1000 feet above the sea-level, the *Soli Range*; but in the middle, where it attains 3000 feet and more, the *El-Khair Mountains*: it is still higher where it approaches the table-land of Iran. The whole country between this range and the *Erdosh-Tagh* is mountainous. In the vicinity of its northern limits the rocky masses are rarely and not deeply furrowed by depre-

sions in the shape of valleys. They form a table-land from 6000 to 7000 feet elevated above the sea-level, whose surface presents a succession of low hills with gentle declivities and small plains between them. This is the table-land of *Ali-Bagh*, on which very few lofty summits rise. The climate is very dry, and the vegetation scanty. It is mostly used as pasture-ground in summer. In proceeding southward the country gradually changes its features. The valleys sink deeper and the masses between them rise higher, and thus the table-land is changed into a mountainous country consisting of high ridges with steep acclivities and comparatively narrow valleys between them. Some of the ridges attain a great elevation, as the *Marannan Mountains*, the *Jawar-Tagh*, and the *Jelooch Mountains*; the *Jawar-Tagh* appears to be the highest, and to rise between 12,000 and 13,000 feet above the sea. The declivities of the ridges and the valleys present a vigorous vegetation in the numerous forests and in the growth of the different kinds of grain and vegetables which are cultivated. The forests chiefly consist of different kinds of oak, from which immense quantities of gall-nuts are collected. In the valleys the European *Cerealia* are raised; and the orchards produce apples, pears, plums, and cherries. Many of the valleys open towards the plain of Mesopotamia, and these are wider; but the larger number extend from north to south, and are seldom more than two miles wide, and generally not half so much.

This portion of Kurdistan is in possession of some tribes of Kurds, which were till lately almost independent. Probably more than half the population are Mohammedans, and the other half Christians, among whom the Nestorians are the most numerous. Their patriarch resides in *Julamerik*, a small town situated in the vale of the river *Zab-Ala*, or *Great Zab*. Near the southern extremity of this region are the towns of *AMADIYAH* and *Rowandiz*. The town of *Rowandiz* is some miles west of the peak of *Rowandiz*. It is built on a tongue of land formed by the confluence of two rivers, and contains more than 1000 houses, and perhaps 10,000 inhabitants. Numerous caravans pass between this place and *Mosul*. They export gall-nuts, madder, hides, and tobacco, and bring back several European and Indian articles. In ancient times the district just noticed was called *Cordyene*, or *Gordyene*, which was occupied by the *Karduchi*, the ancestors of the Kurds, and evidently named from them also. [ARMENIA.]

The southern portion of Kurdistan, or that which lies between 36° and 34° N. lat., can hardly be called mountainous, except in its eastern districts. The surface however is greatly diversified by several ranges of hills. Three such ranges may be traced between the banks of the *Tigris* and the *Zagros Mountains*. These three ranges go by the names of the *Hamrin Hills*, the most south-western, *Ali-Tagh*, the central ridge; and *Kara-Tagh*, the north-eastern. They run parallel to one another from north-west to south-east. The *Hamrin Hills* terminate on the banks of the *Tigris* between the town of *Tekrit* and the mouth of the *Zab-Asfal*, or *Lesser Zab* (near 35° N. lat.); the *Ali-Tagh*, south of the confluence of the *Zab-Ala*, or *Great Zab* (near 36° N. lat.); and the *Kara-Tagh* joins the *El-Khair Mountains* south-west of the peak of *Rowandiz*. These ridges are connected with each other at several places by hilly tracts. The Turkish part of this region is described in the article on the Pashalic of *BAGHDAD*; the rest is described under *PERSIA*.

The largest river of Kurdistan is the *Zab-Ala*, or *Great Zab*. It rises in the north-western corner of the table-land of *Ali-Bagh*, or *Elbagh* [ARMENIA], at an elevation of about 7000 feet above the sea-level; receives by its numerous affluents the drainage of a great part of Northern Kurdistan, enters Southern Kurdistan by a narrow glen where the *Kara-Tagh Mountains* are connected with the *Khair* range, and joins the *Tigris* about 30 miles below *Mosul*. At the place of their confluence the rivers are nearly equal in size. The waters of the *Tigris* are highest in April and May, but in the *Zab* in June and July, for about that season the greater part of the snow with which the mountain region is covered during the long winter dissolves, and thus the water brought down by this affluent serves during the summer to keep up the level in the lower part of the *Tigris*. The water of the *Zab-Ala* is much colder than that of the *Tigris*. The other large rivers of Kurdistan are the *Zab-Asfal*, or *Lesser Zab*, and the *Diyâlah*. They rise in the elevated region dividing Southern Kurdistan from the table-land of Iran, and after draining the first-mentioned country they fall into the *Tigris*; they break through all the lower ridges of Southern Kurdistan. The chief towns of this part of Kurdistan are noticed under *BAGHDAD*, Pashalic of.

The climate of Kurdistan is excessively cold in winter, when the mountainous region is covered with snow for six months in the year. The heat in summer in the plains and valleys to the south is very oppressive, especially during the north-eastern winds, which suddenly raise the temperature 10 degrees and more. When the *sharki*, or north-east wind, does not blow, the changes of the atmosphere are very regular in summer.

The fields of Kurdistan produce wheat, barley, and Indian corn; millet and rice are grown only in the lower districts towards the banks of the *Tigris*. Tobacco and cotton are largely cultivated, and supply articles of commerce. Legumes, especially lentils, are much grown. Melons, water-melons, and cucumbers are very abundant. The orchards yield figs, pomegranates, olives, oranges, walnuts, apricots, peaches, plums, apples, pears, cherries, and abundance of grapes of

good quality; in some places there are plantations of dates. Poplar and chinarr trees are planted, and among the forest-trees are several kinds of oak; the pear-tree and rose-bush grow wild.

Sheep, cattle, and horses abound. There are bears, wild hogs, wild goats, antelopes, and jackals. Land-turtles are frequent, but of small size. Bees are very abundant, and honey is a considerable article of commerce; locusts sometimes lay waste a part of the country; birds are not numerous, except partridges and quails.

Minerals appear to be scarce, except building-stone. In the mountain-region iron and sulphur are met with; and in some places these mines are worked on a small scale. There are several salt-springs in the hills between the Lesser Zab and the Diyâlah, from which large quantities of salt are obtained. Naphtha and petroleum abound, especially in the vicinity of Kerkuk.

Commerce is carried on by caravans. At least one caravan departs every month from Suleimaniyeh for the Persian towns of Tabriz and Hamadan. They take to Tabriz chiefly goods obtained from Baghdad, as coffee, dates, and European and Indian manufactures; and bring back large quantities of silk for the manufactures of Baghdad, and some silk stuffs. The exports to Hamadan consist partly of goods obtained from Baghdad, and partly of the produce of the country, as tobacco, fruits, honey, gall-nuts, &c.; the imports consist of butter, but especially of the manufactures of Kasbin, as velvets, brocades, cotton-goods, &c. The commerce with Kerkuk, which is the chief market for the produce of Kurdistan, is very active; from that place are brought to Suleimaniyeh gall-nuts, honey, sheep-skins, and cattle; and exchanged for fruits, rice, leather, coffee, cotton-stuffs, &c. From Northern Kurdistan the chief articles are gall-nuts and manna, which are disposed of chiefly at Bitlis and Van. There is also much commerce with Mosul and Baghdad, where coffee, dates, and European and Indian goods are obtained in exchange for the silk brought from Tabriz, and for the produce of the country, consisting of sheep, gall-nuts, sumach, cheese, butter, gummi, tallow, soap, and tobacco.

The population of Turkish Kurdistan is estimated at one million, of which four-fifths are Kurds, and the remainder Armenians, Persians, Jews, and Turks. The Kurdish population of Persian Kurdistan may amount to 20,000 individuals. But as a numerous colony of Kurds is found in Khorassan, and several tribes are dispersed over the hilly region in Mesopotamia, over Armenia, and as far west as Aleppo and the Taurus range, the whole population of the nation may perhaps not fall short of two millions. The Kurds are a stout race of men, of dark complexion, with black hair, a large mouth, small eyes, and a savage look. They are very regularly built, and attain a great age. Their language is derived from the same stock as that of the modern Persian, but not having been fixed by writing, it has degenerated much more. The name of Kurd signifies a valiant warrior, and is therefore adopted as an honourable denomination. A great portion of the population is still addicted to a migratory life. Even when settled in villages, they leave them in summer, and retire with their herds to the adjacent mountain ranges, from which they return when the harvest time approaches. Though the Kurds are Mohammedans like their neighbours, their women enjoy a much greater degree of liberty, and are frequently met with in the streets. Ladies of rank wear a veil, but the women of the middling and lower classes go without. The Kurds are noted robbers. Further particulars of this people are given under ARMENIA.

The Kurds were known to the ancients. Xenophon ('Anabasis,' iii.) called them Karduchi, and later historians Kordisi and Gordiani. When subject to the kings of ancient Persia, they belonged partly to the province of Assyria, and partly to Media, as at present their country is divided between Turkey and Persia. The battle Gaugamela (Arbela) was fought in Kurdistan, near the modern town of Arbil. [BAGHDAD, vol. i. 822.] After the time of Alexander their country was united to the kingdom of Syria, but was dismembered from it in the third century before Christ by the Parthians. It afterwards became a part of the new Persian empire, and fell with it under the dominion of the khalifs of Baghdad. After the destruction of the khalifat, Kurdistan partook of the numerous revolutions in Persia and Mesopotamia. The famous sultan Saladin was a Kurd, of the tribe of Rewandooz, and appears to have got possession at least of a part of the country. But it soon passed under the dominion of the Moguls (1258), and finally (1888) was conquered by Timur. After the establishment of the Soofee dynasty (1502), Kurdistan constituted a part of Persia, and remained so till the 17th century, when the Kurds, oppressed by the Persians, revolted, and subjected themselves to the dominion of the Turkish sultan.

(Rich, *Narrative of a Residence in Kurdistan*; Heude, *Voyage up the Persian Gulf, and a Journey overland from India to England*; Ainsworth, Shiel, Rawlinson, in *London Geographical Journal*, vols. viii., x., and xi.; Ritter, *Erdrkunde von Asien*; Dr. Layard, *Nineveh and its Remains*; *Discoveries*.)

KURILE ISLANDS, a group of islands in the Pacific Ocean, extend from Cape Lopatka, the southern extremity of the peninsula of Kamtchatka, in a somewhat curved line to Cape Broughton, the north-eastern extremity of the island of Yeso. They are twenty-five in number, and are all of volcanic origin, consisting of high masses of lava. Ten active volcanoes, some of them 6000 feet high, are known to exist on the nineteen northern islands. The vegetation is scanty,

and on those near Kamtchatka trees do not grow; but the southern islands are more fertile, especially Kunashir and Iturup, on which the Japanese have settled. The remainder are claimed by the Russians as an appendage to Kamtchatka, and they even established a settlement on Urup in 1828 for the purpose of hunting the numerous wild animals, especially beavers, which are found there. The natives are partly Kamtchatdales and partly Ainos, a tribe which seems to belong to the same race as the Japanese. Both tribes live on the produce of the chase and the fisheries, which they barter with American, Russian, Japanese, and Dutch traders. The Japanese have introduced agriculture into the islands which have been settled by them.

KURLAND. [COURLAND.]

KURNAU. [BHUTPOOL.]

KURSK, a large government of European Russia, lies between 50° 20' and 52° 26' N. lat., 33° 40' and 38° 20' E. long. It is bounded N. by Orel, E. by Voronetz, S. by Slobodak-Ukraine, and N. by Tschernigov. Its area is 17,818 square miles, and the population in 1846 was estimated at 1,680,000. The surface of the province is undulating. It contains no mountains, but is traversed by many small eminences. There are no large rivers or large lakes, nor are the forests extensive. The country is populous, and covered with villages. The soil generally consists of a rich mould, of sufficient depth, over a thick clayey or loamy bottom; sand or stiff clay occurs but rarely, and heath and moor still more rarely. The hills consist of clay, marl, lime, freestone, and chalk. The principal river is the Donetz, which, after being joined by the Oskol, Uloscha, and other rivers, flows into the Ukraine, where it joins the Don. Neither the Donetz nor any of the other rivers, of which there are 13 large and 495 smaller rivers, is navigable throughout. The Sem, or Seim, runs into the Desna, a feeder of the Dnieper. Among the rivers that join it is the Swava, which comes from Orel, and has many ruins and tumuli on its banks. The streams are not frozen over till the beginning of December, and are free from ice at the beginning of March. In some parts the tapeworm is endemic among the people, and the liver-fluke in the cattle. The corn occasionally suffers from blight.

Kursk is one of the most fertile provinces of the empire. The soil is so rich that it needs no manure. When it is exhausted, it is suffered to lie fallow for three or four years. The system of agriculture is very rude: new ground is broken up with a large plough, drawn by three or four yoke of oxen; old lands are turned or scratched up with a light plough. The corn is dried and threshed in the field; there are no barns, but the grain is deposited in pits in the ground, where it may be preserved for six or ten years, only covered with sods or boards. The chief products are—rye, wheat, barley, oats, peas, buckwheat, millet, poppy, hemp, hops, tobacco, and some flax. Horticulture is very general and successful; all kinds of garden vegetables are cultivated and thrive well. Apples, cherries, various sorts of plums, and pears are grown. There is an abundance of hazel-nuts and wild berries; melons and water-melons are grown in the open fields. There is some wood in small coppices in most of the circles, but timber and fuel are scarce. Straw and dried cow-dung are used for fuel. The crown forests cover an area of only 330 square miles. Wolves, foxes, hares, bustards, partridges, and quails abound. The breeding of cattle and sheep is carried on very extensively. The horses are of the Russian breed, but nearly equal to those of the Ukraine. Oxen alone are employed in agriculture. The inhabitants keep numbers of swine and domestic poultry; and so many bees, that honey and wax are articles of exportation. There is scarcely any fish. The minerals are iron, limestone, flints, and saltpetre.

Agriculture and the breeding of cattle are the chief employments: very few hands are engaged in manufactures. Such clothing as the countryman wants—shirts, stockings, gloves, and caps, are of his own manufacture. The manufactures are chiefly in the towns of Kursk and Belgorod. The exports consist of the natural productions of the country. The mode of transport in the absence of navigable rivers and canals is expensive. Products are mostly sent by land to the Volga and thence to St. Petersburg. Sometimes they are sent by the Sem and the Desna to Odessa.

The population consists partly of great, partly of little Russians. There are few strangers, but a good many gipsies. The head of the Greek Church is the archbishop of Kursk and Belgorod.

Kursk, the capital of the government, in 51° 43' 30" N. lat., 36° 27' 45" E. long., is the residence of the military governor of Kursk and Orel, of the civil governor and authorities, and of the archbishop. It stands on the Tuskara, a feeder of the Seim, at the foot of a hill on which there is an old decayed fortress. The town is surrounded with palisades, the old rampart having been converted into walks and gardens. The streets are narrow and crooked, but they are paved. There are twelve stone and four wooden churches, two convents, an ecclesiastical seminary, a gymnasium, hospital, and several manufactories. The population is stated at 26,000. A great annual fair is held on a heath at Koreaja Pustinja, a village about 12 miles from the town.

Among the other more important towns are BELGOROD; *Karalcha*, on the left bank of a river of the same name, in the south of the province, which has 6 churches, saltpetre factories, and 11,000 inhabitants; *Putivul*, on the Seim, in the west of the province; population, 10,000; *Sudecha*, 50 miles S.W. from Kursk; population, 7000:

Rylak, west of Kursk, on the Sein: *Starov-Oskol*, in the east of the province, on the Oskol, a feeder of the Donets: *Mikhailofska*, in the south-east: and *Obojan*, in the interior, south of Kursk, each with over 6000 inhabitants.

KURUMAN. [BETHOUANA.]

KÜSTENLAND (*Coast Country*), the name of a new province or crownland of the Austrian empire, which comprises the circles of Görz and Istria and the territory of Trieste. It is bounded N. by Carniola, E. by Croatia and the Bay of Quarnero, S. by the Adriatic, and W. by the Adriatic and the province of Udine or Friuli. Its

area is 3060 square miles. Its population, according to official estimate, in 1851 amounted to 508,016. The geographical and statistical details respecting the crownland are given in the articles AUSTRIA, GÖRZ, ISTRIA, and TRIESTE.

KÜSTRIN. [BRANDENBURG.]

KUTCH. [CUTCH.]

KYBER PASS. [AFGHANISTAN.]

KYLE. [AYRSHIRE.]

KYSHA. [ALEUTIAN ISLANDS.]

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LAACHER SEE. [EIFEL.]

LAALAND, an island belonging to Denmark, is situated in the Baltic, between 54° 39' and 54° 57' N. lat., 10° 56' and 11° 50' E. long.; its length from west to east is about 60 miles, its breadth 20 miles, and its area is 460 square miles. The population is about 50,500. The island is low, flat, and has much marsh ground. The water is bad, and the climate rather unhealthy. The soil is extremely fertile, producing all kinds of corn, pulse, flax, hops, potatoes, fruit, timber, &c., for exportation. The inhabitants have great numbers of horned cattle, and fish are very abundant. There are four towns in the island. *Marieboe*, situated on a lake nearly in the centre of the island, has about 1000 inhabitants. *Nastov*, or *Nakator*, with 2300 inhabitants, has a good harbour and considerable trade. *Nystedt*, with 800 inhabitants. *Rödbye*, with 900 inhabitants. Charles X. of Sweden, in his bold march across the frozen Baltic in 1657-8, traversed Laaland in his way.

LA BALME. [ISÈRE.]

LABRADOR. [HUDSON'S BAY TERRITORIES.]

LABREDE. [GIRONDE.]

LABUAN, an island in the Malay Archipelago, and the seat of a British colonial government, is situated near the north-west coast of the island of Borneo, and 30 miles N. from the town of Borneo, in 5° 22' N. lat., 115° 10' E. long. The island is about 10 miles in length, 5 miles in breadth, and 25 miles in circumference. The population in 1851 was 780, exclusive of aliens and resident strangers (chiefly native labourers), amounting to 800. The island is well supplied with good water, and contains coal. It was ceded to the British in 1846, and the colonial government was established on it at the beginning of October 1848.

The locality on which the government establishment was formed consists of a narrow and slightly-raised ridge on the sea-shore, forming the outer edge of a low flat, called the Plain, which is in many parts below the level of the sea, and was converted into a marsh during the rains. The area of the Plain probably does not exceed 100 acres. It is bounded on the inland side by swampy tracts of jungle. The harbour is tolerably good. The unhealthiness of the marshy ground in the Plain has been considerably abated in consequence of the construction of a canal, by which the water is carried off.

The coal is wrought on the north-east point of the island. The mines have been taken by the Eastern Archipelago Company, who in 1851 exported 5032 tons of coal, of which 938 tons were supplied to vessels belonging to the British navy. During 1852 there entered inwards 1198 ships and prahus, of an aggregate burden of 6223 tons; and there cleared outwards 27, of an aggregate burden of 5052 tons. The imports in 1852 were valued at 30,970*l.*; the exports at 16,564*l.* The principal exports were:—Coal, 5448*l.*; sago, 2379*l.*; birds'-nests, 1937*l.*; pearls, 1680*l.*; and camphor, 1559*l.* The principal item of revenue is the royalty on coal. Farm licences are increasing in value, improved rentals being obtained at each succeeding sale.

LACCADIVE ISLANDS, discovered by Vasco de Gama in 1499, are situated in the Indian Ocean, off the west coast of Malabar, between 10° and 13° N. lat., 72° and 75° E. long. They are 17 in number, but only 8 are inhabited, and two sand-banks are yet uncovered with vegetation. The other 7 are uninhabited and overgrown with cocoa-nut trees. They are visited for the coir and nuts by boats from the other islands. The largest of these islands are Cabarettoe, Anderot, or Underoo, and Akhatoe, but they are all small, Anderot, one of the largest, being only 3 miles in length, from east to west, and 1 mile broad.

These islands are based on coral reefs. The south-west monsoon is the only wind that prevails with any degree of regularity, the opposite or fine-weather monsoon being interrupted in a great measure by the proximity of the archipelago to the mainland of Hindustan. The coral-reef of Anderot projects to the north-east. The islands are low, and rise towards the centre with a slightly undulating surface. The chief products are a little rice, a plant not unlike rhubarb, of a most acrid pungent taste, sweet potatoes, cocoa-nuts, plantains, papaus, and betel-nuts. Cows are the only quadrupeds on the islands; they are of small size and not numerous. There is poultry in small quantities, and the sea contains fish and turtle.

The total population of the inhabited islands amounts to about 10,000. They resemble the inhabitants of the coast of Malabar, and

are Mohammedans. The four most considerable islands are subject to the Behee, or petty sovereign of Cananore in Malabar, and the other four are ostensibly British. They export to Mangalore cocoa-nuts, coir for making cables, a few cowries, and a kind of coarse sugar or jaggery, made from the cocoa-nut tree. The imports consist of rice and coarse cotton-cloth. The islands have no safe anchorage. During the south-west monsoon all intercourse between them is interrupted, and their large boats are sent to the Malabar coast for shelter.

(*Journal of the London Geographical Society*, vol. vi.)

LACCO. [ISCHIA.]

LACEDÆMON. [SPARTA.]

LA-CHÂTRE. [INDRE.]

LACHLAN RIVER. [AUSTRALIA.]

LA-CIOTAT. [BOUCHES-DU-RHÔNE.]

LACOCK. [WILTSHIRE.]

LACONICA, called by the Romans *Laconia*, a country of ancient Greece, was bounded W. by Messenia, N. by Arcadia and Argolis, and E. and S. by the sea. Laconica is a long narrow valley, running from north to south, and lying between two mountain masses which stretch from Arcadia to the southern extremities of the Peloponnesus. The western range, which terminated in the promontory of Tænarum, now Matápan, the most southerly point of Greece, was called Taygetus, the highest point of which, called Taleton (now St. Elias), is 7902 feet high. The eastern range, terminating in Cape Malea, was known by the names of Parnon, Thornax, and Zarax. The highest point of Mount Parnon, the most northern part of the eastern range, is 6355 feet. The whole drainage of the valley is collected in the river Eurotas, which flows from the high lands of Arcadia, and is joined by the river Cenus, a little above Sparta. From its source to its junction with the Cenus the Eurotas flows through a very deep and narrow valley, which near Sparta is so much contracted as to leave room for little more than the channel of the river. After it leaves Sparta the hills recede farther from the river; but near Cenoë they again approach it for a short distance, and afterwards retire to the west and east towards the capes Tænarum and Malea respectively, leaving between them a plain of considerable breadth and fertility, through which the Eurotas flows to the sea. Between the mountains which form the eastern boundary of the valley of the Eurotas and the sea there was a narrow strip of land, which contained the towns of Delium, Minoa, and Epidaurus Limerá, belonging to Laconica: Prasia, which was farther north on the same coast, belonged to Argolis. The area of Laconica is probably about 1896 square miles. It forms a nome or province of the modern kingdom of Greece, and had in 1852 a population of 87,801.

The district of *Thyreatis*, on the borders of Argolis, was an object of early contention between Argos and Lacedæmon. (Herod. i. 82.) It originally belonged to Argolis, but was conquered by the Spartans about B.C. 547, in whose possession it remained till the decline of Sparta, when it was recovered by Argos. In the time of Pausanias it was included in Argolis. (Pausan., ii. 38, sec. 5.)

The southern projection of the Taygetus between the Laconian and Messenian gulfs is now called *Mani*, the country of the Maniotes, who always maintained their independence against the Turks. The slopes of Taygetus are clothed with forests of dark green pine. The range is rich in iron, marble, and green porphyry.

The snow remains on the highest points of Taygetus, in the neighbourhood of Amyclæ, to the month of June: the streams on the eastern slope of this mountain range are abundant. The orange-tree flourishes at Mistra, near the ancient Sparta, and fills the air with its perfume at a time when the summits of Taygetus are still wrapped in snow.

Colonel Leake describes the soil of Laconica as "in general a poor mixture of white clay and stones, difficult to plough, and better suited to olives than corn" ('*Morea*, i. 148). This description is in conformity to that of Euripides, who says that "it possesses much arable land, but difficult to work" (quoted by Strabo, viii. 366). Strabo informs us that there were some valuable stone-quarries near Tænarum and in the mountains of Taygetus (viii. p. 367). Laconica was subject, in common with the southern countries of Greece, to earthquakes, the most remarkable of which occurred B.C. 462, and destroyed the whole of the city of Sparta with the exception of five houses.

Laconica is well described by Euripides as difficult of access to an enemy. (Strabo, viii. 366.) On the west the range of Taygetus formed an almost insuperable barrier to an invading force; and on the north there were only two natural passes by which the country could be entered; one by the valley of the Upper Eurotas, as the course of that river above Sparta may be termed, and the other by the valley of the Cœnus. Both of these natural openings led to Sparta, which shows how admirably the capital was situated for purposes of defence. The want of good harbours on the coast also protected it from invasion by sea; and the possession of the island of Cythera, at the entrance of the Laconian Bay, which contained several good harbours, was therefore always considered by the Lacedæmonians as a point of great importance. Gythium, on the coast of the mainland, was the naval station of the Spartans.

There were no towns of any importance in Laconica, with the exception of Sparta. [SPARTA.] One of the most ancient towns was *Amyclæ*, the residence of the Achæan kings, situated a little south of Sparta, in a fertile plain. In the time of Pausanias it had become a small place, but contained many temples and works of art (Pausan., iii. 18.); and its temple of Apollo is described by Polybius as superior to almost all the other temples of Laconica. (Polyb. v. p. 367, Casaub.) The inhabitants of the rugged district of *Sciritis*, which lay to the south of Arcadia, between Tegea and the valley of the Upper Eurotas, enjoyed peculiar honours and privileges. They formed a separate body in the Spartan army, and were always stationed on the left wing. (Thucyd., v. 67; Xenoph., 'Rep. Laced.', xii. 3; 'Cyrop.', iv. 2, sec. 1.) After the invasion of Laconica, B.C. 369, they revolted from the Spartans. (Xenoph., 'Hell.', vii. 4, sec. 21.) They appear to have been of Arcadian race.

The Leleges, according to the most ancient traditions of Laconica, were the earliest inhabitants. (Pausan., iii. 1, sec. 42.) Lelex, the first king, was succeeded by his son Mules, who left the kingdom to his son Eurotas. According to the same traditions Eurotas, dying without children, bequeathed the kingdom to Lacedæmon, the son of Jupiter and Taygeta, who married Sparta, the daughter of Eurotas. The sovereignty is said to have remained in his family till shortly before the Trojan war, when the descendants of Pelops, Menelaus, and Agamemnon obtained possession of the country by marrying Clytemnestra and Helen, the daughters of Tyndareus, the last monarch of the ancient dynasty. At the time of the Trojan war we find the country in the possession of the Achæans, who undoubtedly settled in Laconica at a very early period, and probably conquered the Leleges. Menelaus was succeeded by Orestes, and Orestes by Tisamenus, during whose reign Peloponnesus was invaded by the Dorians.

After the conquest of the country Laconica was assigned to Aristodemus, or his sons Eurysthenes and Procles, for, according to the general tradition, Aristodemus did not live to enter Laconica. Strabo relates, on the authority of Ephorus (viii. p. 364), that Eurysthenes and Procles divided Laconica into six districts, over which they set governors with the title of kings. During the reign of Eurysthenes the conquered people were admitted to an equality of political rights with the Dorians; but his successor Agis deprived them of these privileges. The condition of the original inhabitants of the land, and their relation to their Dorian rulers, as well as the remaining history of the country, belong to the history of SPARTA.

(Strabo, lib. viii.; Pausanias, *Laconica*; Leake, *Morea*; Gall, *Itinerary of Greece*; Müller, *Dorians*; Thiersch, *De l'Etat Actuel de la Grèce*; Thirlwall, *History of Greece*.)

LA-CÔTE-ST-ANDRÉ. [ISÈRE.]

LADAKH is a kingdom in Asia, situated to the east of Cashmere, from which it is separated by that branch of the Himalaya Mountains which is called the Tibet Panjahl range. According to Moorcroft its area is equal to half that of England. It has the figure of a triangle, whose longest side runs from Bissahir [HIMALAYA] along the mountain range to Cashmere. North of it lie Baltistan, or Little Tibet, and Khotan in the Chinese province of Thian-shan-Nanlu. From the last-mentioned country it is divided by the nearly unknown mountain chains of Kuenluen and Kara-korum. East of it is Chang-tang, a province belonging to Tibet.

Ladakh is a part of the elevated table-land which is supported by the Himalaya system, and divided by it from the low plains of the Ganges and Indus. Its elevation above the valley of the Indus can hardly be less than 10,000 feet. The mountain ranges which traverse the country in a direction nearly parallel to the course of the Indus, rise in their highest parts to between 22,000 and 23,000 feet above the sea. Through the middle of the country runs the valley of the river Indus, here called Sing-ke-tee. This river, after passing Gertope, enters Ladakh at its southern extremity, where its valley is upwards of two miles wide. It continues to be wide as far as 33° 12' N. lat., 78° 50' E. long., where it breaks through a central range and rushes with great impetuosity into the plain on which Leh, the capital of the country, is built. The plain is extensive and well peopled, but the country bordering it on the north is unknown.

The Indus, which traverses the country in a north-north-western direction, receives here several considerable tributaries, of which the Shayuk, the most important, joins the Indus below Leh. There are several lakes in this country, most of which are salt, and furnish great quantities of that article. The largest of these lakes is that

of Chimorerel, which is from 20 to 25 miles long, with a width of 8 or 10 miles.

As the surface of the country is so elevated above the sea, its climate and productions do not correspond to its latitude (30° to 35°). The whole country is covered with snow in winter, and most of the mountains are so even in the month of June. The winters are long and severe, and all the rivers are covered with ice, which facilitates travelling in this season, just as in the northern countries of Europe. The people are mostly clad in sheep-skins and fur, as in Russia. The summers are hot and dry. Rain does not appear to be frequent.

The plain about Leh, though of moderate fertility, is well cultivated, which is the case with other districts of less extent. Wheat, barley, and lucerne are grown to a great amount. In some districts a kind of barley is raised which resembles wheat; in others cotton is cultivated in small quantities. Turnips are grown very extensively. Wood is scarce: poplars and some other trees are planted in the lower tracts.

The pastures occupy a large part of the country. The cattle are small and of three different kinds, common cattle, chowry-tailed cattle (Yaks), and a third kind called 'tho,' a mixed breed between the two former. Ases are rather numerous, as well as goats, which also live in a wild state. But the shawl goat is not found in the country. Sheep are numerous, and among them there is a small race called the 'purick-sheep,' which produces excellent wool. Horses are pretty common. On the uncultivated plains a species of wild horse is found, called by Moorcroft 'Equus Kiang.' Among the domestic animals is the dog, which is large and strong. The animal from which musk is obtained is abundant in the mountains.

The sands of most of the rivers which fall into the Indus contain small particles of gold; these are collected in several places. Other metals are not mentioned. Saltpetre and sulphur also are found, and supply materials for gunpowder, which is made in considerable quantities.

Leh, or *Lei*, the capital of the country, contains according to Moorcroft, 1000 houses, each several stories high and substantially built. There are several bazaars, each containing from twelve to fourteen shops. Leh is a place of great trade, being the principal entrepot for shawl-wool, and three great fairs are annually held here, of which that in February is the most frequented. These fairs are attended by merchants from Yerkand, in the Chinese province of Thian Shan Nanlu, from L'Hassa and other parts of Tibet, from Amritair and other towns of the Panjab, and particularly from Cashmere. Roodok, on a small feeder of the upper Pungong Lake, is another place of considerable traffic. It is said to contain 300 families, and is chiefly connected with Hindustan by the way of Kunawar in Bissahir. [HIMALAYA.]

The inhabitants of Ladakh belong to the same race as the inhabitants of Tibet. They are a very industrious and frugal people, and well acquainted with the arts of civilised life. Their country being surrounded by mountains they have preserved their independence, though on all sides bordering on neighbours much more powerful than themselves. Their sovereign, who resides at Leh, is called Gealbo, that is, rajah of Leh. He sends however from time to time presents to his neighbours, because his subjects are connected with their countries by commerce. Ladakh, being situated between Hindustan, Cashmere, Khotan, and Tibet, is the thoroughfare of a very extensive commerce. The commercial routes are few: that to Tibet runs from Leh to Roodok, and thence to Gertope along the Indus; from Gertope it seems to cross mountain ranges to L'Hassa. From Roodok the road to Kunawar traverses a table-land, and then descends to the Paruti River, a tributary of the Spiti, which falls into the Sutlej. Kunawar is that country which occupies the tract where these three rivers join. The road from Leh to Cashmere and the Panjab leads westward over the Tibet Panjahl Mountains by the elevated mountain-pass of Naubuck Nai Mallik. Ladakh is called Tibet by the Cashmerians. The road from Leh to Yerkand is by far the most difficult and dangerous: it crosses the high mountain range of Kara-korum and the whole mountain system of the Kuenluen, and traverses wide mountain tracts which are nearly uninhabited.

The principal object of this extensive commerce is the wool of the goats, which is used in the manufacture of shawls. It is brought from Gertope to Leh, and thence conveyed to Cashmere and the Panjab; 800 horse-loads are said to be carried annually by this route. The merchants of Kunawar bring to Roodok sugar, tobacco, cotton and woollen cloths, indigo, swords, copper, tin, iron, paper, rice, and spices. They take in return salt, borax, gold-dust, tea, and shawl-wool. [See HIMALAYA MOUNTAINS, in SUPPLEMENT.]

(*Transactions of the Asiatic Society; Journal of the London Geographical Society; Asiatic Journal; Ritter's Erdkunde.*)

LADOGA, LAKE. [RUSSIA.]

LADRONE ISLANDS, so called from the thievish disposition of the natives at the time of their discovery by Magalhaens (1521), are also called *Mariane Islands*, in honour of the queen of Philip IV. of Spain, who caused them to be settled. They extend in a northern and southern direction between 13° and 20° 30' N. lat., 144° and 145° 30' E. long., and are about twenty in number. They are mostly of a volcanic character, and even in modern times some of the volcanoes have been in activity. Like other islands of this description

their surface is broken, and rises to high hills and even to mountains; but the soil, wherever it can be cultivated, is of great fertility. Being exposed to the trade-winds the climate is not so hot as might be expected from their geographical position. Nearly every kind of intertropical product thrives on these islands, which produce cotton, rice, indigo, Indian corn, sugar, cacao, cocoa-nuts, tobacco, plantains, &c., in abundance. The Spaniards have introduced most of these products, as well as the llama, from Peru, which is said to thrive on the mountains. Cattle, horses, mules, and asses are numerous. The sea abounds in fish, and also produces trepang for the Chinese market. The principal island is Guajan, which is about 80 miles in circumference. Its capital, and the seat of the Spanish governor, is San Ygnacio de Agaña, which has an open roadstead defended by two small fortresses; but about 10 miles farther south there is a good harbour called Calderona de Apura, which is also fortified. Of the other islands Tinian has obtained some notoriety from the stay there of our distinguished seaman Anson, and from the extensive ruins, which indicate that these islands were once inhabited by a people well acquainted with the arts of civilisation. The aboriginal inhabitants, who at the time of the foundation of the Spanish settlement in the middle of the 17th century are stated to have amounted to 150,000, have disappeared on Guajan, but probably they are more numerous on some of the other islands, which are only nominally dependent on the Spanish governor. The present population of Guajan consists of settlers from Mexico and the Philippine Islands, who are called by the Spaniards Los Indios; they speak Spanish, and are Catholic Christians. The number of Spaniards is very small. (Anson; Kotzebue, *Voyage round the World*.)

LAEKEN. [BRABANT, SOUTH.]

LAFAYETTE. [INDIANA.]

LAGAN, RIVER. [BELFAST.]

LAGHOUAT. [ALGERIE.]

LAGNEU. [AIX.]

LA'GO MAGGIORE, the ancient *Lacus Verbanus*, the largest lake in Italy, extends about 40 miles in length from north to south; its greatest breadth, which is 8 miles, is about the middle of its length; but it is only between 2 and 3 miles broad in most other places, and still less at the north and south extremities. The elevation of its surface above the sea is 878 feet, and its greatest depth is 1100 feet. Its northern half extends between the lower offsets of the Pennine Alps on one side and the Rhaetian Alps on the other, receiving all the streams that flow from the southern slope of those mountains, from Mount Ross on the west to Mount Bernardin on the east. The southern extremity of the lake touches the level plain of Lombardy. The principal affluents of the Lago Maggiore are the Toccia or Toesa, the Maggia, the Ticino, and the Tresa. It also receives an outlet from the small lake of Orta, which lies west of the Lago Maggiore. The outlet of the Lago Maggiore is formed by the Ticino, which issues from its southern extremity at the town of Sesto. The northern extremity of the Lago Maggiore, which is called at that end the Lake of Locarno, extends into the Swiss canton of Ticino. Through the remainder of its length the Lago Maggiore divides Austrian Italy from the Sardinian territory, which lies along its western shore. The Ticino continues to mark the boundary between the two states to its junction with the Po. The lake abounds with fish. Steamers ply on it. [ARONA; COMO; NOVARA; TICINO.]

About the middle of the length of the lake, and in its broadest part, where it forms a gulf indenting the western shore, near Pallanza, are the Borromean Islands (*Isole Borromée*), which belong to the noble Milanese family of the same name. They are four in number—Isola Madre, Isola Bella, Isola dei Pescatori, and the Isolino, the smallest of all. The Isola Madre, which is the largest, is covered with laurel, pine, and cypress trees, forming a grove rising in the midst of the water, and contrasting by its perpetual verdure with the snows of the neighbouring Alps. The Isola Bella is richer, but its beauty is more artificial. Numerous terraces rising in a pyramidal form are planted with orange- and lemon-trees, and adorned with marble statues and vases. The splendid palace of the owners is rich in marbles, gilding, and mirrors, and the lower apartments are shaped like grottoes and embellished with statues and fountains. The myrtle, the rose, the vine, and the fig-tree thrive luxuriantly around. The whole has an air of enchantment, but art is too apparent, and the lovers of nature prefer the more simple beauty of the Isola Madre. The Isola dei Pescatori is inhabited chiefly by fishermen, and has nothing remarkable; neither has the Isolino.

LAGO SALSO and LAGO SALVI. [CAPTANATA.]

LAGONEGRO. [BASILICATA.]

LAGOS. [ALGARVE; GUINEA.]

LA-GRASSE. [AUDE.]

LA-GUERCHÉ. [ILLE-ET-VILAINE.]

LA-GUIOLLE. [AVEYRON.]

LAGUNA. [BRAZIL.]

LA-HAYE-DES-CARTES. [INDRE-ET-LOIRE.]

LAHN, RIVER. [RHINE.]

LAHORE. [HINDUSTAN.]

LAHSA. [ARABIA.]

L'AIGLE. [ORNE.]

LAINDON, or LANGDON. [ESSEX.]

LAISSAC. [AVEYRON.]

LALINDE. [DORDOGNE.]

LA-LOUPE. [EURE ET LOIR.]

LAMBALLE. [CÔTES-DU-NORD.]

LAMBERHURST. [KENT.]

LAMBESC. [BOUCHES-DU-RHÔNE.]

LAMBETH. [LONDON.]

LAMBOURN, or CHIPPING LAMBOURN, Berkshire, a market-town in the parish of Lambourn, is situated in 51° 30' N. lat., 1° 33' W. long., distant 20 miles S.W. by S. from Abingdon, and 65 miles W. from London. The population of the parish of Lambourn in 1851 was 2577. The living is a vicarage in the archdeaconry of Berks and diocese of Oxford. The town of Lambourn is situated upon the little river Lambourn, which falls into the Kennet at Newbury. In the market-place is a tall plain pillar, with an ornamented capital. The church is a very handsome cruciform structure of transition Norman and early English styles, with some windows of the decorated and perpendicular styles. The market held on Friday is of ancient date, but has much declined. There are four annual fairs.

LAMEGO. [BEIRA.]

LAMLASH. [ARRAN.]

LAMPETER, Cardiganshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Lampeter-Port-Stephen, is situated in 52° 7' N. lat., 4° 3' W. long., distant 29 miles E. by N. from Cardigan, and 209 miles W. by N. from London. The population of the borough of Lampeter in 1851 was 907. The living is a vicarage in the archdeaconry of Cardigan and diocese of St. David's. The borough is a contributory to the Cardigan district of boroughs in returning one member to the Imperial Parliament. Lampeter Poor-Law Union contains 14 parishes and townships, with an area of 74,200 acres, and a population in 1851 of 9883.

The town is pleasantly situated on the left bank of the river Teify at the foot of the Tregaron Downs. Besides the parish church, which was rebuilt in 1836, there are places of worship for Wesleyan and Calvinistic Methodists and Independents; a National school, and a Free Grammar school. An agricultural society has been established here. A county court is held. The market is on Saturday; and there are 11 fairs in the course of the year. St. David's College, Lampeter, founded in 1822 by Bishop Burgess, was incorporated in 1828, and received by a supplementary charter in August 1852, authority to grant the degree in Bachelor of Divinity. The course of instruction is adapted especially for Welsh students, but others are admitted. The college grants at the end of the term a certificate to students who have satisfactorily completed their theological course; which is accepted by most of the bishops as a qualification to become candidates for orders. About 30 scholarships and exhibitions are attached to the college, and it possesses a library of 30,000 volumes. The college buildings, erected in 1827 from a design by C. R. Cockerell, R.A., stand on an elevated site near the town, and form a quadrangle of a picturesque appearance: they accommodate about 70 students: the number of students in 1851 was 50. The annual income of the college is about 3000*l*.

LA-MURE. [ISÈRE.]

LANARK, Lanarkshire, Scotland, a royal and parliamentary burgh and market-town, in the parish of Lanark, is situated on a hill rising from the river Clyde, where it is joined by the Mouse Water. It is distant about 29 miles S.W. from Edinburgh, and 29 miles S.E. from Glasgow by railway, and occupies nearly the centre of Lanark county. The population of the burgh in 1851 was 5008. The town is governed by a provost and 16 councillors, and unites with Airdrie, Falkirk, Hamilton, and Linlithgow in returning one member to the Imperial Parliament.

The town is of great antiquity. Kennett II. assembled the states of the realm here in 978, and it had been constituted a royal burgh before the time of Malcolm IV. Its latest charter was given by Charles I. In the town are many handsome houses built of freestone, which is extensively quarried for this purpose in the adjoining parish of Carluke. The chief public buildings are the commercial bank, county-hall, prison, parish church, and grammar school. In March 1851 there were 8 places of worship in Lanark, of which 2 were of the Established Church, 2 of the United Presbyterian Church, 2 of the Independent Connexion, one of the Free Church, and one of the Roman Catholic communion. There is an Endowed Free school for poor children. In the town are subscription libraries, a mechanics institution, which had 40 members in 1851, and 150 volumes in its library, a savings bank, and several friendly societies. Fairs are held seven times in the year.

New Lanark is a well-built village to the south-west of Lanark town. It lies low upon the right bank of the Clyde, and is completely surrounded by beautifully wooded hills. It contains a cotton manufactory.

LANARKSHIRE, sometimes called CLYDESDALE, an inland county in the west of Scotland, bounded N. and N.W. by the counties of Stirling and Dumbarton, W. and S.W. by those of Renfrew and Ayr, S. S.W., and S.E. by Dumfriesshire and Peeblesshire, E. and N.E. by Peeblesshire, Linlithgowshire, and Edinburghshire, is comprised between 55° 14' and 55° 57' N. lat 3° 20' and 4° 20' W. long.

The greatest length of the county is 52 miles; its greatest width is 34 miles; and its superficial extent is 631,719 statute acres, or 987 square miles. The population in 1841 was 426,972; in 1851 it was 530,169. The county returns one member to the Imperial Parliament.

Surface, Soil, Geology, &c.—Lanarkshire is divided into three principal districts or wards, to each of which is appointed a sheriff-substitute. Its surface is so various that it will be convenient to notice the local peculiarities of each ward under separate heads.

The *Upper or Southern Ward*, of which the ancient burgh of Lanark is the chief town, includes that extensive portion of the county which lies between the counties of Peebles, Dumfries, and Ayr. It constitutes more than one-half of the county, and consists principally of mountains, hills, and moorish lands, which do not appear susceptible of much improvement. About two-thirds of this district may be called moor-pasture, the remaining part being occupied by arable and meadow lands, orchards, &c.

The geology and mineralogy of this part of the county are important. Rich seams of excellent coal, from two to seven feet in thickness, are advantageously wrought in the northern part of this district, at Wilsontown. The Wilsontown coal-field lies in an oval basin bearing north-east and south-west. It is of considerable extent, but full of what are called 'troubles;' that is, throwings up or down of the seams of coal, sometimes to the extent of 50 feet. In the immediate vicinity of this coal-field are the Wilsontown iron-works, the supply of ironstone being reputed to be here inexhaustible. Sandstone (of a beautiful white colour, well adapted for building), whinstone, and limestone, are all abundant, and are extensively used. The lead-mines in the parish of Crawford are very productive, and have been continuously worked from a remote period. Gold and silver are disseminated in minute particles through the superincumbent clay, but the quantity is too small to repay the expense of its extraction. Records exist which state that at one time specimens of native gold were sometimes met with here from one ounce to several ounces in weight. In the vicinity of the lead-mines copper and antimony have been found, and attempts have been made to work them, but without success. Among the more elevated mountains of this part of the county are abundant quarries of slate, but their distance from towns, causing great expense of carriage, precludes their being profitably worked.

The arable portion of this ward is confined to the banks of the Clyde and of the streams which are contributory to it. The highest ground is in the parish of Crawford where the Clyde has its source, and where the mountains appear crowded together. The principal elevations are Tintoe, in the united parishes of Wiston and Robertson (2310 feet); and the range of the Lowthers in the parish of Crawford, and near the borders of Dumfriesshire, of which the greatest height is 3100 feet.

The *Middle Ward*, of which Hamilton is the chief town, is about half the extent of the Upper Ward. In this ward the elevation of the land is considerably diminished, and it declines towards the north-west. The moor and coarse pasture-land does not here form one-half of the soil. The prevailing soil is of a clayey nature intermixed with sand, and varies considerably in colour, composition, and degree of fertility. The usual term of leases is 19 years. Oats and barley form the principal crops, but there is also much wheat raised. The farm-buildings are generally good and substantial. Farming operations are much better understood than formerly, and draining is generally attended to.

This ward is also rich in minerals, containing an abundance of whinstone, sandstone, ironstone, and coal. The coal-seams vary from two to nine feet in thickness, and abound chiefly in the northern part of the district. The ironstone occurs both in masses and in seams. In the western part of the district limestone abounds.

The *Lower or Northern Ward* is of limited extent. It contains the city of Glasgow and the parishes surrounding that city, and is in the centre of the great coal district of Scotland. In Calder parish, besides numerous iron-furnaces and ironstone- and coal-mines, there are immense fields of fire-clay varying from 4 to 19 feet in thickness, and the quality is considered equal to the Stourbridge clay. In their vicinity are extensive works for the manufacture of crucibles, &c. Many of the moorlands in this district have been reclaimed, and they are being lessened by peat-cutting, so that upon many of them oats, ryegrass, and wheat are now grown. The greater part of the tilled land is sown with oats, which also constitute the chief spring corn.

Climate, Agriculture, &c.—The climate of the county is almost as various as its soil. The Lower Ward, being more open to the sea-breezes which prevail from the west and south-west, is comparatively temperate; intense frost is seldom of long continuance, and deep snows are rare: at the same time the elevated lands in the counties of Renfrew and Dumfries, intercepting the vapours with which the westerly winds are usually saturated, occasion the frequent fall of heavy showers. The barometric and thermometric variations in the Middle Ward are more uniform, but in the Upper Ward they are sudden, and there also the climate is unusually severe. The snow sometimes lies for weeks in the mountain roads of the southern part of the county.

Nearly three-fourths of the land of Lanarkshire belong to large proprietors. A considerable extent of inclosed land is kept constantly in grass, and let out from year to year for pasture, especially in the

neighbourhood of the towns and important villages. Throughout the county the dairy system has been prosecuted with great success. The cows are generally of the Ayrshire breed. The sheep are mostly black-faced. The draught horses of Clydesdale are held in great estimation in the north of England and the south of Scotland. Pasturage is chiefly attended to in the Upper Ward; dairy farming is the chief employment of agriculturists in the Middle and Lower Wards.

Clydesdale is famous for its fruit—apples, plums, pears, gooseberries, &c. The rent of the orchards on both sides of the river forms a material part of the income of the landlords, all of whom, from the largest proprietors to the small farmer, sell their fruit annually, the purchasers being generally the Glasgow fruiterers.

Hydrography, Communications, &c.—The principal river of the county is the Clyde (the Glotta of Tacitus, 'Agric.' c. 23), which in a commercial point of view is of more importance than any other river of Scotland. [CLYDE.] The contributory streams are—the Medwin Waters, which rise in the hills on the extreme eastern boundary of Lanarkshire; the Douglas, from the extensive parish of that name; the Mouse Water, which falls into the Clyde near Lanark, also coming from the east of the county; the Nethan, which comes from the high grounds in the west; the Avon, which waters Strathaven parish and the district of that name, and joins the Clyde near Hamilton; and the Calder Water, in the south of the county, with several others of minor importance.

The Monkland Canal from Glasgow intersects the parish of New Monkland, and terminates at the southern extremity of the parish of Old Monkland: its length is about 12 miles. The Ardrossan Canal proceeds from Port Eglinton, on the south side of Glasgow, through Govan, and thence to the counties of Renfrew and Ayr. The Forth and Clyde Canal traverses a portion of the north-western corner of the county.

The roads are all well constructed, and kept in excellent repair. Glasgow is the centre of a series of railways, the most important of which are—the Caledonian, which traverses the whole county; the Edinburgh and Glasgow railway; and the Glasgow and South-Western railway.

Divisions, Towns, &c.—For judicial and administrative purposes the county is divided, as already mentioned, into three wards. A sheriff-substitute also resides at Airdrie, a portion of the Middle Ward having been created for this purpose a separate jurisdiction. Ecclesiastically the county proper is divided into 37 parishes. The most important town is GLASGOW, the commercial capital of Scotland. LANARK and HAMILTON, the chief towns of the Upper and Middle Wards, are described under their respective titles. Besides these, the county contains the towns of AIRDRIE, Calderbank, Carluke, Coatbridge, Govan, Rutherglen, Stonehouse, Strathaven, and Wishawton.

Calderbank, population 2872 in 1851, in Old Monkland parish, is a town of recent origin, and dependent on the coal- and iron-mines in the neighbourhood.

Carluke, population 2845, is a small town and burgh of barony in the parish of Carluke. Many of the inhabitants are weavers. In the neighbourhood coal, ironstone, and limestone are extensively wrought. In the parish are Mauldsdale Castle, formerly the seat of the Hyndford family, and Lee, the seat of the Lockharts, where is preserved the famous 'Lee penny,' noticed by Sir Walter Scott in 'The Talisman.' The parish church, Free Church, and chapels for United and Original Seceders, are the public buildings situated in the burgh, which has also several schools and a savings bank.

Coatbridge, population 8564, like the other towns and villages in the extensive parish of Old Monkland, is chiefly dependent on the coal- and iron-mines. The Monkland Canal is here crossed by a wooden viaduct. The Coatbridge station of the Monkland railway is 9½ miles from Glasgow. There are a Free and a United Presbyterian church, and a mechanics institution, which in 1851 had 140 members, with 700 volumes in the library belonging to it.

Govan, population 3131, about 2 miles W. by N. from Glasgow on the left bank of the Clyde, possesses several large ship-building yards. The church is rather a pretentious building, but a bad imitation of the gothic style. The Free and the United Presbyterian Churches have places of worship. In the parish are situated the Observatory and the Royal Botanic Garden connected with Glasgow University. The town is connected with Glasgow by a line of elegant villas.

Rutherglen, one of the most ancient royal burghs in Scotland, and now a parliamentary burgh, in the parish of Rutherglen, is situated on the left bank of the Clyde, 2 miles E. from Glasgow. The population of the parliamentary burgh in 1851 was 6514; that of the municipal burgh was 6947. The burgh is governed by a provost and 17 councillors. It unites with Dumfries, Kilmarnock, Port Glasgow, and Renfrew in returning one member to the Imperial Parliament. In Rutherglen church, in February 1297, a treaty of peace was concluded between the Scotch and the English. The town consists of one main street; it is lighted with gas. The only public buildings are the town-hall, the parish church, and chapels for the Free and the United Presbyterians. The inhabitants are chiefly employed in handloom weaving. Two important fairs are held here. The town is connected with the suburbs of Glasgow by an old narrow bridge. There is here a station of the Caledonian railway.

Stonehouse, population 2086, is in the parish of Stonehouse, in the

Middle Ward of the county, near Hamilton. Besides the parish church there are chapels for the Free and the United Presbyterian Churches.

Strathaven is a burgh of barony and market-town in the parish of Avondale: the population in 1851 was 4274. It is chiefly inhabited by weavers, who are however in many cases the owners of the houses in which they reside. Cattle and cheese are the staple objects of traffic. The town is old, and the streets are narrow, but lighted with gas. In the town are several schools, a Free church, three chapels for United Presbyterians, and a public library. In the neighbourhood is the old castle of Strathaven, near which are many neat villas.

Wishawton, population 3373, is in the parish of Cambusnethan. In the vicinity are numerous coal- and iron-works.

The following villages, with their populations in 1851, may be mentioned:—

Biggar, population 1530, is a picturesque village in the parish of Biggar, lying on both banks of the Biggar Water, a tributary of the Tweed. The village dates as a burgh of barony and market-town from the middle of the 15th century. The inhabitants are principally weavers. The church is a cruciform edifice of the 16th century. There are two chapels for United Presbyterians, and a scientific institution, which has 40 members and a library of 200 volumes. The remains of several encampments are in the parish. Roman utensils and coins have been occasionally found. *Blantyre*, population of the parish 2848, about 7 miles S.E. from Glasgow, possesses extensive cotton-spinning works. The ruins of Blantyre Priory have been referred to under *BOTHWELL*. There is here a station of the Glasgow and Hamilton branch of the Caledonian railway. *Busby*, a village partly in East Kilbride parish, but chiefly in the parish of Mearns, Renfrewshire, has extensive print-fields and cotton-spinning works. There is here a chapel for United Presbyterians. *Cambuslang*, parish population 3306, is a village 4 miles E. from Glasgow. Here is a station of the Caledonian railway. *Cambusnethan*, population of the parish 8621, in the middle ward of the county, is pleasantly situated in the midst of the orchard district. On the borders of the parish are the extensive Shotts Iron-Works. *Cambusnethan House*, a fine castellated mansion, stands on the right bank of the Clyde, about 2 miles S.W. from the village. *Douglas*, population 1525, is an agricultural village and ancient burgh of barony in the parish of Douglas. Besides the parish church there are chapels for Free, United, and Reformed Presbyterians. In the neighbourhood are the new and splendid seat of the Douglas family and the remains of the ancient Douglas Castle, the 'Castle Dangerous' of Sir Walter Scott. Part of the old church is still preserved, and contains several interesting monuments of the ancient Douglasses, among which is that of the 'good Sir James,' who carried Bruce's heart to the Holy Land. *Gartsherrie*, a village in Old Monkland parish, has an elegant church. In the village are extensive iron-works; and in the parish are the Dundyan, Clyde, Calder, and other iron-works, all extensive, and all contributing to the great iron-trade of Glasgow. There is here a station of the Caledonian railway. *Kilbride, East*, population 1113, an agricultural village and burgh of barony, about 8 miles S.E. from Glasgow. Limestone is extensively wrought in this parish. The milk, butter, and cheese, the chief products of the farms of the district, are sent to Glasgow. There are here a Free and a United Presbyterian church, and a subscription library with 1220 volumes. *Leadhills* is a mining village in Crawford parish, on the borders of Dumfriesshire. The mining operations have been somewhat diminished of late years. *Partick* is a populous old village on the river Kelvin, just beyond the western boundary of the city of Glasgow, now surrounded by the handsome villas of the citizens. It is partly in the Barony parish; the greater part is in the parish of Govan. There are a Free church, two chapels for United Presbyterians, and a society called the Partick Popular Institution, which had 65 members in 1851. The archbishop of Glasgow in former times had a country-house here.

History, Antiquities, &c.—Many interesting events have occurred within the limits of this county; but they have generally been referred to in treating of the different spots where they occurred. The battle of Drumclog, which preceded the slaughter of Bothwell Bridge, took place on Drumclog Moor, in the parish of Strathaven. The church of Rutherglen was the spot chosen by Menteith to arrange for the betrayal of Wallace. The remains of the successive occupants of this district have been found in various parts of the county, throughout the whole of which are scattered remnants of the baronial towers and of the ecclesiastical buildings of the feudal period.

Industry, &c.—Before the commencement of the last century Lanarkshire was not remarkable either for commerce or manufactures. At the time of the Union a considerable trade was carried on in the towns and villages, in collecting yarn for English markets, and many branches of the linen manufacture had been brought to considerable perfection. The rapid rise of the city of Glasgow has led to the discontinuance of most of the small establishments in the county. Those which now exist are subordinate branches of the extensive establishments of GLASGOW, which city, with its suburbs, comprehends the greater part of the population, manufactures, and commerce of the district. In 1852 there was only one savings bank in the county, at Glasgow. The amount owing to depositors on November 20th 1852 was 565,469*l.* 4*s.*

Religious Worship and Education.—According to the returns of the Census of 1851, it appears that there were then in the county 279 places of worship, of which 59 belonged to the Free Church, 57 to the Established Church, 52 to the United Presbyterian Church, 27 to Independents, 13 to Roman Catholics, 10 to Episcopalians, 9 to Baptists, 7 to Wesleyan Methodists, 6 to Mormons, 5 to Reformed Presbyterians, 4 to Primitive Methodists, 3 to Original Seceders, 3 to the Evangelical Union, and 2 to Quakers. The total number of sittings provided was 175,319. The number of Sabbath schools in the county was 622, of which 235 belonged to the Free Church, 113 to the Established Church, 107 to the United Presbyterian Church, 33 to Independents, 12 to Wesleyan Methodists, 8 to Episcopalians, and 6 to Baptists. The total number of Sabbath scholars was 60,119. The number of day-schools was 531; namely, 281 public schools with 36,382 scholars, and 250 private schools with 16,886 scholars. There were 172 evening schools for adults with 6811 scholars, of whom 2594 were females. There were 29 literary and scientific societies in the county with 8740 members, and 53,351 volumes in the libraries belonging to them.

LANARK, NEW. [LANARK.]

LANCASHIRE, a northern county of England, is bounded N. by Cumberland and Westmorland, N.E. and E. by Yorkshire, S. by Cheshire, and W. by the Irish Sea. Its form is irregular: the district of Furness on the north-western side of the county is separated from the rest by the Bay of Morecambe, and by a narrow strip of the county of Westmorland. Its greatest length, not including Furness, is from the 'Counties Stone,' at the junction of the three counties of York, Westmorland, and Lancaster, to the bank of the Mersey, south of Prescott, about 64 miles; the greatest breadth is from Redmer's Head, east of Rochdale, to Formby Point on the Irish Channel, nearly 45 miles. The greatest length of Furness is from the neighbourhood of Ambleside at the head of Windermere to Rampside, at the western extremity of Morecambe Bay, 23 or 24 miles; the greatest breadth from the Duddon to the Winster about 13 miles. The long narrow island of Walney and some smaller ones are at the southern extremity of this detached portion. The whole county is comprehended between 53° 20' and 54° 25' N. lat., 2° 0' and 3° 16' W. long. The area is estimated at 1905 square miles, or 1,219,221 statute acres; the population in 1841 was 1,667,054; in 1851 it was 2,031,236. In size Lancashire is the sixth county in England, being somewhat smaller than Northumberland, and rather larger than Hampshire; in population it was exceeded in 1831 by Yorkshire and Middlesex; in 1841 and 1851 it was the most populous county in England.

Surface and Coast-line.—The inland part of Furness is an integral part of the Cumbrian Mountains, and is marked by the features which characterise Cumberland. Mountains rising to the elevation of between 2000 and 3000 feet are separated by narrow valleys watered by mountain-streams, or occupied by lakes. Towards the coast the mountains and hills subside. Furness is divided into Upper Furness, or Furness Fells, which is mountainous; and Lower, or Low Furness, which includes the low flat towards the shore. In the main portion of the county the northern and eastern parts are occupied by branches from the central high lands which run southward through Yorkshire into Derbyshire. These elevations are not equal to those of the Cumbrian group; but they expand into greater breadth, forming high waste moorlands. In the southern and western parts the high lands gradually subside, leaving between their base and the sea a broad flat belt of land, and on the south sinking into the valley of the Mersey and the wide expanse of the plain of Cheshire. These high lands reach the margin of the sea at Liverpool; but from the mouth of the Mersey northward to the mouth of the Ribble, a uniform level, containing extensive peat-mosses, stretches inland from the flat and sandy coast for several miles. Between the mouth of the Ribble and the Wire is an extensive level tract called the Fylde country. [FYLDE, THE.] The level country still borders the sea from the mouth of the Wire to that of the Lune, and continues along the coast of Morecambe Bay. With the exception of these low lands, and the tract of Lower Furness, Lancashire has a hilly and in some parts a mountainous character. The principal elevations are as follows:—Old Man in Coniston Fells, 2577 feet; another peak, near Old Man, of about the same height; Pendle Hill, near Clitheroe, 1803 feet; Bleasdale Forest, on the east border near Garstang, 1709 feet; Boulworth Hill, on the east border, near Burnley, 1689 feet; Rivington Moor, near Bolton, 1545 feet.

Except near Blackpool, where there are clay-cliffs extending for about 3 miles, and having in some places a height of above 100 feet, the coast is low throughout, with a sweeping rounded outline, skirted by broad sands dry at low water. Towards the north, where the high land approaches nearer to the sea, the coast loses its convexity of outline, and forms a deep bay, of which Rosall Point and the southern point of Furness form the extremities. A tongue of low land projecting near the mouth of the Lune divides this large bay into the two smaller ones of Lancaster and Morecambe, the Morecambe of the ancients. Lancaster Bay receives the Lune and the Wire: the estuaries of the Leven and the Ken, or Kent, open into Morecambe Bay. The depth of water in both bays is little except in the channels formed by the rivers, and a considerable part becomes at low water an expanse of sand, across which there is a road, passable, though not

without danger, when the tide is out, from the neighbourhood of Lancaster into Furness.

Walney Island, off the southern extremity of Furness, extends from north-west to south-east about eight miles, in width nowhere more than one mile. It bends in at each extremity towards the mainland, from which it is separated by a narrow channel. It is so low as to have been at times nearly inundated by the tide. At the southern extremity of the island is a lighthouse. The other islands of the group—Foulney, Fife of Fouldrey (on which are the mouldering remains of an old castle, once extensive and strong), Sheep Island, Roe Island, Dova How, and Old Barrow Ramsey, are all small: they are in the channel between Walney and the mainland.

Geology, Mineralogy, &c.—The new red-sandstone, or red marl, in which occurs the great deposit of rock-salt, occupies the valley of the Mersey, extending inland several miles, especially in the neighbourhood of Manchester. It occupies also a considerable portion of the western side of the county as far north as the valley of the Lune at Lancaster. It is covered near the coast by the moss or peat which extends to the westward of a line drawn from Liverpool by Ormskirk to Preston; and from Preston by Garstang to Lancaster it is covered by the clays, marls, and peat-mosses of the Fylde district. The peat-mosses contain great quantities of large timber-trees, the remains of ancient forests. A great portion of the tract in which the peat occurs is in a state of cultivation. The coal-measures crop out from under the red marl. The coal-field of South Lancashire, to which the county owes its manufacturing pre-eminence, occupies a large irregular tract between the Ribble and the Mersey. The line which bounds it extends from Colne south-west by Burnley, Blackburn, and Chorley, to Upholland, near Wigan; thence north-west to near Ormskirk; and thence south and east by Prescott to between Newton and Warrington. From this point the boundary runs in an irregular line by Newton and Leigh to Worsley; and thence makes a sweep round Manchester at an average distance of five miles from that town till it meets the river Thame on the border of the county. The eastern limit of the coal-field is, generally speaking, just within that of the county; for the high land which divides Lancashire from Yorkshire is formed of the millstone-grit, which here crops out from beneath the coal-measures. The coal-measures probably extend westward under the sea. The coal re-appears in the peninsula of the Wirral in Cheshire, and yet farther west in the coal-field of Flintshire and Denbighshire. A small coal-field, east of Lancaster, occupies a portion of this county, and extends into Yorkshire.

The millstone-grit forms, as already noticed, the heights which skirt the eastern side of the county, as well as those which separate the basins of the Mersey and the Ribble, the valleys of the Irwell and the Roch, and the valleys of the Ribble and the Lune. In the intervening space between the two coal-fields the red marl rests upon the millstone-grit.

That part of the county which is north of the Lune is chiefly occupied by the carboniferous or mountain limestone. Between Hornby and Lancaster this formation extends over a small district south of the Lune. The old red-sandstone, which underlies the mountain limestone, appears just on the border of the county near Kirkby Lonsdale. Furness is occupied partly by the Lower Silurian slate rocks which form the mass of the Cumbrian Mountains. In the central part of Furness occurs carboniferous limestone. Lower Furness is occupied partly by the new red-sandstone, which forms its southern extremity.

The principal mineral production of Lancashire is coal. The coal is of various kinds, including cannel coal. Lead is obtained from the millstone-grit and mountain-limestone districts. The lead-mine of Anglesark, between Chorley and Bolton, yields also carbonate of barytes. Some copper is obtained in the high mountains of Furness; and ironstone is found in the lower part of the same district, between Ulverstone and Dalton. The mountains of Furness yield blue slate; coarse slate of lighter colour, and flag-stones, are obtained near Wigan. Excellent freestone is quarried near Lancaster, and scythe-stones and brick and pipeclay are found in various parts.

Hydrography and Communications.—The rivers that water this county have their general course from north-east to south-west; those of Furness excepted, which flow from north to south. The principal rivers are the Lune in the north, the Wire and the Ribble in the centre, and the Mersey in the south.

The *Lune*, or *Loyne*, rises in Westmorland, on the northern slope of the Langdale Fells. It enters Lancashire near Kirkby Lonsdale, and flows first south and then south-west past Lancaster, where it opens into a wide estuary in Lancaster Bay. The Lune receives in the lower part of its course the Greta, which rises on the southern slope of Wharfedale, and the Wenning, which also rises in the mountains of Yorkshire and flows past the town of Hornby; both these tributaries join the Lune on the left bank. The length of the Lune may be about 48 miles, of which 20 miles are in Lancashire. Lonsdale, or the Valley of the Lune, is surpassed by few vales in England in picturesque beauty. The navigation of the river commences at Lancaster, up to which town it is navigable for ships of small burden.

The *Wire* rises in the moorlands on the Yorkshire border east of Lancaster, and flows first west and then south by Garstang, below which it turns west and then north-west until it enters the Bay of

Lancaster near Rosall Point, by a deep and wide estuary. Its whole course is about 28 miles. At the mouth of the Wire a harbour has been formed, and the town of Fleetwood built.

The *Ribble* rises in the Yorkshire Mountains, a little east of Wharfedale. It touches the border of Lancashire about 3 miles above Clitheroe. After dividing the counties of York and Lancaster for some miles it enters Lancashire, through which it flows in a somewhat sinuous course to the town of Preston, below which it opens into a wide shallow estuary and enters the Irish Sea. It is joined on the right bank by the Hodder, which rises very near the source of the Wire, and has the upper part of its course in Yorkshire, and the lower part on the border of Yorkshire and Lancashire. On its left bank it receives the Calder, which rises just within the boundary of Yorkshire, but has the greater part of its course in Lancashire. In the neighbourhood of Preston it receives on the left bank the Darwen, or Derwent, which rises in the moors near Over Darwen, between Blackburn and Bolton. The Ribble's Dale, or Valley of the Ribble, is very beautiful. The estuary is forded at low water at Heaketh Bank below Preston, where it is 4 miles wide; but with the tide small vessels can get up to near Preston.

The *Mersey* rises in Yorkshire from different sources in Clough Moss and Holme Moss, south-west of Huddersfield. The streams from these sources form the Thame, or Tame, which flows south-west first through Yorkshire and then along the border of Lancashire and Cheshire, by Staleybridge and Ashton-under-Line to Stockport, where it is joined by the Goyt [DERBYSHIRE] and assumes the name of Mersey. The lower part of its course is described elsewhere. [CHESHIRE.] The navigation of the Mersey begins at Stockport. Its principal Lancashire tributary is the Irwell, which has its source in Durley Hill, in the moors between Rochdale and Burnley, and flows in a very winding course by Heywoodbridge near Haslingden, Bury, and Manchester. At Manchester it receives the Irk from between Oldham and Rochdale, and the Medlock from the Yorkshire border near Oldham. The Irwell is navigable as far as Manchester. The whole length of the Irwell may be about 40 miles; that of the Tame, or Mersey, including its estuary, nearly 70 miles.

There are several small streams in the county. The Winster and the Duddon form respectively the eastern and western boundaries of Furness: and the Leven from the Lake of Windermere, and a stream from Coniston Water, flow through the middle of Furness and unite their waters in the wide estuary of the Leven. The Duddon is a beautiful stream; its valley is called Donnerdale. It rises north of Coniston Fells, and sweeps round and under them. The Douglas rises near Wigan, and flows north-west into the estuary of the Ribble. The Alt, or All, rises near Prescott and flows north-west into the Irish Sea near Formby Point. The Douglas is 20 miles long; the Alt 14 miles; the Douglas was made navigable nearly throughout as far back as the year 1727; but many years since an artificial cut was substituted for the natural channel, except for a short distance near the mouth.

Two considerable lakes are in Furness, Winandermere or Windermere and Coniston Water. Windermere is on the border of Westmorland and Lancashire, but by its position rather belongs to Lancashire, within which its southern part is included. It is about 11 miles long from north to south, and varies from half a mile to a mile in breadth; but in one part (where there is a ferry) it is not above 500 yards over. It is the largest lake in England, and its greatest depth is rather more than 200 feet. At its northern extremity it receives two mountain streams from Langdale Pikes, which unite just before they enter the lake: several other mountain streams flow into it on the east and west. Its waters are discharged by the Leven, which flows from its southern extremity into Morecambe Bay. A small lake (Eathwaite Water) in Lancashire discharges its waters into Windermere, to the west of which it lies. The waters of some of the smaller Westmorland lakes also flow into this great receptacle. The waters of Windermere are very clear, and the scenery along its banks remarkably beautiful. In it are several small islands.

Coniston or Thurston Water is nearly 6 miles long from north to south, with a variable breadth, never perhaps exceeding three-quarters of a mile. Its greatest depth is about 240 feet. It is fed by a number of mountain streams, and discharges its waters into the estuary of the Leven. Coniston Fells are near the northern extremity of the lake. Some shallow lakes or morasses lie along the western coast of Lancashire, as Marton Mere, between the Ribble and the Wire, which is now considerably reduced by the channel called the Main Dyke; and White Otter and Barton Mere, not far from Ormskirk. Marton Mere, near the mouth of the Douglas, has been drained and brought into cultivation.

The Sankey Canal, for the construction of which an Act of Parliament was obtained in 1755, was the first canal executed in England. It extends by a very circuitous course of about 12 miles from St. Helen's, near Prescott, along the valley of the Sankey Brook, into the Mersey at Fidler's Ferry, near Warrington, and has three branches. The Duke of Bridgewater's Canal was commenced soon after the Sankey Canal. The execution of this great work was effected by Francis duke of Bridgewater, assisted by Brindley the engineer. The greater part of this canal however belongs to CHESHIRE. It commences at Manchester, and enters Cheshire about 6 miles south

from that city. About 3 miles from Manchester a branch runs west to Worsley, where there are extensive tunnels and underground works connected with the Earl of Ellesmere's collieries, and thence to the town of Leigh. The Leeds and Liverpool Canal, the most extensive in the kingdom, enters this county from Yorkshire at Foulridge, near Colne, and passes by or near Burnley, Blackburn, Chorley, Wigan, and Ormskirk to Liverpool. Cuts connect this canal with the Ribble and with the Duke of Bridgewater's Canal at Leigh. The length of this canal, without reckoning the branches, is about 127 miles, including the 11 miles of the Lancaster Canal incorporated with it. The Lancaster Canal begins near Kendal in Westmorland and runs southward in a tolerably direct line to Lancaster, where it crosses the Lune by an aqueduct of five arches, each of 70 feet span, and rising nearly 49 feet above the surface of the river: from Lancaster it proceeds by Garstang, where it crosses the Wire by an aqueduct, to Preston. Here the canal is for a few miles replaced by a railroad, which crosses the Ribble on a viaduct bridge. The canal recommences on the south side of the Ribble valley, and joins soon after the Leeds and Liverpool Canal. The whole length of the Lancaster Canal is above 70 miles. The Ashton-under-Line Canal, or, as it is sometimes called, the Manchester, Ashton-under-Line, and Oldham Canal, commences on the eastern side of the town of Manchester, and runs in a tolerably direct line to Fairfield, about four miles from Manchester on the road to Ashton. It has branches to Stockport; to the Huddersfield Canal, at Dukinfield, near Ashton; and to the collieries at Hollinwood, near Oldham. Several cuts have been made in Manchester from this canal to wharfs and quays in the town. It communicates with the Rochdale Canal. The length of the canal and its branches (exclusive of the branch to Stockport) is nearly 12 miles. Of the Huddersfield Canal and the Peak Forest Canal only a very small portion is in Lancashire. They both cross the Thame near Dukinfield to unite with the Ashton-under-Line Canal. The Rochdale Canal commences in the Calder Navigation in Yorkshire, and proceeds by Todmorden into Lancashire. It follows the valley of the Rooh to Rochdale, and thence proceeds to Manchester, where it locks into the Duke of Bridgewater's Canal, receiving a branch from the Ashton-under-Line Canal by the way. The Manchester, Bolton, and Bury Canal commences in the Mersey and Irwell Navigation at Manchester, and runs to Bolton, with a branch to Bury. The canals of Lancashire form part of that immense system of inland navigation which connects the Irish Sea with the German Ocean. The Leeds and Liverpool Canal, with the Aire and Calder Navigation, forms one line of communication; and the Duke of Bridgewater's Canal, with the Rochdale Canal, the Calder and Hebble Navigation, and the Aire and Calder Navigation, forms a second. The Ashton-under-Line, Huddersfield, and Sir John Ramsden's Canals may be substituted for the Rochdale Canal in this last line.

The railway system is more completely carried out perhaps in Lancashire than in any other county. The entire southern division of the county is covered with a network of lines, and every part of it has easy communication by railway with all the important towns. The main northern line to Scotland, in connection with the London and North-Western railway company, by way of Carlisle, enters Lancashire at Warrington, passes through it in a northern direction about 53 miles, passing by or through Wigan, Preston, and Lancaster, and quitting the county near Burton. From Manchester lines run in all directions. The Manchester and Liverpool line runs westward to Liverpool, 31 miles: from it are short branches south to the Mersey opposite Runcorn, and north-west to St. Helen's. A direct north-west line unites Manchester with Preston. From it lines diverge right and left, connecting it with other lines. The Manchester and Huddersfield and the Manchester and Yorkshire lines connect Manchester with the various towns in Yorkshire. The North-Western railway gives it direct communication with London, though only a few miles of this line are in Lancashire. A short line of 8 miles runs south-west from Manchester to Altringham. Other short lines run east to Oldham and to Staleybridge. From the Clifton station on the Liverpool line, near Manchester, a line runs nearly north by Bury, Haslingden, Burnley, and Colne, where it quits the county. A line quits the Liverpool line at Kenyon, and proceeds nearly north by Leigh, Bolton, and Blackburn to Accrington, where it quits the county. From Liverpool a line runs at a short distance from the coast to Southport. A line runs nearly north-east from Liverpool to Preston; and another line runs more east past Wigan, and joins the Manchester and Preston line a few miles west of Bolton. From Preston a line runs north-west at some little distance from the coast past Kirkham to Fleetwood, having short branches to Lytham and to Blackpool. A cross-line connects Preston with Blackburn and Accrington, and another connects it with Clitheroe. The Whitehaven and Furness Junction railway runs along the southern extremity of Furness, from Peel northward past Dalton to Broughton, where it crosses the Duddon into Cumberland. The Furness line connects Dalton with Ulverstone.

Of coach-roads the following are the principal:—The Port Patrick, Carlisle, and Manchester road enters the county at Stockport, and runs by Manchester, Chorley, Preston, Garstang, and Lancaster into Westmorland. The Liverpool road enters the county at Warrington, and runs by Prescott to Liverpool, from which place a road runs to Preston, where it joins the high road to Carlisle. The coach-road

from Manchester to Liverpool joins the London and Liverpool road at Warrington. A road from Manchester runs by Middleton and Rochdale to Halifax and Leeds in Yorkshire; another by Oldham to Huddersfield, and so to Leeds; and another northward by Bury and Clitheroe into the mountain district of Yorkshire. The other roads are too numerous to be particularised.

Climate, Soil, Agriculture.—The climate of Lancashire is mild and moist. The high hills which run along its eastern boundary shelter it from the cold easterly winds, but at the same time arrest the clouds which come from the Atlantic, and produce more abundant rains than in those parts of England which lie to the eastward.

The surface of the county is very uneven in the northern and eastern parts. Near the coasts the land is level, and the soil consists of a good sand over a rocky subsoil, or a clay marl, which when mixed with the upper soil renders it extremely productive, especially in garden vegetables. There are extensive tracts of peat-moss.

From the moist nature of the climate Lancashire is more productive in grass than in corn. The arable land is generally well cultivated. Many of the farms are of considerable size, and were formerly occupied as domains by the larger proprietors. Several still retain the name of Hall or Manor Farm, but the subdivision of property has given rise to very small occupations, which are cultivated like large gardens, and are very productive, especially the sandy loams, where excellent crops of potatoes are raised. Oats have always been a favourite crop, partly from their suiting a moist climate, and partly from their forming a considerable part of the food of the inhabitants in the central and northern parts of the county. Wheat is sown where the land is favourable to it, as along the shore north of Lancaster, in the Fylde, and in the south-west part of the county. Potatoes were early cultivated in the fields in Lancashire, and they retain their celebrity when raised in the lighter soils, and when not over-matured. A considerable extent of land in the vicinity of manufacturing towns is kept in grass for the purpose of bleaching linen.

Sheep are not abundant in proportion to cows; the breeds commonly met with are the black-faced, the Cheviot, and the improved Leicester. The original breed of oxen in Lancashire was one of the best in England until it was surpassed by the Leicestershire, which is only the same blood improved by careful selection. Milk is a very important article of food in a populous district; butter and cheese are however made in great quantities and of a very good quality. Many useful horses are bred in Lancashire, for which there is a great demand in the manufacturing towns. They are chiefly cart-horses of a hardy active sort. The breed of swine does not present any peculiar feature. A great deal of pork and bacon is imported from Ireland.

Divisions, Towns, &c.—The county of Lancashire is divided into six hundreds, as follows:—Amounderness, west; Blackburn, east; Leyland, central; Lonsdale (including the borough of Lancaster), north; Salford (including the city of Manchester), south-east; and West Derby (including the boroughs of Liverpool and Wigan), south-west. The county contains the borough, market, and sea-port towns of LANCASTER and LIVERPOOL; the ancient borough and market-towns of CLITHEROE, PRESTON, and WIGAN; the recently-constituted city of MANCHESTER; the decayed and now-disfranchised borough of Newton; the market-towns of ASHTON-UNDER-LINE, BLACKBURN, BOLTON-LE-MOORS, BURNLEY, BURY, CARTMEL, CHORLEY, COLNE, Dalton, GARSTANG, Hawkshead, HASLINGDEN, Hornby, KIRKHAM, LEIGH, MIDDLETON, OLDHAM, ORMSKIRK, Poulton, PRESCOT, ROCHDALE, TODMORDEN, ULVERSTONE, and WARRINGTON; with the small towns of ACCRINGTON, Atherton, Barton-upon-Irwell, Over Darwen, Eccles, Fleetwood, Heywood, Hindley, Horwich, Lytham, Radcliffe, Saint Helen's, Southport, and Tyldesley. Ashton-under-Line, Blackburn, Bury, Manchester, Oldham, Rochdale, Salford (a suburb of Manchester), and Warrington, were by the Reform Act erected into parliamentary boroughs. The places printed in small capitals are described under their respective headings. Of the others an account is subjoined. The populations given are those of 1851.

Atherton, population 4655, about 12 miles W. by N. from Manchester, has numerous cotton-works in its vicinity. A fine old mansion called Atherton Hall stood here, but was pulled down a few years since.

Barton-upon-Irwell, 6 miles W. from Manchester, population of the township 12,687, is on the right bank of the Irwell. It has greatly improved of late years in consequence of the increase of the cotton manufacture. The town possesses a district church, chapels for Wesleyan and Primitive Methodists and Roman Catholics, and a National school. There is here a stone aqueduct of three arches over which the Duke of Bridgewater's Canal is carried across the river Irwell.

Dalton-in-Furness, 25 miles W.N.W. from Lancaster across the Sands: population of the parish, 4683. This town flourished at an early period in consequence of the favour of the neighbouring abbey of Furness. Dalton consists of a principal street of poor houses, terminating on the west in a spacious market-place. The church is a small neat building of considerable antiquity. On a rocky eminence west of the town there is a square tower, the remains of a castle. The market is on Saturday. Malting and brewing are carried on, and there are some iron-works and tanyards near the town. A station of the Whitehaven and Furness railway is at Dalton. In the market-place is a stone cross,

Near the town are the picturesque ruins of Furness Abbey, noticed near the end of this article.

Over Darwen, 4 miles S. from Blackburn, population 7020, possesses a district church and a chapel of ease, places of worship for Wesleyan Methodists, and National, British, Infant, and Operative Free schools. The mechanics institution in 1851 had 194 members, with a library containing 1700 volumes. Cotton-mills, paper-mills, iron-works, and collieries in the neighbourhood give considerable employment. A market established some years back is held on Saturday. A market-house, with a magistrate's room and an assembly room over it, stands in the centre of the town. Fairs for horses and cattle are held in May, July, and October. *Lower Darwen*, population 3521, is about 3 miles S.E. from Over Darwen, but the two places are almost connected by intervening hamlets. The occupations of the inhabitants are nearly similar. At Lower Darwen are a district church, Dissenting chapels, and National and British schools.

Eccles, 4 miles W. from Manchester: population of the town, 4108. The church, an ancient structure, was repaired in 1847; in the interior are some monuments of interest. There are a chapel for Wesleyan Methodists, a Free Grammar school, and an Infant school. The inhabitants are engaged in the cotton and silk manufactures. Eccles cake enjoys a reputation somewhat analogous to Banbury cake.

Fleetwood, or *Fleetwood-on-Wire*, 20 miles S.W. from Lancaster, situated at the north-east corner of the peninsula formed by the estuary of the river Wire and the shore of the Irish Sea, is a modern town, which owes its origin and importance to the extension of railway and steam-vessel communication: the population of the town and port in 1851 was 3121. Sir P. Hesketh Fleetwood, Bart., from whom the place has its name, laid out the town with much taste, and erected various public buildings. In connection with the Preston and Wire railway, which has an extensive station here, steamers ply between Fleetwood and Belfast, Londonderry and the Isle of Man, and during the summer months to Glasgow. Two wharfs, respectively 1180 feet and 1440 feet long, accommodate the steamers and other shipping. There are also docks and a lighthouse. A raised stone causeway, and a bridge of piles extending about two miles, carry the railway along the western side of the Wire water or estuary. There are a neat church; chapels for Independents, Wesleyan Methodists, and Roman Catholics; the 'Fleetwood Testimonial Schools,' an Infant school; a school supported by Roman Catholics; and a commodious market-house. A custom-house and extensive bonded warehouses are on the wharfs. The number and tonnage of vessels registered as belonging to the port of Fleetwood on December 31st 1853 were—16 sailing-vessels with an aggregate tonnage of 480 tons, 14 of 3424 tons, and 5 steamers of 904 tons in all. The number and tonnage of sailing-vessels entered at the port during 1853 were—inwards, 443 vessels, tonnage 83,874; outwards 268, tonnage 19,255: the steam-vessels entered were—inwards 672, tonnage 117,880; outwards 671, tonnage 118,726. The mechanics institution had 142 members in 1851, and 570 volumes in its library. A subscription news-room is maintained. Rosall College, about 3 miles S.W. from the town, furnishes a liberal education to sons of clergymen and other gentlemen: the pupils reside in the college. The market is held on Friday. Fleetwood is a favourite resort in summer for sea-bathing.

Hawkhead, in Furness, 34 miles N.N.W. from Lancaster by Ambleside, population of the township 825, is situated in a pleasant vale near the head of Kethwhite Water, on a brook flowing into the lake. The parish church is finely situated on an elevation; it is of Norman date, but was repaired and altered in the reign of Elizabeth by Sandys, archbishop of York, a native of the town. In the town is a place of worship for Quakers, a National school, and Archbishop Sandys's Grammar school, which has an income of about 220*l.* a year, and had 25 scholars in 1852. The town-house is a neat building. In the neighbouring mountainous district are extensive iron-works and slate-quarries. Large flocks of sheep are fed on the hills and plains in the district. The market is on Monday. Fairs are held on Easter Monday, the Monday before Ascension Day, Whit-Monday, and October 2nd.

Heywood is chiefly on the left bank of the river Roch, about 3 miles from Bury and Rochdale respectively, population 12,194; it owes its importance chiefly to the cotton manufacture. Besides numerous cotton-mills, there are iron-foundries, coal-mines, rope-works, and a manufactory of power-looms. There are two chapels of the Establishment, chapels for Baptists, Independents, Wesleyan, Primitive, New Connexion, and Association Methodists, and Swedenborgians; National and Infant schools, a Swedenborgian school, a mechanics institute, and a savings bank. At Heywood is a station of the Lancashire and Yorkshire railway, and a cut from the Rochdale Canal communicates with the village.

Hindley, 15 miles W. by N. from Manchester, population of the town 5235, has several cotton factories and collieries in the vicinity. Hindley possesses an old Episcopal chapel, chapels for Wesleyan Methodists and Roman Catholics, and an Infant school.

Horwich, 16 miles N.W. from Manchester, population of the town 2104, has a chapel of the Establishment, chapels for Independents and Wesleyan Methodists, and National and Infant schools. Cotton-spinning, coal-mining, and the making of fire-bricks are the chief occupations.

Hornby, 10 miles N.E. from Lancaster, population of the township 374, once a market-town of some importance, stands in the midst of a rich grazing district, on the banks of the river Wenning, near its junction with the Lune. Hornby Castle, near the town, the ancient seat of the Stanleys, Barons Monteagle, has been rebuilt, and is now fitted up as a modern mansion. There are a neat Episcopal chapel with an octagonal tower, a Roman Catholic chapel, and a Free school in Hornby. A handsome stone bridge crosses the Wenning. The market, held on alternate Tuesdays chiefly for cattle, is well attended: there is a yearly fair.

Lytham, on the right bank of the estuary of the Ribble, 26 miles S. by W. from Lancaster, population of the parish 2698, is much resorted to in summer for sea-bathing. There is a fine promenade along the beach. Besides the parish church, which was erected in 1771, there are in Lytham St. John's church, erected in 1834; chapels for Wesleyan Methodists and Roman Catholics; and a Charity school. There is a small shipping business at Lytham Pool, affording some employment for ship-carpenters, block-makers, and sail-makers. A branch of the Preston and Wire railway runs to Lytham. There are baths, assembly- and billiard-rooms, and other accommodations used at bathing towns.

Newton-in-Makerfield, or *Newton-in-the-Willows*, is situated about 15 miles W. from Manchester, by the Manchester and Liverpool railway: the population of Newton in 1851 was 3719. The market, which had been long discontinued, has been restored. An obelisk marks the site of an ancient market cross. Fairs for cattle and horses are held on May 17th and August 11th and 12th. In the town is an ancient court-house. Newton was a borough by prescription, and returned two members to Parliament from the 1st of Elizabeth, but was disfranchised by the Reform Act. Besides the parish church there are a chapel for Independents, a Grammar school, and an Infant school. Cotton-mills, flour-mills, iron-foundries, and an extensive glass-manufactory, afford employment. Brick-making is carried on.

Poulton, or *Poulton-le-Fylde*, a market-town in the Fylde district, situated on an elevation, about 2 miles from the left bank of the estuary of the Wire, 21 miles S.S.W. from Lancaster: population of the township, 1120. The church was rebuilt about 1757, except the tower, which is of the time of Charles I. The Wesleyan Methodists and Roman Catholics have places of worship. A Free school was founded in 1717 for boys and girls; an apprentice fund for poor boys was also provided by the founder of the Free school. The market-day is Monday: three yearly fairs are held. Poulton possesses a savings bank.

Radcliffe, 6 miles N.N.W. from Manchester: population of the town, 5002. Gingham, checks, ticks, and fustians are largely manufactured; and there are calico printing-works and collieries. The parish church is an ancient structure: there are a chapel of ease, two chapels for Wesleyan Methodists, and National and Infant schools. Near Radcliffe are the ruins of a tower erected in the reign of Henry IV.

Saint Helen's, in Prescott parish, 22 miles W. by S. from Manchester, population of the town 14,866, is a straggling ill-built place: it is lighted with gas. There are two established churches and a chapel of ease; chapels for Independents, Wesleyan and Primitive Methodists, Quakers, and Roman Catholics; several National and British schools, Infant schools, a Free school, and a school for Roman Catholics. The town-hall in the market-place contains assembly-rooms and a news-room. The British Plate-Glass Company's establishment at Ravenhead, the works for smelting copper-ore belonging to the proprietors of the Parys Mine in Anglesey, chemical works, potteries, iron and brass foundries, and a brewery, afford employment. Rope-making and tanning are carried on. A customary market is held on Saturday: there are two yearly fairs. A county court is held in the town. The Liverpool and Manchester railway and the Sankey Canal pass near the town, and a railway goes to Runcorn Gap on the Mersey.

Southport, 22 miles N. from Liverpool, or 18½ miles by railway, population 4765, situated in a flat district on the coast at the mouth of the Ribble, is a favourite bathing place. The main street of the village is well lighted with gas and paved, and there is a spacious promenade. In the village are three churches, two Independent chapels, and one each for Wesleyan and Primitive Methodists, Quakers, and Roman Catholics; Church, Wesleyan, National, and British schools. The usual accommodations for visitors are amply provided, and there are medical and other charities.

Tyldesley, about 10 miles W. by N. from Manchester, population of the town 3608, has a large and handsome church, with a tower and spire, together 150 feet high; chapels for Wesleyan Methodists and the Countess of Huntingdon's Connexion; a National school, and a mechanics institution with a library. Coal-mines, cotton-factories, and flour-mills give considerable employment.

The following are among the more important villages; the populations, when not otherwise designated, are those of the parishes in 1851:—

ASHTON-IN-MAKERFIELD. *Bacup*, 16 miles N. from Manchester, population of the village 6981 in 1851, has extensive cotton factories, several dyeing establishments, brass and iron foundries, woollen, woollen-printing, and fulling-mills, and an extensive corn-mill. In the vicinity are numerous coal-mines. There are in Bacup a chapel belonging to the Establishment; two chapels for Baptists; chapels

for Wesleyan and Association Methodists; National and British schools; a school in connection with the Wesleyan chapel; and a mechanics institution, which had 105 members in 1851, with 881 volumes in its library. The village is lighted with gas. *Blackrod*, 17 miles N.W. from Manchester, population of the township 2509, occupies the site of a Roman station; traces are distinctly visible of a Roman road. Extensive collieries and bleach-fields are in the neighbourhood. Blackrod possesses a district church, a chapel for Wesleyan Methodists, a Free Grammar school, founded in 1627, and a National school. *Bolton-to-Sands*, is situated on the east side of Morecambe Bay, 4 miles N. from Lancaster, population of the township 686. The church was erected in 1818. The Free Grammar school had 51 scholars in 1851. *Broughton-in-Furness*, 31 miles N.W. from Lancaster, population of the township 1297, is situated about half a mile from the river Duddon, on the left bank of a stream flowing into the estuary of that river, which here forms the boundary between Lancashire and Cumberland. The houses, which are generally of stone, form a square, and have a neat appearance. Hoops and brush-stocks are extensively made. Oak-bark, grain, malt, and large quantities of blue slate are exported. There is a small market on Wednesday. Fairs are held on April 27th, August 1st, and October 6th, chiefly for horned cattle and mountain-sheep. The Duddon is navigable to about half a mile from the bridge. The Whitehaven and Furness railway passes Broughton; the Furness line runs to Ulverstone. In the town is an Endowed school. Broughton Tower, a portion of an old fortress, is now incorporated with a large modern mansion. *Chowbent*, 12 miles W.N.W. from Manchester, population returned with the chapelry of Atherton, is a populous and busy village, although some of its former celebrity in the manufacture of machinery and iron-work has departed. In the village are a chapel of ease, and chapels for Baptists and Unitarians. *Crosby*, on the coast, 6 miles N. by W. from Liverpool, population of the chapelry 2408, is a pleasant bathing village, much resorted to in summer. A chapel of ease is in the village. A Free Grammar school was founded here in 1618. *Denton*, 6 miles E. by S. from Manchester: population of the township 3146. The felt-hat trade, which was formerly carried on here, has considerably declined, and some coal-mines in the vicinity have been closed, in consequence of which the population has been reduced in number. The parochial chapel is an ancient building, constructed of wood and plaster. There are a district church, and a British school. *Didsbury*, 5½ miles S. from Manchester, population of the township 1449, is selected by many of the Manchester merchants as a place of residence. It is pleasantly situated near the right bank of the Mersey, which here separates Lancashire and Cheshire. Besides the parochial chapel there are a Wesleyan Methodist chapel, a theological institution belonging to the Wesleyan Methodist body, in which young men are trained for the ministry, and an Endowed National school. *Eccleston*, 16 miles S. by W. from Lancaster, population of the township 681, is a place of little trade, situated near the left bank of the Wire. It possesses a parochial chapel, chapels for Wesleyan Methodists and Roman Catholics, and a Free school. The gathering and preparing of rushes for tallow chandlers is a considerable source of employment. *Evertton*, a suburb, and included in the parliamentary borough of Liverpool, population of the chapelry 9221 in 1841; in 1851 it had risen to 25,513; at the Census in 1851 there were 370 of the military in the barracks. There are two district churches, an Independent chapel, a Free school, and National and Infant schools. *Farnworth*, 12 miles E. by S. from Liverpool, has a chapel, which is a picturesque embattled edifice of the 15th century; a Free Grammar school founded in 1480, which has an income from endowment of about 60*l.* a year, and had 21 scholars in 1853; and National schools. Canvas for sails is largely manufactured; watchmaking, and the making of files and other iron tools are carried on. *Gorton*, about 3 miles S. by E. from Manchester, population of the chapelry 4476, contains extensive chemical works, a cotton factory, and establishments for starch making, dyeing, and hat-making. There are a chapel belonging to the Establishment, chapels for Baptists, Wesleyan Methodists, and Unitarians, and an Endowed school for boys. A reservoir of the Manchester water-works, about 70 acres in extent, is in Gorton Vale. The Manchester and Stockport Canal passes Gorton on the east. *Greenacre's Moor* is in the township of Oldham, with which the population is returned. The village is a suburb of Oldham, and a place of residence for many genteel families; it has two Established churches, two chapels for Independents, a chapel for Wesleyan Methodists, National schools, two schools conducted by Methodists, and a mechanics institution, which in March 1851 had 68 members. Numerous cotton-mills, warp making establishments, iron-works, coal-mines, and rope-works furnish employment. Candle-wicks, and clogs and pattens are also made. *Haigh*, 22 miles N.E. from Liverpool, population of the chapelry, which is part of the parish of Wigan, 1220, has extensive coal mines, from which are obtained large quantities of cannel coal, and of a coal which from its superior qualities has received the name of King Coal. Numerous toys and ornaments are made from the cannel coal, which is susceptible of a high polish. There is a large iron-foundry. Besides the parochial chapel there are a public school for boys, and a school of industry for girls. Haigh Hall the seat of the Earl of Balcarres, is between Haigh and Wigan

Haigh, part of the borough of Wigan, 17 miles W. by N. from Manchester, population of the township 3670, has extensive coal-mines, from which cannel and king coal are raised; the cotton manufacture, and the making of garden and edge tools employ many of the population. Ince Hall is a fine old many-gabled mansion. *Kearsley*, about 8 miles N.W. from Manchester, population of the township 4236, has extensive bleaching-works, branches of the cotton manufacture, chemical works, and some less important occupations. A chapel for Swedenborgians is in the village. *Knossley*, about 6 miles N.E. from Liverpool, population of the township 1486. In the neighbourhood is Knowsley Park and Hall, the seat of the Earl of Derby. The mansion is a large brick edifice of various dates and incongruous styles; in it are some fine paintings. The park is very extensive. *Leyland*, 6 miles S. by W. from Preston, population of the township 3617, was once a place of some importance. The church, which is very large, was rebuilt in 1816 except the tower, which is ancient. There are places of worship for Independents and Roman Catholics; a Free school founded in the reign of Elizabeth, which had 18 scholars in 1853; a National and an infant school, and a savings bank. The inhabitants are employed in the cotton manufacture. Warden Hall, a fine old family mansion, is in Leyland. *Morecambe*, a bathing place on the shores of Morecambe Bay, about 4 miles N.W. from Lancaster, and close to Poulton, which is a station of the North-Western railway. The Local Board of Health for Poulton and two neighbouring townships has an interest in the management of the sanitary affairs of the place. *Newchurch*, 8 miles N.W. from Rochdale, population of the chapelry 16,915, has a church, rebuilt in 1825; chapels for Wesleyan and Association Methodists, Baptists, and Unitarians; a Free Grammar school, several National schools, and a school connected with the Baptist chapel. The cotton manufacture, the coarse woollens and baize manufacture, coal-mining, and the quarrying of stone, furnish employment to the population. *Oswaldtwistle*, about 8 miles E. by S. from Blackburn, population of the township 7654, has a parochial chapel, chapels for Baptists and Wesleyan and 1 Primitive Methodists, and National and Infant schools. Several extensive cotton-spinning, manufacturing, and printing-works are in the village. *Padiham*, about 3¼ miles W. by N. from Burnley, population of the township 4509, is situated on an elevation on the right bank of the river Calder: the streets are lighted with gas. The cotton manufacture, and the printing of cotton goods give extensive employment. Several coal-mines are in the vicinity. Besides the parochial chapel, there are chapels for Wesleyan Methodists, Baptists, and Unitarians; National, British, and Wesleyan schools. Three fairs are held in the course of the year. *Pendlebury*, 5 miles N.W. from Manchester, population of the township 2750, is chiefly engaged in the various branches of the cotton manufacture. Several collieries are in the neighbourhood. There are here a neat district church, and National schools. Agecroft Hall, a very ancient mansion, is in the vicinity. *Pillington*, about 6 miles N. by W. from Manchester, population of the township 12,863, is chiefly occupied in the cotton manufacture. *Poulton-le-Sands*, on the shore of Morecambe Bay, about 4 miles N.W. from Lancaster, population of the hamlet 995; is resorted to in summer for sea-bathing, for which it is advantageously situated. The village has railway communication by Lancaster with Yorkshire, and with the northern and southern parts of the county. There are here a chapel of the Establishment, recently rebuilt, and a Free school. *Ramsbottom*, 4 miles N. from Bury, population of the ecclesiastical district 3431, is dependent on the cotton manufacture: at this place the first Sir Robert Peel established the calico-printing trade. The extensive works of Messrs. Grant Brothers, and Messrs. Ashton afford extensive employment. There are here a Scotch church, erected in 1832 by William Grant, Esq., and a chapel of the Establishment, erected by public subscription, to which Messrs. Ashton liberally contributed. There are National and Wesleyan schools. *Rawtonstall*, about 8 miles N. from Bury, population of the ecclesiastical district 5643; has extensive cotton-mills, the proprietors of which have liberally provided means of instruction for their work-people by the erection of a church and a school. There are also a Wesleyan chapel, National schools, a mechanics institution, and a savings bank. *Ribchester*, 9 miles N.E. from Preston, population of the township 1650, occupies the site of the Roman station Coccium, or Rigodunum, on the right bank of the Ribble. A bath and other Roman remains have been discovered. The church is of the perpendicular style. There is a Roman Catholic chapel. The inhabitants of Ribchester are mainly occupied in hand-loom weaving. Salesbury Hall is an antique mansion of noteworthy character. About 4 miles from Ribchester is *Stoneyhurst*, noticeable on account of the Jesuit college, founded in 1840, a large and commodious structure, fitted up with every needful adjunct. It stands in beautiful grounds in the midst of very picturesque scenery. The church is elaborately decorated. The hall is capable of dining 150 pupils. *Seaford*, is a modern village on the coast 3 miles N. from Liverpool, in which are some neat residences of Liverpool merchants, and a new church. It is resorted to for sea-bathing. *Standish*, 3 miles N.W. from Wigan: population, 2655. The church is a semi-classic structure, erected in 1584. There are chapels for Wesleyan Methodists, Independents, and Roman Catholics; a Free Grammar school, founded in 1610, a School of Industry, and an Infant school. The inhabitants are mainly dependent on the coal-mines in the vicinity.

Fairs are held June 29th and November 22nd. It was in Standish Hall that the "Lancashire Plot" for the restoration of the Stuarts was concocted. *Stratford*, on the right bank of the Mersey, 4 miles S.W. from Manchester, population of the chapelry 4998, has a parochial chapel, chapels for Wesleyan Methodists and Independents, National, British, and Infant schools; and a temperance hall. Large numbers of pigs are brought from Wales and from Ireland, and killed at Stratford, chiefly for sale in Manchester. The Duke of Bridgewater's Canal, and the railway from Manchester to Altrincham pass close to the village. *Turton*, 4 miles N. from Bolton, population of the chapelry 4158, has cotton-mills, and bleach works on a large scale. The church is a handsome structure, picturesquely situated. Traces of a Roman road are visible in the neighbourhood. On Chetham's Close are the remains of a stone circle. Turton Tower is an embattled square tower of the Tudor period, to which a large modern mansion is attached. *Upholland*, about 4 miles W. from Wigan, population of the township 3359, has a Free Grammar school, founded in 1668, which had 125 scholars in 1853. The village is ancient; many of the houses are old and of curious construction, built in streets which run down the side of a rather steep hill. A priory formerly stood here; part of the building is used as a parochial chapel. In the neighbourhood are flour-mills, stone-quarries, and coal-mines. *Walmersley*, about 2½ miles N. from Bury, population of the township 4802. There are here cotton-mills, fulling-mills, chemical works, a brewery, and other establishments. A fine new church, picturesquely situated, and chapels for Wesleyan Methodists and Independents are in the township. There are remains of a beacon tower of the time of Elizabeth. A tower has been erected by the Messrs. Grant. *Walton-on-the-Hill*, 3 miles N. from Liverpool: population of the township, 2469. The parish church, which was, till 1698, the mother church of Liverpool, was rebuilt in 1742; it is partly of the decorated style; the tower is a modern erection. Its pleasant position, and its proximity to Liverpool make Walton a favourite residence of Liverpool merchants. In the village are Endowed, National, and Infant schools. *Walton-le-Dale*, 2 miles S.E. from Preston, population of the township 6855, occupies a beautiful situation on both banks of the Darwent, near its junction with the Ribble; the cotton manufacture is the chief source of employment. The church stands on an elevation, and commands fine prospects. There are a Free Grammar school, and National and Infant schools. *Waterloo*, on the coast about 5 miles S.S.W. from Liverpool, is a pleasant resort in summer. Numerous good residences have been erected in the village and neighbourhood. *Worle*, 6 miles W. by N. from Manchester, population of the township 10,189: in the township are three chapels of the Establishment, one of them built in 1847 by the Earl of Ellesmere; a chapel for Wesleyan Methodists; the Countess of Ellesmere's Normal school, and an Infant school. Extensive coal-mines are worked in the township, and there are several flour-mills.

Divisions for Ecclesiastical and Legal Purposes.—Lancashire was included in the diocese of Chester from 1541, when Henry VIII. constituted that bishopric till 1847, when pursuant to an Act passed some years previously, the whole of the county (except the deanery of Furness and Cartmel, which were added to the diocese of Carlisle), was formed into the diocese of Manchester, in the province of York. The parishes are very extensive. Whalley parish is 104,689 acres, Lancaster 73,732 acres, Rochdale 58,620 acres, Blackburn 45,269 acres, Kirkham 48,530 acres, and Prescott 36,554 acres; and others are little inferior in extent. There are however numerous dependent chapelries; and many chapels-of-ease and district churches have been built.

By the Poor-Law Commissioners Lancashire is divided into 29 Poor-Law Unions:—Ashton-under-Line, Barton-upon-Irwell, Blackburn, Bolton, Burnley, Bury, Caton, Chorley, Chorlton, Clitheroe, The Fylde, Garstang, Haslingden, Lancaster, Leigh, Liverpool, Manchester, Oldham, Ormakirk, Prescott, Preston, Prestwich, Rochdale, Salford, Todmorden, Ulverstone, Warrington, West Derby, and Wigan. These Unions contain 475 parishes and townships, with an area of 1,193,085 acres, and a population in 1851 of 2,091,203.

Lancashire is in the northern circuit. The assizes were till of late years held at Lancaster alone, but they are now held at Lancaster for the northern division of the county, and at Liverpool for the southern division. The quarter-sessions are held at Lancaster, and by successive adjournments at Preston, Salford, and Kirkdale. County courts are held at Ashton-under-Line, Blackburn, Bolton, Burnley, Bury, Chorley, Clitheroe, Colne, Garstang, Haslingden, Kirkham, Lancaster, Leigh, Liverpool, Manchester, Oldham, Ormakirk, Poulton, Preston, Rochdale, Salford, St. Helen's, Ulverstone, Warrington, and Wigan.

By the Reform Act the county was divided for parliamentary purposes into two parts, the northern and the southern divisions. Fourteen members were formerly returned to Parliament for this county; namely, two for the county itself and two each for the boroughs of Lancaster, Clitheroe, Liverpool, Newton, Preston, and Wigan. By the Reform Act Newton was disfranchised and Clitheroe reduced to one member: but the division of the county, with the creation of four new boroughs, Manchester, Bolton, Blackburn, and Oldham, each returning two members; and of five, Ashton-under-Line, Bury, Rochdale, Salford, and Warrington, each returning one member, has raised the whole number to 26.

Lancaster, as a county palatine, possesses a chancery court. In the time of Henry III. the earldom of Lancaster was instituted in favour of Edmund, surnamed Crouchback, second son of that king. In the time of Edward II. the earldom was erected into a duchy in favour of Henry Plantagenet, the then earl, and afterwards of John of Gaunt, who had married the heiress of Henry, and for whom the county was made a palatine county. In the time of Edward IV. the duchy was declared forfeited to the crown, to which, by Act of Parliament, both it and the county palatine were inseparably united. The chancery court has a chancellor, attorney-general, and other functionaries, and has an equity jurisdiction within the limits of the duchy.

History and Antiquities.—In the earliest period of English history this county was inhabited chiefly by the Brigantes, the most numerous and powerful of the tribes which then possessed the island. The Brigantes were subdued by Agricola, and in the subsequent division of Britain Lancashire was included in the province of Maxima Caesariensis.

Several places mentioned by ancient geographers are commonly identified with positions in this county. Among those mentioned in the Itinerary of Antoninus are the estuary or bay of Moricambe, Manchester (Mancunium), and Bremetonacæ or Bremetonacia, which is fixed by some at Lancaster, and by Camden and others, with more reason, at Overborough near Tunstall, some miles higher up the Lune, in the neighbourhood of Kirkby Lonsdale.

In Richard of Cirencester's map Moricambe is marked as a river, and the Alauna, Belisama, and Seteia are evidently identified by him with the Lune, the Ribble, and the Mersey. Coccium, in his map, is evidently fixed at or near Ribchester, and Rerigonium agrees in position with Lancaster: possibly Ad Alaunam, which he mentions in his Itinerary, is another name for the same place. The termination 'caster' leads us to fix a station at this town, and the first syllable 'Lan,' or, as it is provincially pronounced 'Lon,' accords well with the name Ad Alaunam, as well as with the first syllable of Longevicus, a station mentioned in the Notitia, which Camden is decided in placing here.

Several Roman roads have been traced in this county. Six of them diverge from Manchester (Mancunium) as a common centre. One runs north-west to Blackrod, and another north to Ribchester, the position most reasonably assigned to Coccium; two others run into Cheshire, one south-east by Stockport, another south-west by Stretford, supposed to be the Fines Flaviae et Maxima mentioned by Richard. Two others run into Yorkshire: one north-east towards Halifax; one, which branches from the foregoing, more easterly towards Oldham, Saddleworth, and Almondbury. The road to Ribchester is continued northward in the direction of Overborough, the Bremetonacæ of Camden. One branch road led from Ribchester to Freckleton, on the north side of the estuary of the Ribble, and another from Overborough to Lancaster, the Ad Alaunam and Rerigonium of Richard.

All traces of the station Mancunium have disappeared: of Coccium and Bremetonacæ some traces are visible at Ribchester and Overborough. Various antiquities of importance have been dug up or found at each of these places. Coins and other antiquities have been found at Colne (perhaps the Colonia of Ravennas), and at Cliviger near Burnley.

Long after the invasion of the Saxons Lancashire, at least in its northern part, retained its independence as a part of the British state of Cumbria or Cumberland, though this was frequently obliged to own the supremacy of the Northumbrian Angles. Egfrid, the son of Oswio, who reigned over the Northumbrians A.D. 670-685, conquered a part of the county, and bestowed Cartmel in Furness, with the Britons therein (et omnes Britanni cum ea), on St. Cuthbert, bishop of Lindisfarne, or rather annexed it to the temporalities of that see. Lancashire would be brought into subjection to the Saxons on the submission of the Cumbrian Britons to Edward the Elder in 921.

In 1323 the northern part of the county was ravaged by the Scots under Robert Bruce, who advanced as far as Preston, part of which he burned. In the reign of Henry VII. the Earl of Lincoln and Lord Lovel, with 2000 German soldiers under Martin Swart, and a number of Irish under Lord Geraldine, landed in Furness to support the cause of the impostor Lambert Simnel. In the civil war of Charles I. Lord Strange, afterwards earl of Derby, at the head of the Royalists, made an unsuccessful attempt in 1642 on Manchester, which was occupied for the Parliament by the county militia. Preston and Lancaster were subsequently taken by the Parliamentarians, and re-taken by the Royalists. In 1644 the siege of Lathom House took place; it was raised on the approach of Prince Rupert, who had previously taken Bolton, and afterwards obliged Liverpool to surrender; but in the following year the house was besieged again, and was given up by order of the king. In 1648 the Duke of Hamilton and General Langdale marched southward to Preston, in the neighbourhood of which, on Ribblesdale Moor, they were routed by the less numerous but veteran forces of Cromwell and Lambert. The vanquished fled southward, were overtaken and again defeated at Winwick and Warrington. Lancaster Castle was meantime besieged by the Royalists, but in vain. In the year 1651 the Earl of Derby again raised the royal standard, but being defeated by Lilburne at Wigan Lane, and subsequently taken, was executed at Bolton. In the

rebellion of 1715 Generals Wills and Carpenter compelled the supporters of the Pretender to surrender at Preston, to which place they had advanced in their march southward.

Of the early periods of our history there are few castellated remains. The keeps of Lancaster and Dalton castles, the ruins of the castle on the island of Pile of Fouldrey, and Hornby Castle, are noticed elsewhere. Gleaston Castle is in Furness, about two miles east of Furness Abbey: the ruins consist of portions of three square towers with some connecting walls, formed of mud and pebbles, and faced with limestone, inclosing an area or court-yard. Thurland Castle, near Hornby, is an old mansion which, having been fortified, stood a siege in the civil wars of Charles I. The ruins of Greenhaugh Castle, a mile from Grunstang, consist of one shattered tower. The monastic ruins in the county are of greater interest. Cockerham Abbey is about 6 miles S.W. from Lancaster, on a point of land at the mouth of the Lune. The only portion remaining is the chapter-house, an octangular room, the roof of which is supported by a single pillar rising in the centre. Furness Abbey is near Dalton, in Furness, on the banks of a rivulet in a narrow and fertile vale. It was founded in 1127 by Stephen, then earl of Morton, afterwards king of England, for Cistercian monks removed here from Tulket in Amounderness, but originally from Savigny in France. The ruins of this abbey are still magnificent, and from the picturesque beauty of the surrounding scenery are among the most striking of our monastic remains. They are of Norman and early English character. The whole length of the church is said to be 287 feet; the nave is 70 feet broad, and the walls are in some places 54 feet high and 5 feet thick. The windows and arches are upon a scale of unusual loftiness. There are ruins of the chapter-house and cloisters, and of the school-house, a large building detached from all the rest. The immediate precincts of the abbey, said to comprehend 65 acres, are inclosed by a stone-wall, on which appear the remains of small buildings, the offices of the abbey, and, entered by a gateway, a beautiful pointed arch. The ruins are built of a pale red stone, dug in the neighbourhood, and changed by time and weather to a dusky-brown tint. They are everywhere embossed by climbing or parasitic plants. Whalley Abbey and the priory church of Cartmel need only be mentioned here.

Religious Worship and Education.—According to the 'Returns of the Census,' taken in March 1851, it appears that there were then in Lancashire 1627 places of worship, of which 529 belonged to the Church of England, 300 to Wesleyan Methodists, 170 to Independents, 114 to Roman Catholics, 107 to Primitive Methodists, 100 to Baptists, 81 to the Wesleyan Methodist Association, 35 to Unitarians, 27 to Quakers, 27 to New Connexion Methodists, 23 to Presbyterians, 21 to Swedenborgians, 15 to Mormons, 11 to the Countess of Huntingdon's Connexion, 8 to Welsh Calvinistic Methodists, and 7 to Jews. The total number of sittings provided was estimated at 790,874. The number of Sunday schools in the county was 1524, of which 548 belonged to the Church of England, 489 to 7 sections of Methodists, 155 to Independents, 83 to Baptists, 78 to Roman Catholics, 26 to Unitarians, 21 to Presbyterians, 19 to Swedenborgians, 8 to Quakers, and 7 to Mormons. The total number of Sunday scholars was 823,173. The number of Day schools in the county was 3014, namely, 1036 public schools with 150,338 scholars, and 1978 private schools with 65,509 scholars. Of Evening schools for adults there were 314, with 9637 scholars. There were 99 literary and scientific institutions, with 20,053 members, and possessing libraries containing about 210,000 volumes.

Savings Banks.—In 1852 the county possessed 29 savings banks, at Accrington, Ashton-under-Line, Blackburn, Bolton, Burnley, Bury, Chorley, Clitheroe, Colne, Croston, Ecclestone, Fleetwood, Kirkham, Lancaster, Leigh, Leyland, Liverpool, Manchester, Oldham, Ormskirk, Poulton, Prescott, Preston, Rawtonstall, Southport, Staleybridge, Ulverstone, Warrington, and Wigan. The total amount owing to depositors on November 20th 1852 was 2,692,747*l.* 18*s.* 10*d.*

LANCASTER, the chief town of Lancashire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Lancaster, is situated on an eminence on the left bank of the river Lune, in 54° 4' N. lat., 2° 46' W. long., distant 240 miles N.W. by N. from London by road, and 230 miles by the North-Western railway. The population of the municipal borough of Lancaster in 1851 was 14,604; of the parliamentary borough 16,168. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. A Local Board of Health has charge of the sanitary arrangements of the borough. The living is a vicarage in the archdeaconry of Lancaster and diocese of Manchester. Lancaster Poor-Law Union contains 19 townships, with an area of 54,252 acres, and a population in 1851 of 23,454.

Lancaster was a Roman station, probably the Ad Alaunam of Richard of Cirencester. The castle was enlarged, and the town, which had previously received a charter from King John, obtained additional privileges in the reign of Edward III., who conferred the duchy of Lancaster on his son John of Gaunt. The town suffered severely in the War of the Roses, and was the scene of contest in the civil war of Charles I.

Lancaster is situated at the north-western angle of Lancashire, about 7 miles from the mouth of the river Lune. The appearance of the town is picturesque. The summit of the eminence on which the

town stands is crowned by the towers of the castle, a spacious edifice, comprehending a large court-yard, some smaller yards, and several differently-shaped towers: it has been almost wholly rebuilt in a palatial style, and fitted up at a vast expense as a county jail and court-house. The large square keep is very ancient and extremely strong: the gateway, defended by two semi-octangular projecting towers, is referred to the time of Edward III. The shire hall and county-courts are modern. The streets of the town are for the most part narrow: they are paved with the ordinary cobble-stones of the district, and are lighted with gas. The houses are built of freestone, which is quarried in the neighbourhood, and are covered with slate. The church is on the same eminence as the castle: it is spacious, and contains some specimens of screen-work; the tower is modern. In the churchyard is the shaft of a Danish cross with Runic characters. There are several chapels of ease and chapels for Independents, Wesleyan Methodists, Presbyterians, and other dissenters. The Royal Grammar school is supposed to have been founded by John Gardiner in 1485. The number of scholars in 1853 was 114, of whom 20 were admitted by the corporation. A new school-house, with residences for the masters, has been recently erected. Lancaster Grammar school has possessed some celebrity: among its more eminent living scholars are Dr. Whewell and Professor Owen. There are also in the town a Blue-Coat school, National, British, Roman Catholic, Quaker, and Infant schools. There are assembly-rooms, a theatre, and public baths. A handsome stone-bridge of five arches over the Lune connects the town with the suburb of Skerton. There are several almshouses; and on Lancaster Moor, in the neighbourhood of the town, is the county lunatic asylum, a neat building, capable of accommodating 700 patients. There are also a lying-in charity, a dispensary, and other benevolent institutions. The Lancaster Athenaeum had 640 members in 1851; the Church of England Instruction Society had 202 members, with 650 volumes in its library; the mechanics institute had 220 members, with 2900 volumes in its library. The town-hall is a neat building, standing in a square: in it are several portraits of distinguished persons. The custom-house is a small Ionic edifice. The assizes for the county, quarter-sessions, and a county-court are held at Lancaster. There is a savings bank. Markets are held on Wednesday and Saturday. Fairs are held May 1st, July 5th, and October 10th, the last being a great cheese fair. In the town and vicinity are cotton- and silk-mills, iron-foundries, corn-mills, very extensive steam-power marble-works, and considerable establishments for the manufacture of furniture. The river admits vessels of 300 tons burden up to the town. The number of sailing vessels registered as belonging to the port of Lancaster on the 31st of December 1853 was—Under 50 tons 36, tonnage 1389; above 50 tons 53, tonnage 5479; and 7 steam-vessels of 1035 tons. During 1853 there entered the port 1256 vessels of 67,153 tons, and cleared 555 vessels of 32,596 tons. Of steam-vessels there entered 369 of 61,467 tons, and cleared 363 of 60,261 tons. The total amount of customs duties received at the port in 1850 was 27,001*l.*; in 1851 it was 20,036*l.* Races are held annually on the Moor, about a mile and a half from the town.

LANCHESTER, Durham, a small town and the seat of a Poor-Law Union in the parish of Lanchester, is situated in 54° 50' N. lat., 1° 44' W. long., distant 8 miles N.W. from Durham, and 266 miles N.N.W. from London. The population of Lanchester township and hamlets was 752 in 1851. The living is a perpetual curacy in the archdeaconry and diocese of Durham. Lanchester Poor-Law Union contains 18 parishes and townships, with an area of 48,984 acres, and a population in 1851 of 20,075. Lanchester is a small place in a remote district near the border of the county. The parish church, which was formerly collegiate, is early English, and has an embattled square tower. In the vicinity are flour-mills and coal-mines. Lanchester is on the site of the Roman station *Episcum*; distinct traces of the works and of the great Roman road to Scotland are observable in the neighbourhood.

LANCIANO. [ABBUEZÒ.]

LANDAU, a small fortified town of Rhenish Bavaria, is situated in a beautiful valley on the Queich, 18 miles S.W. from Speyer, and has about 6000 inhabitants, exclusive of the garrison. The ground plan of the ramparts is a regular octagon, with 8 curtains, covered by 7 bulwarks, 3 redoubts, 7 lunettes, 1 fort, 3 whole and 2 half bastions, and surrounded by broad moats. The barracks and casemates are bomb-proof. It is very regularly built within, has two gates, a large parade, a church, which Protestants and Roman Catholics have in common, a gymnasium, various public offices, and manufactures of calico, woollens, linen, hats, fire-arms, copper and iron-foundries, large vinegar factories, &c. Landau, which was formerly an imperial city, was ceded to France in 1680, and fortified by Louis XIV. In 1702 it was taken by the Austrians, but recovered by the French in 1703. After the battle of Blenheim in 1704 it again fell into the hands of the Austrians, who retained it till 1713, when it was again ceded to France. In 1793 it was unsuccessfully besieged by the Austrians and Prussians. The first treaty of Paris in 1814 left it to the French; but at the second treaty in 1815 it was declared a fortress of the German Confederation, under the protection of Bavaria, a part of whose contingent to the army of the Confederation forms the garrison.

LANDERNEAU. [FINISTÈRE.]

LANDES, a department in the south-west of France, bounded N.

by that of Gironde, E. by Lot-et-Garonne and Gers, S. by Basses-Pyrénées, and W. by the Bay of Biscay. Its greatest length from west to east is 72 miles, from north to south 66 miles. Its area is 3599 square miles. The population in 1841 was 288,077; in 1851 it amounted to 302,196, which gives 84.02 to the square mile, being 90.56 below the average per square mile for the whole of France.

The department takes its name from the French word 'landes,' by which the vast sandy and marshy plains that extend between the Garonne and the Adour from the meridian of Greenwich to the Bay of Biscay are designated. In point of size the department of Landes is inferior only to that of Gironde.

The lower slopes of the Pyrenees enter the south and south-east of the department, furrowed by many brawling rivers, and subsiding into rich plains that extend along the left bank of the Midouze and the Adour, which rivers form the general southern boundary of the Landes. To the northward of these rivers the surface of the ground is covered with a loose ashen-gray sand, overgrown here and there with heath and furze, or with pine woods. Numerous flocks of wretched half-starved sheep wander over this desert waste, tended by shepherds who walk on high stilts to enable them to pass dry-footed over the marshes that occur in all directions. Clothed in sheep-skins, perched on his lofty stilts, and seated on a high staff with a flat broad end, the shepherd of the Landes, watching his sheep and knitting woollen stockings, his constant occupation, presents to the stranger unprepared for the sight an extraordinary appearance. Not only the shepherds, but the charcoal-burners, and almost all the scanty population of the Landes, are accustomed to the use of stilts, on which they walk with astonishing rapidity. Maize and barley are grown in favourable situations in this district; but the most important produce of the Landes are the pine forests, which cover nearly one-fourth of the surface, and which, besides the value of the timber, and the great quantity of rosin they are made to yield by tapping, are found to present a most effectual barrier to the sand hills along the west coast that formerly rolled into the interior under the influence of the western winds, and overwhelmed the villages and crops exposed to their course. The surface of the Landes is in parts rather elevated, as is proved by the rapidity of the river-streams which flow from them towards the south, west, and north-west: the largest of these is the Leyre, which flows north-west into the Bay of Arcachon. The chief rivers of the department are the ADOUR, which receives numerous feeders from the Pyrenees on the left bank; and its principal tributary from the right bank, the Midouze. [GERS.]

Along the sea-coast of the department, which extends north and south about 70 miles, a marked feature of the country are the sand-hills, which have a width from east to west of 5 miles; their height ranges from 120 to 170 feet; they slope towards the sea at an angle of 25 degrees, towards the land at an angle of 50 degrees. The form of these masses of sand is continually varying; sometimes they are arranged in regular chains, at others they present a level surface; and not unfrequently they assume the form of isolated heaps, the openings between them being called 'lettas.' The rate of advance of these moving sands was formerly about 65 feet yearly. To landward of them there are in some places rich pasture grounds. There are several shallow inlets and some isolated lagoons along the coast; and all through the Landes there are numerous marshes, the exhalations from which render the climate foggy in winter, and always more or less unhealthy. The marshes which formerly lined the banks of the Adour have been almost entirely converted into most productive land. The climate of the department, owing to the proximity of the Pyrenees and the prevailing westerly winds, is not so hot as might be expected from its latitude.

The department contains 2,303,429 acres, of which area 968,967 acres consist of barren sands and moors; 415,261 acres are arable land; 654,190 acres are covered with woods and forests; 51,101 acres are under vine culture; 65,728 consist of grass land. The agricultural products, most of which are raised in the territory of Chalosse, as the country south of the Adour is called, are—wheat, maize, millet, hemp, flax, madder, saffron, &c. About 10,000,000 gallons of wine are produced annually, of which about a third goes to supply the home consumption; the rest is exported, or distilled and sold as Armagnac brandy. Almonds, plums, and fruits of all kinds, are abundant and excellent. Cattle are of inferior breed, ill-fed, and give milk of the poorest quality; the horses are small; sheep are numerous, but their wool is the worst possible; goats, pigs, poultry, and bees are numerous; game and fish are plentiful. Besides the pine (*pinus maritima*), which grows most luxuriantly in the Landes, the forest-timber consists of oak, cork, chestnut, and beech.

Mines of iron and bitumen are worked; mica, coal, marble, granite, lithographic stone, chalk, ochre, potters'-clay of superior quality, crucible earth, &c., are found. Peat fuel is dug. Mineral springs are numerous.

The industrial produce is composed of coarse woollens, pottery, liqueurs, bar-iron and iron-ware, rosin, pitch, tar, glass, paper, leather, brandy, beer, oil, &c. There is also a considerable trade in timber, deals, linseed-oil, fruits, wool, pork, &c. The number of wind- and water-mills amounts to 762; of iron-foundries and smelting-furnaces to 81; of factories and workshops of different kinds to 351. About 135 fairs are held annually. The department is crossed by 7 state and 11 departmental roads, and by the railway from Bordeaux to Bayonne, which is now (October, 1854) completed as far as Dax.

The department is divided into 3 arrondissemens, which, with their subdivisions and population, are as follows:—

Arrondissemens.	Cantons.	Communes.	Population in 1851.
1. Mont-de-Marsan . .	12	116	102,761
2. St.-Sever	8	109	88,655
3. Dax	8	108	110,780
Total	28	333	302,196

1. Of the first arrondissement and of the whole department the capital is *Mont-de-Marsan*, which stands in 45° 53' N. lat., 0° 30' W. long., 65 miles south from Bordeaux, and nearly the same distance N.E. from Bayonne. The town, though small, and with a population of only 4465, presents a thriving appearance, and its situation at the junction of the Midou and the Douze, which form the Midouze, a navigable feeder of the Adour, give it considerable advantages in the way of commerce. The streets are wide and well-built, and there are several fine avenues of ancient oaks leading into the town. The principal structures are the prefect's residence, the court-house, prison, the hospital, and barracks. The town is the seat of a tribunal of first instance, and has a college, public library of 12,000 volumes, a theatre, and several public baths. Cloth, blankets, sailcloth, and leather are the principal manufactures. *Mont-de-Marsan* has communication with the Garonne by the Canal des Landes, which at Lavardac joins the Baise, a navigable feeder of the Garonne. The most important commerce of the town consists in the transport of the wines and brandies of Armagnac by the Midouze and the Adour for shipment at Bayonne. In time of war with England *Mont-de-Marsan* becomes an important entrepôt between Bayonne and Bordeaux. With the other towns the population given is that of the commune. *Sabres*, a town of 2524 inhabitants, stands on the Leyre in the midst of barren wastes and marshes, and has a very handsome church said to have been built by the Templars.

2. In the second arrondissement the chief town, *St.-Sever*, is situated in an extremely fertile district on the left bank of the Adour, 10 miles S. from *Mont-de-Marsan*, and has a tribunal of first instance, a college, and 5238 inhabitants, who manufacture fine pottery, linseed-oil, and leather, and trade in corn, wine, brandy, mineral waters, marble, cut-stone, plaster of Paris, &c. The town is well built, and contains some handsome buildings; among which are the court-house, the hospital, barracks, prison, and a magnificent church, which formerly made part of the Benedictine Abbey of *St.-Sever*, founded here in A.D. 993. The town was formerly fortified. The English took it in 1296 after a long siege. Charles VII. recovered it in 1426. In the religious wars of the 16th century the town was twice taken and suffered terribly on both occasions. *Aire*, an episcopal and ancient city, stands on the slope of a hill on the left bank of the Adour, which is here crossed by a handsome stone bridge, 17 miles E. from *St.-Sever*, and contains an ecclesiastical college, a very ancient church, and 4432 inhabitants. The town, which is neat and well built, has manufactures of hats and leather. The see of *Aire* was founded about A.D. 500, soon after which date Alaric II., king of the Visigoths, made it his residence. The Northmen sacked *Aire* in the 9th century. The Gascons, Saracens, and English successively seized it: the religious wars almost completed its ruin. *Amos*, a pretty little town of 2176 inhabitants, is situated in a very fertile corn and wine country near the junction of the *Luy-de-France* with the *Luy-de-Béarn*, and has potteries, brandy distilleries, tile-works, and numerous flour, oil, and bark-mills. *Hagetmas*, a town of 3081 inhabitants, stands in a district abounding with game, on the *Loute*, a few miles south by west from *St.-Sever*, and has manufactures of household linen, pottery, leather, and several oil-mills. It has also a good trade in wine, corn, maize, flax, chestnuts, hides, and cattle. Great quantities of oak-staves and hoops are dispatched to Bordeaux. *Mugron*, situated at the foot of a hill on the left bank of the Adour, has 2190 inhabitants, who trade in brandy, wine, rosin, and silk. *Tartas*, W. by N. from *St.-Sever*, is a well-built ancient town prettily situated on the Midouze, and has 2759 inhabitants, who manufacture linseed-oil, vinegar, and leather, and trade largely in corn, wine, brandy, saffron (of which a great deal is grown in the neighbourhood), fruits, game, hams, timber, planks, resin, &c.

3. In the third arrondissement the chief town, *Dax*, situated in a fertile plain on the left bank of the Adour, over which there is a bridge to the suburb of *Sablar*, is a well-built town, surrounded by ramparts and fosses of Roman construction, 30 miles S.W. from *Mont-de-Marsan*, and has 5842 inhabitants. The town, which is entered by three gates, is defended by a strong castle. The chief buildings are—the former episcopal palace, now occupied by the sub-prefect and the mayor, the court-house, the cathedral, and the gaol. *Dax* has a tribunal of first instance, a college, and a considerable commerce in liqueurs, wine, corn, hams, onions, timber, deals, rosin, &c. It has been famous from the most ancient times for its hot mineral springs, whence its ancient name of *Aquæ*, of which *Dax* (*d'Acqs*) is a corruption. *Aquæ*, or *Aquæ Tarbellicæ* was the capital of the *Tarbelli*, a people of Aquitania. On the downfall of the Roman empire the town was seized successively by the Goths, the Franks, and the Gascons. In A.D. 910 it was stormed by the Saracens. The

English held it from the 12th to the 16th century, when they were finally driven from Gascogne by Charles VII. *St-Esprit*, in the south-western extremity of the department, and on the right bank of the Adour, here crossed by a long wooden bridge which joins the town to Bayonne, is a large busy town, with a population of 7324, by far the greater part of whom are descendants of Jewish refugees from Spain. The citadel of *St-Esprit*, constructed by Vauban, commands the town of Bayonne, and the approaches to it by land and sea. [BAYONNE.] The Jews have 3 synagogues here, in one of which a Rabbi preaches every day in Spanish. *Peyrehorade*, on the right bank of the Gave-de-Pau, which here becomes navigable and a few miles lower down enters the Adour, has 2742 inhabitants. It has a fine old castle flanked with towers. Large stores of ship-timber from the forests of the Pyrenees are kept here; there are also important quarries in the neighbourhood. *Soustons*, on the eastern shore of the lagune of Soustons, 17 miles W. from Dax, has a population of 2733.

The department forms the see of the bishop of Aire, is comprised in the jurisdiction of the High Court of Pau, within the limits of the University Academy of Bordeaux, and belongs to the 13th Military Division, of which Bayonne is head-quarters. It returns 2 members to the Legislative Body of the French Empire.

(*Dictionnaire de la France; Annuaire pour l'An 1849; Statistique de la France; Official Papers.*)

LANDEWEDNACK. [CORNWALL.]

LANDRÉCIES. [NORD.]

LANDSKONA, a small fortified seaport town in Sweden, on the shore of the Sound, is situated at nearly an equal distance between Cape Kuller and the town of Malmö, and opposite the small island of Hven, in 55° 51' N. lat., 12° 8' E. long., and has about 4000 inhabitants. Its harbour is spacious and safe. Being situated nearly opposite the capital of Denmark, the harbour as well as the town are well fortified. It carries on a considerable trade in corn, and has some manufactures of tobacco and starch, and also some sugar-houses, tanneries, and soap-houses.

LANDSHUT, one of the prettiest towns in the kingdom of Bavaria, is situated in 48° 30' N. lat., 12° 7' E. long., in a delightful country on the right bank of the Isar, which is here crossed by two bridges. The principal portion of the town consists of two long, broad, and straight streets, connected by a number of narrower ones. The houses are well built of brick, lofty, many of them with pointed gables. The town has a very picturesque character, owing to its antique architecture and the number of its towers. The open parts are two market-places and the parade-square. The most remarkable buildings are the palace, the house of the provincial assembly, an hospital, and two parish churches, of which *St. Martin's* is celebrated for its beautiful steeple, 456 feet high, and one of the loftiest in Germany. On a hill overlooking the town is the ancient castle of Traunitz, which was formerly a strong fortress, and the residence of the dukes of Bavaria: in this castle Frederick of Austria was confined for three years by Lewis the Bavarian. On the declivity of this hill is the botanic garden. A suburb is built on an island formed by the Isar. In the year 1800 the university of Ingolstadt was transferred to Landshut, but in 1826 it was removed to Munich. There are however still a Catholic theological school, a gymnasium, a lyceum, and a chirurgical clinical school. There are manufactories of woollen cloth, leather, hosiery, starch, playing-cards, snuff, and tobacco, but all on a small scale; the breweries and distilleries are however extensive. Landshut was formerly an important fortress. It has accordingly suffered severely in times of war. The population is about 9500.

LANDVISIAU. [FINISTÈRE.]

LANE-END. [STOKE.]

LANESBOROUGH. [LONGFORD.]

LANGDALE. [WESTMORLAND.]

LANGÉAIS. [INDRE-ET-LOIRE.]

LANGELAND. [FÛNEN.]

LANGENSALZA. [KEFURT.]

LANGHOLM. [DUMFRIESHIRE.]

LANGLEY, ABBOT'S and KING'S. [HERTFORDSHIRE.]

LANGON. [GIBONDE.]

LANGPORT, Somersetshire, a borough and market-town and the seat of a Poor-Law Union, in the parish of Langport Eastover, is situated in 51° 2' N. lat., 2° 49' W. long., distant 36 miles S.W. by S. from Bath, and 128 miles W. by S. from London. The population of the parish in 1851 was 1117. The borough is governed by a portreeve and capital burghesses. The living is a perpetual curacy annexed to the vicarage of Huish Episcopi, in the archdeaconry of Wells and diocese of Bath and Wells. Langport Poor-Law Union contains 29 parishes and townships, with an area of 53,485 acres, and a population in 1851 of 18,468.

The town of Langport is built at the junction of the Ivel and Parret, on the slope and at the foot of a hill: the lower part of the town near the Parret is liable to be flooded. The principal street leads down the hill to the Parret, over which is a handsome bridge of three arches. The town is well lighted with gas and paved throughout. The village of Huish Episcopi, or Bishop's Huish, forms a part of Langport. The ancient guildhall and market-place is a neat building. Langport church consists of nave, chancel, north and south aisles, two chapels, and a vestry-room, with a good western tower.

The road to Yeovil passes under an ancient building with an arched gateway; this building is popularly called 'Hanging Chapel;' it is now used as a museum. There are chapels for Independents, Bible Christians, and the Plymouth Brethren. The Grammar school, founded in 1675, has been further endowed, and a new school-room built: the school is free to children of the inhabitants: the number of scholars in 1852 was 60. There is also a National school. On a bridge near the middle of the town is the register-office, an elegant little building. There is also a public reading-room and library. On the banks of the Parret Navigation Company's canal are extensive wharfs. The market is on Saturday; there are four yearly fairs. Langport sent members to Parliament in the reign of Edward I. A county court is held here.

LANGRES, a town in France, capital of the second arrondissement in the department of Haute-Marne. This town takes its name from the Lingones, a Celtic people, whose capital it was. They were among the tribes who, in the time of Cæsar, embraced the Roman alliance, and they retained a considerable degree of liberty even under the emperors. Their chief town was called Andomatunum; in the later period of the Roman empire it was called, after the name of the people, Lingones; in old French the name is written Langone and Langoine, and thence by corruption came Langrea. It was a place of great importance under the Romans: many antiquities have been found; and there yet remain the ruins of triumphal arches, and vestiges of several Roman roads. The Alemanni were defeated with terrible slaughter under the walls of Langres in A.D. 298 by the Romans under Constantius, the father of Constantine the Great. The town was taken and burnt by Attila, and afterwards by the Vandals in A.D. 407. Rebuilt, it was next seized by the Burgundians. It was afterwards the head of a county in the possession of the dukes of Bar, from whom Hugues III., duke of Bourgogne, purchased it in A.D. 1179, and gave it to his uncle Ganthier, bishop of Langres. Louis VII. erected the county into a duchy, and the bishops of Langres were peers of France down to 1830. In 1814 Langres capitulated to the Austrians.

Langres is situated in 47° 51' 53" N. lat., 5° 19' 55" E. long., at a distance of 158 miles S.E. from Paris, and has 8646 inhabitants. The town, built on the watershed between the Mediterranean and the Atlantic, near the sources of the Marne, the Meuse, the Amana, and the Vingeanne, occupies a higher site than any other town in France, except Briançon. It is surrounded by old walls, and is pretty well built, with wide streets, and is ornamented with fountains and promenades. The most remarkable structures are the cathedral, part of which dates from A.D. 380; the town-hall; and a Roman triumphal arch, which makes part of the town-wall. The greatest ornament of the town is the promenade called *Blanche-Fontaine*, which is formed of an avenue of magnificent limes, nearly a mile in length, and terminates in a majestic vaulted arcade, from the top of which a colossal frog in bronze continually spouts a mass of limpid water that feeds several basins and jets. The public library of 7000 volumes is in the town-hall: there is a museum in the old church of *St. Didier*. The chief manufacture of Langres is cutlery; there is also a considerable trade in corn, flour, wine, flax, hemp, wool, &c. The town has given title to a bishop since the 3rd century; its diocese is coextensive with the department of Haute-Marne. It is the seat of tribunals of first instance and of commerce, and has two ecclesiastical schools, a college, and three hospitals.

LANGUEDOC, one of the most extensive and important of the provinces into which, before the revolution, France was divided. It was bounded N. by Lyonnais and Auvergne, and by Rouergue and Quercy, subdivisions of Guyenne; E. by the Rhône, which separated it from Dauphiné and Provence; S. by the Mediterranean, the province of Roussillon, and the Pyrenees; and W. by Guienne and Gascogne. Its extent, as described above, includes the county of Foix, which is a subdivision of it, though it constituted a separate military government previous to the revolution. Its subdivisions and area, exclusive of Foix, were as follows:—

District.	Capital.	Square Miles.
Vivarais . . .	Viviers . . .	2201
Rasés . . .	Limoux . . .	796
Carcassès . . .	Carcassonne . . .	561
Lauragais . . .	Castelnaudary and Lavaur . . .	683
Velay . . .	Le Puy . . .	912
Gevaudan . . .	Mende . . .	2027

And the following dioceses:—

Nîmes . . .	1246
Uzès . . .	1159
Toulouse . . .	1090
Montpellier . . .	707
Lodève . . .	372
Béziers . . .	897
Narbonne . . .	1433
Alby . . .	1923
Montauban (part of) . . .	208
Total . . .	10,119

The province now forms the departments of AUDE, TARN, HÉRAULT, LOZÈRE, ARDÈCHE, and GARD, together with the arrondissements of

Toulouse and Villefranche in HAUTE-GARONNE, Castel-Sarrasin in TARN-ET-GARONNE, and Puy and Ysengaux in HAUTE-LOIRE. Under the Romans it formed part of Gallia Narbonensis, and on the decline of their power it got the name of Septimania, from its seven bishoprics, namely, Toulouse, Béziers, Nîmes, Agde, Maguelonne, Lodève, and Uzès. The emperor Honorius ceded the territory of Languedoc to the Goths, who held it for nearly 200 years, when they were driven out by the Saracens, who in their turn were expelled by Charles Martel. The country thus subjected to the kings of France was governed by feudatory dukes and counts till 1270, when, on the death of the last count of Toulouse, it was united to the crown of France.

The name Languedoc has been transferred to the country from the name given to the language of the inhabitants, who used the word 'oc' as an affirmative, and were hence said to speak the 'langue d'oc,' as distinguished from the dialect spoken north of the Loire, which expressed the affirmative by 'oui,' and was called the 'langue d'oui.' The name Occitania, sometimes applied to the country, is said to be derived also from 'oc.'

The province extended from the Rhône to the Garonne, the most western point reaching the junction of the Tarn with the last-mentioned river. It was formerly divided into Haut-Languedoc, Bas-Languedoc, and Cévennes, which had Toulouse, Montpellier, and Alais for their capitals respectively.

Under the old Bourbon monarchy Languedoc had a kind of parliament called States, consisting of the clergy, three archbishops and twenty bishops; the nobility, among whom the count of Alais held the first place; and the commons, consisting of the consuls and deputies of the episcopal and other towns. The archbishop of Narbonne was perpetual president of the States. Their chief business was to apportion among the different parts of the province the taxes levied by the king.

LANMEUR. [FINISTÈRE.]

LANNILIS. [FINISTÈRE.]

LANNION. [CÔTES-DU-NORD.]

LANVOLLON. [CÔTES-DU-NORD.]

LANZAROTE. [CANARIES.]

LANZET, LE. [ALPES, BASSES.]

LAON, a town in France, capital of the department of Aisne, the seat of an assize court, of a tribunal of first instance, of a communal college, and of an ecclesiastical seminary, is situated in 49° 33' 54" N. lat., 3° 37' 42" E. long., 75 miles N.E. from Paris, and has 8043 inhabitants in the commune. It is situated on a steep isolated hill 592 feet above the level of the sea, and commanding on every side an extensive view over the surrounding plain. It is said to have taken its origin, in the reign of Clovis, from a castle which stood on this eminence. In the later period of the Carolingian dynasty it was frequently the residence of the kings of France, and it continued throughout a part of the domain of the crown. From the latter end of the 5th century to the time of the first French revolution it gave title to a bishop, who was a suffragan of the archbishop of Reims. The town consists of one principal street, rather narrow, and several smaller streets very narrow: it is surrounded by an ancient wall, flanked with towers and by a boulevard, or public walk, on the brow of the hill, whence splendid views of a vast plain brilliant with verdure and teeming with fertility are obtained. At the foot of the hill are the suburbs. Great improvements have been made in Laon in recent times by modernising the houses and widening the streets as opportunities offered. The cathedral of Notre-Dame, erected in two years (A.D. 1112-1114), crowns the hill on which the city stands: it is built in a simple gothic style. The interior is remarkable for its imposing vastness and for its square choir. The principal façade presents the usual triple-arched portal, remarkable for cavernous depth and for great simplicity of ornamentation; the second story presents a beautiful rose of noble dimensions, filled with splendid stained glass, and flanked by two deeply-recessed gothic windows; over these is a niched gallery, surmounted by a graceful parapet of stone tracery, behind which spring into view two gothic towers with large lofty unglazed windows, through which the light plays with grand effect. There are two similar towers behind these, besides a smaller one over the choir. The cloisters of the cathedral were demolished by the corporation of the town not very long ago. There are four other churches in Laon, of which St. Martin's also dates from the 12th century, and is remarkable for its two lofty towers. The abbey of St. Jean is now the residence of the prefect, and the Hôtel-Dieu is established in the monastery of St. Martin. The public library, which contains about 20,000 printed volumes and some valuable manuscripts, is lodged in a part of the convent of St. Jean; in the library is a beautiful marble statue of Gabrielle d'Estrées. Among the other public structures may be noticed the general hospital, the town-hall, the college, the theatre, and the barracks. The massive tower of Louis-d'Outremer, one of the oldest historical monuments in France, was pulled down some years ago to make room for a citadel. Near the Porte St. Martin is a tower considerably out of the perpendicular. Extensive cellars are cut in the chalk rocks beneath the town. The industrial products of Laon comprise nails, hats, woollen-stuffs, hosiery, &c.; the trade in corn, wine, and garden-stuffs is important. In the suburbs are potteries and tan-yards, lime-kilns, a rope-walk, and a manufactory of copperas. The neighbourhood produces grain

and wine, and many artichokes and other vegetables are grown for the supply of Paris.

Laon was besieged in the civil contests of the Armagnacs and Bourguignons, and was taken from the League by Henri IV. in 1594. In March 1814 it was the scene of a severe action between the French and the Prussians and other allies, at the termination of which Napoleon I. was compelled to retreat upon Soissons.

LAOS, the country of the Laos, Chau, or Lowas, comprehends the central portions of the peninsula beyond the Ganges, lying between 15° and 24° N. lat., 96° and 103° E. long. It is bounded S. by Siam and Cochin China, E. by the last-mentioned country, N. by China, and N.W. and W. by the Birman empire. Its area covers about 180,000 square miles. Little is known of the country.

The western portion of it, extending along the banks of the Saluen River, which divides Laos from Birma, is covered with mountain ranges, which do not attain the snow-line, but rise in some parts to a considerable height, as the thermometer was observed to stand at 46° at 8 o'clock in the morning. This mountain region seems to extend over the whole country north of 20° N. lat.; it is intersected by wide level tracts and plains along the courses of the rivers, which are of great fertility, but low, and subject to frequent and extensive inundations. The south-eastern part is traversed by the river Maekhaun, or Camboja. Along the eastern border of Laos there runs a mountain range about 100 miles wide, which separates it from Cochin China and Tonkin. The greatest part of the country is covered with forests and swamps, or stagnant waters, which are produced by the inundations of the numerous rivers which descend from the high ranges surrounding the elevated table-land of Yunnan in China.

The largest of its numerous rivers are the Saluen [BIRMA], the Maekhaun [COCHIN CHINA], and the Menam, or river of Siam, which flows through the centre of the country between the two first-named rivers. The Menam rises on the western declivity of the table-land of Yunnan, in two branches: the Mae-ghue, the western; and the Mae-praen, the eastern. They unite south of 22° N. lat., and the rivers after their junction preserve the name of Mae-praen, and also their southern direction. Where the Mae-praen approaches the boundary of Siam (near 18° N. lat.), its name is changed into that of Menam, under which it is known up to its mouth in the Gulf of Siam. At about 20° N. lat. the Maekhaun divides into two branches, of which the western, called Anan, runs south-south-west until it joins the Mae-praen, south of 19° N. lat. This natural canal is said to be navigable for barges. The whole course of the river Menam probably exceeds 800 miles, and it is navigable for the greatest part of its course, though several rapids occur in it.

Rice is the principal grain cultivated, no wheat is grown. Most fruits which grow in Southern Asia succeed; cotton is cultivated, and much silk is collected, as well as gum-lac. Among the wild animals the elephant and rhinoceros are abundant. Cattle and buffaloes abound. In some of the northern districts tea plantations are very extensive: the leaves of the plant are not dried, but salted for chewing. The mountainous parts, and especially those districts which are contiguous to Yun-Nan, are very rich in metals. Gold abounds in many of the rivers, and silver-mines are worked to a great extent by Chinese miners. Copper occurs in many places, and tin in a few. Iron-ore is found farther south in the country, on the banks of the Saluen River, and the natives make good fire-arms. Rock-salt also occurs in these parts.

The inhabitants of Laos resemble the inhabitants of Siam and Camboja in the form of their bodies. Their language differs little from the Siamese. All the nations belonging to this stock are called Shan, which by Europeans has been changed into Siam. They are inferior in civilisation to the Siamese, except those who inhabit the southern districts of Yun-nan, and who have adopted the arts of the Chinese. Yet even the rest seem to have made considerable progress in agriculture, horticulture, and the various arts of civilised life. They are Buddhists, and their sacred books are written in the Pali language. They have a national literature. Their best books treat of the common occurrences of life, in prose.

Laos is divided into three great portions. The most northern, between the Saluen and Mae-praen, is called Upper Laos, or the country of the Löwa-Shan; its capital is Kemalatain. South of it lies Laotio, or the country of the Yun-Shan, with the capital Zaen-mae, or Changmai. The south-eastern part is called Lanchang, or the country of the Shan. It is nearly unknown to Europeans, and its capital is said to be Lanchang, or Zandapuri. To these three great divisions is to be added Tarout, which lies north of Lanchang, and seems to be incorporated partly with Yun-nan and partly with Tonkin. It is also inhabited by the Shans.

Towards the end of the 18th century, the dominion of the Birman extended over nearly the whole of Laos; since that time the greatest part had recovered its independence. But as it is governed by a great number of petty hereditary sovereigns, it has been unable to preserve its independence, and in modern times the southern districts seem to have fallen under the dominion of the Siamese government.

Laos exports to Siam musk, gold, lac, slaves, ivory, rhinoceros horns, benzoin, hides and tiger skins, silk and silk-stuffs, precious stones, and salt. Its commerce with Ava, the capital of Birma, is almost exclusively limited to that town, and Kemalatain, the capital of the Löwa-Shan. The merchandise is transported over high

mountains on carts drawn by buffaloes. Laos exports to Birma cattle, gold, silver, precious stones, and fruits, and receives in return iron-ware, yellow and red sandal-wood, cotton-cloth, chintzes, and terrajaponica, opium, and other articles procured from Hindustan. The road which leads to Yun-nan passes the town of Kemalatain, and thence ascends the table-land of south-western China. Laos exports to China gold, precious stones, silver, tin, lead, common and red sulphur, cotton wool and yarn, salted tea, lac, sapan-wood, brasiletto, and an official root, called cothua-boua. The Chinese bring to Laos musk, chowry-tails, and various other articles, raw and manufactured.

(*Edinburgh Philos. Journal*; Crawford, *Embassy to the Court of Ava*; *Journal of the London Geographical Society*, vol. iii; *Asiatic Journal*; Berghaus, *Map and Memoirs*.)

LA PAZ. [CALIFORNIA; PAZ, LA.]

LAPLAND, the country of the Laplanders, comprehends the northern and north-eastern part of the Scandinavian peninsula. In the 12th and 13th centuries all the country north of 64° N. lat., as far as Cape North Kyn and North Cape (71° 11' and 71° 8'), between the White Sea on the east and the North Sea on the west, was in possession of the people called Laplanders, but in the 13th century they became subject to the king of Norway. As however this submission was rather nominal than real, the neighbouring nations, the Swedes and Russians, also settled in those districts which were nearest to their dominions. In consequence of these settlements and the changes introduced by more recent political events, Lapland became ultimately divided between Norway, Sweden, and Russia, and the settlers from these countries are now much more numerous than the original Laplanders. Only a portion of the country is now known as Lapland, the boundaries of which are not very strictly defined. Lapland probably comprises an area of about 130,000 square miles, above half of which is subject to Russia.

Russian Lapland is divided from Swedish Lapland by the Tornea Elf, and its affluent the Muonio, and from Norwegian Lapland by the Tana Elf, but a small tract of coast extending east of the mouth of the Tana Elf to the Bugge Fjord, also belongs to Norway. Russian Lapland constitutes the district of Kola in the government of Archangel, and Tornea in that of Uleaborg. Swedish Lapland is divided between the two districts (læna) of Pitea and Umea, and had a population in 1845 of 11,244; Norwegian Lapland is called Finmarken, and contained 48,938 inhabitants in 1845. [NORWAY; SWEDEN.]

Along the Norwegian coast lies the mountain range of the Kiölen, which rises from the sea with a very steep ascent, attaining at a distance of a few miles the height of 2000 feet, where it begins to be always covered with snow; some of its summits, as the Sutitjelma (67° 10' N. lat.), rise to an elevation of 6000 feet. The eastern declivity of this range is less rapid, and the country, which is 20 miles distant from the highest part, exhibits only high hills. The highest portion of the range is only in a few places covered with grass and low bushes; but stunted birch and some kinds of pines grow on the hills. These hills, between which are narrow valleys, partly occupied by large lakes and partly by forests, advance to a considerable distance from the principal range, and leave a more level tract only along the Bay of Bothnia, between 20 and 30 miles across. The most hilly part is south of the Lulea Elf, north of which river the country extends in rocky plains with a scanty vegetation, and during the greatest part of the year covered with swamps. The surface of these plains is gently inclined towards the Gulf of Bothnia, and the soil is of a better description where they approach the river Tornea and the boundary of Russia. In these parts they are covered with good forests intersected by extensive grassy tracts, which are used as meadows or pasture-ground. Between the Lulea and Calix Elf, and nearly at an equal distance from the Kiölen Mountains and the Gulf of Bothnia, are several isolated high hills, consisting entirely of iron-ore.

Russian Lapland is an extensive plain, generally covered with sand, but some isolated hills rise on the plain to an elevation of several hundred feet. A large part of this plain is covered with low trees. Other districts of great extent are sandy deserts, and in a few districts, especially along the rivers and the numerous lakes, tracts occur which are used as pasture-grounds, and sometimes cultivated.

The climate is very cold. Three-fourths of the year the country is covered with snow, and the frost between November and March is very intense. The spring lasts only a couple of weeks. In July and August the heat is very great, while the days in the most southern districts last 19 or 20 hours, and in the northern several weeks; near the most northern extremity there is day for three months.

Four nations inhabit Lapland—the Laplanders, Swedes and Norwegians, Finlanders, and Russians. The Laplanders now occupy only the more sterile inland parts beyond the polar circle; but in the summer they visit with their herds of reindeer all the highest portions of the Kiölen range as far south as 68° N. lat., where reindeer moss is found. Their number does not exceed 7000, and they are divided into reindeer Laplanders, who live almost entirely on the produce of their herds, and fishing Laplanders, who are mostly dispersed among the lakes and along the banks of the rivers in Russian Lapland, where they live on the produce of their fisheries. The number of the

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Swedes and Norwegians is very considerable; they occupy those tracts which are adapted to agriculture, where they cultivate rye, barley, oats, and potatoes. Rye grows as far as 66° N. lat., barley, oats, and potatoes to 68°.

The countries along both sides of the Gulf of Bothnia are occupied by the Swedes, whose settlements also extend many miles inland; they keep a number of cattle proportionate to the extent of their fields. But the best pasture grounds and meadows are in possession of the Finlanders, who probably settled at an earlier date among the Laplanders than the other foreigners. They occupy large tracts in the level country, where they apply themselves to the rearing of cattle; they are distinguished by their skill in the management of the dairy. The Russians live only in the district of Kola, where they are chiefly occupied as fishermen or as merchants. Only a few of them apply to agriculture or the rearing of cattle. There are no towns, and but few villages, in Lapland. The chief are in Russian Lapland; they are Kola, at the mouth of the river Kola, which had nearly 1000 inhabitants, but which was destroyed by a British war-steamer in August 1854; Enoutekies on the Tornea, and Enare on Lake Enare, the population of each of which is about 400.

Besides cattle, horses, sheep, and goats are numerous, but hogs are rare. Wild animals are numerous, as immense tracts are deserts, and probably uninhabitable. Bears and beavers are scarce: but reindeer, wolves, lynxes, wolverines, foxes, lemmings, hares, squirrels, martens, and others are very numerous. Among the birds are eagles, capercallies, woodcocks, and a variety of sea-birds, which are particularly numerous along the coast of Norway. The forests, which cover a considerable part of the surface of the country, consist mostly of birch, fir, pine, alder, and aspen. The soil, which is overgrown by these forests, is chiefly covered with reindeer moss (*Lichen Islandicus*), which also covers the lower declivities of the higher part of the Kiölen range, and on which the numerous herds of reindeer feed.

LA PLATA. [PLATA, LA.]

LAPORTE. [INDIANA.]

LAR, or LARISTAN. [PERSIA.]

LARAGNE. [ALPES, HAUTES.]

LARASE. [MAROCCO.]

LAREDO. [CASTILLA LA VIEJA.]

LARGO. [FIFESHIRE.]

LARGS, Ayrshire, Scotland, a watering-place in the parish of Larga, on the Frith of Clyde, opposite the island of Cumbrae. The population of the town in 1851 was 2824.

In the vicinity of Larga the soil is dry, and the air salubrious; and on each side of the town are several fine streams of water. The new houses are well built, and the general appearance of the place is, especially from the water, very pleasing. The principal access is by steamers from Glasgow. A neat stone pier has recently been erected. The only historical incident connected with Larga is the celebrated battle fought here in 1263 between the Scots and Norwegians, in which the Norwegians were defeated. In the burial-ground, the site of the ancient church, stands a fine sepulchral chapel belonging to the family of Montgomery. In the neighbourhood of Larga are a few remains of the castellated residences of its ancient lords. The houses of Skelmorly and Kelburne are still habitable; they afford excellent specimens of the dwellings of the Scottish gentry in the 16th and 17th centuries.

LARISSA. [THESSALY.]

LARKHANA. [HINDUSTAN.]

LARNE, county of Antrim, Ireland, a sea-port town and the seat of a Poor-Law Union, is situated in a sheltered bay near the mouth and on the north shore of Lough Larne, 18 miles N.N.E. from Belfast, in 54° 50' N. lat., 5° 50' W. long. The population in 1851 was 2728, besides 346 in public institutions. The town is governed by nine commissioners. Larne Poor-Law Union comprises 13 electoral divisions, with an area of 117,763 acres, and a population in 1851 of 34,710. The town originally sprung up under the protection of Olderfleet Castle, which was erected in the reign of Henry III. upon a little headland close to the town, where its ruins are still seen. In the older parts of the town the streets are narrow and ill-paved, and the houses very inferior; the modern part consists chiefly of one long wide street of well-built houses. The places of worship are the parish church, three Presbyterian meeting-houses, a Roman Catholic and a Methodist chapel. Cotton-cloth, sail-cloth, ropes, and leather are manufactured; and there are several bleach-mills and flour-mills. The bay forms a good natural harbour for small vessels. Lime is exported in large quantities from the extensive works of Magheramorne adjoining the town. The other exports consist chiefly of provisions. Larne is now a mere out-port of Belfast. Fairs are held on July 31st and December 1st. The town has a dispensary and a petty sessions court.

LARNIKA. [CYPRUS.]

LA-ROCHE-DERRIEN. [CÔTES-DU-NORD.]

LA-ROCHELLE. [CHARENTE-INFÉRIEURE.]

LA-SOUTERAINE. [CREUSE.]

LAS-PALMAS. [CANARIES.]

LASSWADE. [EDINBURGHSHIRE.]

LATAKIEH. [SYRIA.]

LATAKOO. [BETHOUANA.]

LATIUM, the country of the ancient Latins, now forms the CAMPANIA DI ROMA, and a part of the Neapolitan provinces of Terra di Lavoro [LAVORO, TERRA DI], under which heads the physical geography of the country is noticed.

The Latini, or Latins, one of the oldest known nations of Italy, are said to have come down at some remote time, long before the building of Rome, from the Central Apennines in the neighbourhood of Reate (the modern Rieti) into the lower country between the Anio, the Tiber, the Alban Mountains, and the sea, which was afterwards called Latium. Varro says that they were a branch of the oldest inhabitants of the peninsula, whilst Dionysius and others thought that they were descendants of an Arcadian colony settled in Italy long before the Trojan war, and identical with the CEnotrians. These aborigines met in the lowlands the Siculi, who are represented by some as a colony from the west, perhaps from Spain, and by others as indigenous in Italy, and identical with the Tyrrheni. These Siculi, or Siceli, were partly driven by the aborigines to the southward, and the rest amalgamated with the new-comers; and thus the nation was formed called afterwards Latini Prisci, and by Ennius called Casci, which in the Sabine or Oscan language, according to Varro, meant old, or the earliest. These Latins appear to have formed their settlements in the lowlands by small communities, perhaps small tribes or even families; a circumstance which would account for the great number of villages or towns spread over a limited surface. Several of these became in course of time considerable places long before the existence of Rome. Such were Laurentum, Lanuvium, Lavinium, Aricia, Gabii, Tusculum, Tibur, Præneste, Labicum, Collatia, Cora, &c. The story of Æneas landing at the mouth of the Tiber, assisting the Latins against the Rutuli, and marrying Lavinia, the daughter of king Latinus, is probably an embellishment invented in aftertimes. The Latin communities were united by religious rites, which were celebrated in the temple of Diana in a grove near Aricia; in a temple dedicated to Venus between Lavinium and Ardea, which was under the care of the Ardeates; and at the Lucus Ferentina, where the wood of Marino now is. (Cato, 'Origines;' Livy, i. 50, 57; vii. 25.) The indigenous deities of the Latins were—Saturnus, who first taught agriculture to their ancestors the aborigines; Janus; and Faunus, who delivered his oracular answers from the depth of the forest of Albunea. Venus and others appear to have been of later introduction into the Latin mythology.

The Latini are described as a race robust, hardy, frugal, and warlike, and their early union with Rome, great part of whose population was recruited amongst them, contributed mainly to the growth and success of that republic. Their morals were simple. Their towns were strong, both by their position and their massive walls. The foundation of Alba is involved in great obscurity, but the fact of its being an important town several centuries before the existence of Rome is indubitable. [ALBA LONGA.] Whether Alba was at the head of the Latin Confederation, or was the centre of another confederation distinct from that of the Latins though connected with it, has been a matter of doubt.

Under Tullus Hostilius war broke out between Rome and Alba, which ended in the destruction of Alba and the removal of the inhabitants to Rome. (Livy, i. 29.) In the following reign of Ancus Marcius the first war of the Latins against Rome is mentioned, the result of which was that Politorium, Tellene, and Ficana were taken by the Romans, and the inhabitants transferred to Rome, where they were settled on Mount Aventine. Tarquinius the Elder took several more of the Latin towns. Servius Tullius obtained, by agreement with the leaders of the Latin cities, that the Latins should unite with the Romans in building a temple to Diana on the Aventine, to be common to both people. This was considered as an acknowledgment that Rome was the head of the Latin nation. The unscrupulous Tarquinius Superbus convoked the Latins to an assembly in the wood of Ferentina (Livy, i. 50, 51), where he persuaded them not only to renew the treaty with Rome, but to acknowledge him as their chief, and to send their youth to serve no longer as auxiliaries, but mixed with the Romans in the same legion. He united a century of Latins and a century of Romans in every maniple commanded by a Roman centurion. Tarquin also assumed the presidency of the Feris Latins, or festivals of the Latin state, which by an ancient usage were held once a year on the summit of the Alban Mount, and were dedicated to Jupiter Latiaris, or Latialis. These feris continued to be held down to the latest period of the Roman republic, and one of the two consuls always attended them. (Cicero, 'De Nat. Deor.' i. 6; 'Ep. ad Fam.' viii. 6; 'Divinat.' i. 11.)

After the expulsion of the Tarquins, the Latin cities, partly to free themselves from Roman supremacy, and partly instigated by Mamilius, Tarquin's son-in-law, and the other connections of the Tarquins, rose in arms, and a war ensued between them and Rome, which ended in the total defeat of the Latin forces by the Roman dictator Posthumius, near the lake Regillus, between Labicum and Gabii, B.C. 499. Peace was made three years after, on condition that the Latins should expel the refugee partisans of the Tarquins. A few years later, under the consulship of Spurius Cassius and Postumus Cominius, a solemn 'foedus,' or treaty of alliance (the Cassian League), was made between Rome and the Latins, by which was renewed the isopolitan franchise formerly existing in the time of Servius in each of the two nations

with respect to the other. The conditions of the treaty were engraved on a brass column mentioned by Livy, and the substance of them is given by Dionysius. (Niebuhr, vol. ii.) Seven years after this league Spurius Cassius concluded a treaty with the Hernici on similar terms; and it is remarkable that in some cases, as at Antium, colonies were sent consisting of equal portions of the three nations.

The league of the Latins with Rome lasted for about a century, till the irruption of the Gauls, during which period there were but a few partial interruptions of the harmony between the two states. (Livy, iii. 71, 72; iv. 9, 10, 11.) The Latin state consisted of thirty towns, which appear to have been independent municipalities; they had their patricians and plebeians; each had its senate and its own magistrates, the chief of whom was styled dictator. Deputies from each town constituted the senate or assembly of the whole state, which met at the grove of Ferentina. A dictator, probably taken by turn from the dictators of the respective cities, was the temporary head of the whole state, presided at the Latin festivals on the Alban Mount, and signed treaties, such as that of alliance with the consul Spurius Cassius. (Sigonius, 'De Jure antiquo Italiae;' Niebuhr, 'History of Rome,' vol. ii.)

After the invasion of the Gauls and their retreat from Rome, we find both the Latins and the Hernici, at least in part, joining the Volsci, Æqui, and the Etruscans, the old enemies of the Romans, and endeavouring to annihilate the city, which was just rising from its ruins. Camillus defeated the Latin towns one after the other. Tusculum humbled itself, was forgiven, and shortly after obtained the Roman citizenship, which enabled its inhabitants to have a domicile at Rome, to vote in the Roman comitia, and to aspire to the public offices of the Roman republic. The Prænestini were defeated, and their town surrendered by capitulation to the dictator Titus Quintius. Soon after, B.C. 376, the Latins joining the Volsci, encamped with them near Satricum, a Volscian town on the borders of the Latini. Being defeated after an obstinate engagement by the Roman military tribunes Æmilius and Valerius, the Volsci forsook their allies, upon which the Latins in a fit of rage burnt Satricum, and then turned their arms against Tusculum, which they entered by force; but the inhabitants took refuge in the citadel, and the Romans under L. Quintius and Servius Sulpicius coming to their assistance, the Latins were surrounded and slaughtered. After a war with Tibur, which led to no definite result, peace was granted, B.C. 357, to the Latins on their demand, and they consequently furnished again a large auxiliary force to Rome. (Livy, vii. 12.) When however, some years after, the Gauls, though repeatedly defeated, appeared again in force and overran the plains of Latium, the coats of which were at the same time infested by Greek pirates, the Latin towns, in a meeting held at the wood of Ferentina, sharply replied to the Romans, who insisted upon their speedily furnishing their contingents, "that the Romans ought not to talk so imperiously to those whose assistance was to them of vital importance; that the Latins would fight rather for their own liberties than for the purpose of extending the dominion of others" (vii. 25.) Soon after that time, the Carthaginians are mentioned by Livy as having entered into a treaty with Rome; but Polybius gives us the text of a former treaty, said to have been concluded between the two republics in the first year after the expulsion of the Tarquins. This treaty, if really of the time of the Tarquins, would confirm the notion that the Roman power under the last kings was much greater than is commonly supposed. (Niebuhr; Heyne, in the 'Götting. Anzeigen.')

After the termination of the first Samnite war (B.C. 340) the Latins, joined by the Campanians, entered the Samnite territory and ravaged it. The Samnites complained to the Roman senate, which promised to restrain the Campanians; but as for the Latins, "there was nothing in their stipulations with Rome that forbade them making war with whomsoever they pleased." This answer increased the audacity of the Latins, and in their councils they began to plan together with the Volsci and Campanians a new war against Rome. The senate demanded explanations, to afford which ten of the chief men of the Latins were sent to Rome: among these was L. Annius of Setia, one of the two prætors, or chief magistrates, of the whole Latin confederation, who, in the presence of the Roman senate, after boasting of the power of the Latins and their allies, and of their ability to assert their own independence, proposed, with a view to a lasting peace, "that the Latins should have the appointment of one of the two consuls, and of one half of the senate, so that Rome and Latium should form in future but one country and one republic, of which Rome would be the capital, and all the people be called Romans." This proposal offended Roman pride. The senate declared war against the Latins, and the two consuls, Manlius Torquatus and Decius Mus, marched each with an army through the territory of the Marai and Peligni (the modern Abruzzo Ultra), and being joined on their march by the Samnites, encamped near Capua, in front of the Latin and Campanian united forces. Here Manlius gave a dreadful instance of Roman severity, in causing his own son to be beheaded for having engaged in a skirmish with the enemy contrary to his orders.

The decisive battle took place in the plain near the base of Vesuvius, and it was one of the hardest fights in which the Romans had ever engaged. (Livy, viii. 8.) By the bravery of Decius however, who devoted his life for the safety of his country, and the skilful general-

ship of Manlius, they were successful, hardly one-fourth of the Latins escaping to Minturnæ. After sustaining a subsequent defeat at Trifanum the Latins made their submission, when part of their land was taken from them and appropriated to the Roman people. In the following year however several of the Latin cities rose again; but instead of uniting their armies in the field they kept their men within their respective walls ready to sally out, and whenever the Romans attempted the siege of one all the rest lent assistance to the besieged. By this means the consul Æmilius was obliged to raise the siege of Pedum. In the next year (B.C. 337) the consul L. Furius Camillus, grandson of the deliverer of Rome, took the field: he entered Pedum by storm, and, together with his colleague, reduced successively the other Latin towns and placed garrisons in them. On his return to Rome he told the senate that it was in their power to destroy the Latin towns; but he advised them to attach the people to themselves for ever by giving them the Roman citizenship, and thus to strengthen the sinews of the republic. The senators, adopting mercy as the wisest course, acted mainly in accordance with this advice, but made a distinction according to the conduct and merits of the various Latin cities. Lanuvium and Nomentum received the Roman citizenship; Tusculum was confirmed in the possession of it; Aricia was kept for a time as a subject town, but was afterwards admitted to the franchise; Tibur and Præneste had their lands confiscated; Velitra, as being an old Roman colony, had its walls razed and its senators banished beyond the Tiber. A fresh colony was sent to Antium; their ships were taken from the old inhabitants, and they were forbidden to go any more to sea. The general assemblies of the Latin cities at the wood of Ferentina were at an end. Thus terminated the existence of the Latins as an independent people; they became subjects of Rome, excepting the few towns above mentioned, which had the Roman citizenship. The Latins, after that epoch, are no longer mentioned as Socii, but distinguished from the genuine Romans as being 'Latini nominia.' (Sigonius, 'De Jure antiquo Italiae,' b. i., 'De Jure Latii')

During the second Punic war the Latins remained faithful to Rome, whose armies were repeatedly recruited among them during that long and fearful contest. For two centuries and a half they remained in the same dependent condition, without the rights of citizenship ('sine civitatis jure'), until the consul L. J. Cæsar (B.C. 91), after the defeat of several Roman armies in the Social war, obtained the passing of a law which gave the Roman franchise to all the people of Italy who were allies of Rome and had remained faithful in that emergency. This franchise, or civitas, is stated accordingly to have been granted to the socii, or allies, who had furnished their contingents, and to the Latins, who are mentioned distinctly from the rest. By this grant the freemen of the Latin towns were placed so far on a level with the Roman citizens as to enjoy the full Roman franchise, to be admitted into the Roman rustic tribes, have votes, and be eligible to public offices.

(Corradino and Volpi, *Vetus Latium Profanum*, 10 vols., 4to.; Cluverius, *Italia Antiqua*; Bonstetten, *Voyage en Latium*; Petit Radet; Dodwell; Nibby; Sir W. Gall.)

LA-TOUR-DU-PIN. [LEER.]

LATRONICO. [BASILIGATA.]

LAUDER, Berwickshire, Scotland, a royal and parliamentary burgh in the parish of Lauder, is situated in 55° 42' N. lat., 2° 45' W. long., 25½ miles S.E. from Edinburgh. The population of the burgh in 1851 was 1105. The town is governed by a chief magistrate and 17 councillors; and unites with North Berwick, Dunbar, Haddington, and Jedburgh in returning one member to the Imperial Parliament.

There is only one street in the town. The parish church, the town-house and lock-up house, the Free church, and the United Presbyterian church are the public buildings. The burgh possesses an extensive common, which is exclusively used by a small body of privileged burgesses. Close by the town is the residence of the Earl of Lauderdale, Thirlstane Castle, which stands in a spacious park.

LAUBURG, a duchy in Germany subject to the king of Denmark, is situated on the right bank of the Elbe, between 53° 22' and 53° 47' N. lat., 10° 3' and 11° 5' E. long. It is bounded by the territories of Hanover, Mecklenburg, Holstein, Lübeck, and Hamburg, and has an area of 392 square miles, with a population of 46,486 in 1850. The face of the country is level, with only a few hills; the soil is in some parts very fertile, while in others there are tracts of sand or extensive heaths; there are also large turf-moors and considerable forests. The rivers are the Elbe, Bille, Stecknitz, and Trave, which afford ample means for inland trade; and the Stecknitz Canal, between the Elbe and the Trave, opens a communication with the Baltic at Lübeck. The duchy is traversed by the Hamburg-Berlin railway, and by a branch from it northward to Lübeck. The most considerable lakes are those of Schaal and Ratzeburg. The products are corn, flax, timber, turf, horned cattle, sheep, poultry, fish, &c. The inhabitants are chiefly engaged in agriculture and the carrying trade both by land and water; and their exports are pretty considerable, especially of timber and fuel. They have no manufactures.

Lauburg had formerly its own dukes, whose family became extinct in 1689. It then fell to the duke of Brunswick-Lüneburg, and subsequently formed part of the electorate of Hanover. In 1805 it was taken possession of by the emperor Napoleon I., and in 1810 incorpo-

rated with the new French department of the Mouths of the Elbe. In 1814 Lauburg was restored to George III. as king of Hanover; but by the peace of 1815, Sweden, which had deprived Denmark of the kingdom of Norway, ceded Swedish Pomerania to Denmark, and Prussia ceded East Friesland to Hanover, in exchange for the duchy of Lauburg, Hanover however retaining the small tract on the left bank of the Elbe and the detached bailiwick of Neuhaus on the right bank. Prussia then exchanged Lauburg with Denmark for Swedish Pomerania; but as the latter province was more valuable, Prussia paid to Denmark two millions of Prussian dollars. It also paid a debt of 600,000 Swedish bank dollars, which Sweden owed to Denmark, and paid besides 8,500,000 dollars to Sweden.

Towns.—*Lauburg* (3800 inhabitants), stands on the Elbe, at the mouth of the Delvenau or Stecknitz Canal, and has a custom-house, some transit trade, and the remains of the old castle of the dukes of Saxe-Lauburg. *Ratzeburg*, the capital, a well-built town on an island in the Ratzeburg Lake, 12 miles by railway S. from Lübeck, has extremely fine views over the lake; it is connected with the left shore by a causeway, and with the right by a bridge 1100 feet in length; population 3000. Part of Ratzeburg is in Mecklenburg Strelitz. The lake is 6 miles long and between a mile and two miles wide; its surplus waters are carried by the Wakenitz into the Trave. *Möllen*, 18 miles by railway from Lübeck, on the Stecknitz, is the burying-place of the famous Till Eulenspiegel, of whom various relics are still shown there: population, 2700. *Buchen* is 29 miles by railway from Lübeck, at the junction with the Hamburg-Berlin line.

LAUGHARNE. [CARRMARTHENSHIRE.]

LAUN. [EGER.]

LAUNCESTON, Cornwall, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 50° 38' N. lat., 4° 19' W. long.; distant 21 miles N.E. from Bodmin, 213 miles W.S.W. from London. The population of the municipal borough of Launceston in 1851 was 3397, that of the parliamentary borough was 6005. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and conjointly with the neighbouring borough of Newport, returns one member to the Imperial Parliament. The sanitary affairs of the borough are under the management of a Local Board of Health. The living is a perpetual curacy in the archdeaconry of Cornwall and diocese of Exeter. Launceston Poor-Law Union contains 25 parishes and townships, with an area of 101,450 acres, and a population in 1851 of 18,305.

Launceston, anciently *Dunheved*, and commonly called Lanson, is usually regarded as the capital of Cornwall. It is pleasantly situated on a steep hill rising from the banks of the Attery, a few miles above the confluence of that stream with the Tamar. Some improvements have taken place in the town of late years. Launceston is a very ancient town. Previous to the passing of the Reform Act, the boroughs of Launceston and Newport each returned two members to Parliament. The county assizes were both held at Launceston till 1716, and the Lent assizes till 1838. Both summer and Lent assizes are now held at Bodmin. The most important building in Launceston is the church, which was erected about 1535. It is built of carved granite blocks, is 104 feet long and 52 feet broad internally, and is of singular beauty. The Wesleyan Methodists and Independents have places of worship. The Grammar school, founded by Edward VI., had 19 scholars in 1853. There are National and British schools; a young men's institute; and a savings bank. A county court is held here. The market is held on Saturday. There are two large market-places; one for meat, &c., the other for corn and light goods. Fairs are held six times a year.

The remains of the ancient castle of Launceston are very remarkable. The most remote antiquity has been assigned to it, but none of the existing remains appear of earlier than Norman date, while parts are much later. The castle grounds were beautifully laid out as pleasure grounds at the expense of the late Duke of Northumberland, the constable of Launceston Castle. Some slight remains exist of a priory founded in the reign of Henry I.; also a few fragments of the old town wall.

LAUNCESTON. [VAN DIEMEN'S LAND.]

LAURENCEKIRK. [KINGARDINESHIRE.]

LAURENT-DE-MÉDOC, ST. [GIRONDE.]

Lauria. [BASILIGATA.]

LAURVIG. [AGGERHUS.]

LAUSANNE, the head town of the Swiss canton of Vaud, is situated near the northern shore of the Lake of Geneva, on three steep hills, which project from Mont Jorat, and are separated by deep ravines. The highest of these ridges, upon which the old cathedral is built, is 500 feet above the lake, and about 1700 feet above the sea. The situation of Lausanne is picturesque, but the interior of the town is far from pleasing; the streets are mostly narrow, very steep, and ill paved. The cathedral, a vast gothic structure of the 11th century, the handsomest in Switzerland, is adorned with a lofty tower, and also a spire 200 feet high. It contains the tomb of Victor Amadeus VIII., duke of Savoy, and a monument to Mrs. Stratford Canning; the remains of St. Bernard, the founder of the celebrated hospice on the Alps, were buried in this cathedral. The church of St. François is also a very old building, and is memorable for the council assembled there in 1449, in which Felix V. solemnly resigned his claims to the

Popedom. The castle, formerly the residence of the bishops of Lausanne, is now the government-house, and the legislative council of the canton assembles in one of its halls. The other remarkable buildings of Lausanne are—the college, which contains the cantonal library, with 33,000 volumes, and a museum containing collections of mineralogy, botany, zoology, &c.; the penitentiary, the charity-schools, and the casino, or club-house. There are a Catholic church and a Lutheran chapel; the latter is used also by the English. The town, according to the census of 1850, had a population of about 18,000. The manufactures, which are important, comprise woollen-cloth, paper, leather, and jewellery. Some trade is carried on in wine, which is the staple produce of the canton. Steamboats ply on the lake between Geneva, Lausanne, and other towns. The environs of Lausanne are delightful. The house and garden in which Gibbon wrote the greatest part of the 'Decline and Fall' are still shown at Lausanne. In the cemetery of St.-Pierre, near the town, is the grave of John Kemble.

LAUSITZ, or LUSATIA, formerly a margraviate in Germany, extended from 50° 50' to 52° 16' N. lat., 13° 20' to 15° 15' E. long. It was bounded N. by Brandenburg, E. by Silesia, S. by Bohemia, and W. by Saxony. The area was 4386 square miles, and the population about half a million of inhabitants. It was divided into Upper Lausitz (the southern part) and Lower Lausitz.

Lausitz was early inhabited by tribes of the Slavonian Sorbi, the ancestors of the present Wends, who were subdued A.D. 928 by Henry I., and converted to Christianity in 968 by Otho I. From that time its history presents a continual change of masters. In 1620 Lausitz and Silesia having revolted in consequence of the religious oppression of the emperor Ferdinand II., John George I., elector of Saxony, reduced those provinces to obedience; and by the treaty of Prague (A.D. 1635) the whole of Lausitz was ceded to Saxony. By the decision of the Congress of Vienna in 1815 Saxony was obliged to cede the whole of Lower Lausitz and the half of Upper Lausitz to Prussia; so that the Prussian portion of the ancient margraviate has an area of about 3300 square miles, which is divided between Brandenburg, Prussian Saxony, and Silesia. The part left to Saxony forms the circle of Lausitz, or Bautzen, or Budisain, as it is otherwise called, from names of its chief town. The circle is bounded N. by Prussian Saxony, E. by Silesia, S. by Bohemia, and W. by the Saxon circle of Dresden. Its area is 967 square miles, and its population in 1852 was 297,744, of whom about 43,000 are Wends, who still retain their own language (which differs very little from the other Slavonian dialects), and many national habits, to which they are passionately attached. They are a well-made, robust, brave, and industrious race of men. The inhabitants of the circle are nearly all Lutherans or Catholics, the ratio of the former to the latter being nearly as 12 to 1.

The circle is covered in the south-east with mountains, which form the continuation of the Riesengebirge westward and send out numerous offsets into the other parts of the circle. The principal rivers are the Neisse, a feeder of the Oder in the south-east; the Spree in the centre, and the Elster in the north-west, which belong to the basin of the Elbe. The soil is sandy, and in general unproductive. The corn produced does not suffice for the home consumption. Flax, hemp, tobacco, &c., are grown. Horses, horned cattle, sheep, bees, and geese are very numerous. Bog-iron is found, and iron-mines are worked. Great quantities of turf are cut for fuel. A great number of the inhabitants are engaged in manufacturing woollen-cloth, hosiery, linen, cotton, leather, tobacco, &c. There are several iron-forges and foundries.

The province is crossed by the Saxo-Silesian railway, which runs east from Dresden to Görlitz in Silesia, passing through Bautzen and Lobau, whence a branch runs southward through Herznhut to Zittau. The Saxo-Silesian line connects the province with the railway system of central and western Germany on the one hand, and on the other it abuts in the great line which connects Berlin with Vienna through Breslau.

The principal towns of the circle are:—*Bautzen* [BAUTZEN]: *Ebersbach*, N.W. of Zittau, on the Spree, a place of 6000 inhabitants, and one of the principal centres of the linen manufacture in Saxony; *Kamenz*, on the Schwarze-Elster, which has manufactures of woollen-cloth, linen, and leather, and a population of 3844; the poet Lessing was born here in 1729; *Gross-Schönau*, which stands on the Altwasser, and has 4600 inhabitants, who manufacture large quantities of damask; *Reichenau*, on the Bohemian frontier, which has 3700 inhabitants employed in the manufacture of linen and ribands; *Herznhut*, a few miles N. of Zittau, a small place of 1400 inhabitants, from which the sect of the evangelical brethren took the name of Herznhutters; and *Zittau*, on the Altwasser, or Mandau, a feeder of the Neisse, 21 miles by railway S. by E. from Lobau. It is a large well-built walled town, with considerable linen and woollen manufactures, cotton factories, distilleries, breweries, paper-mills, dye-houses, and potteries; it has also a good commerce in flax, linen thread, and colonial products; a theatre, 8 churches, a gymnasium, a training-school for teachers, a public library of 12,000 volumes, and about 10,000 inhabitants.

LAVAGNA. [GENOVA.]

LAVAL. [MAYENNE.]

LAVAUR. [TARN.]

LAVELLO. [BASILICATA.]

LAVENHAM, Suffolk, a market-town in the parish of Lavenham, is situated on the right bank of the little river Bret, in 52° 6' N. lat., 0° 48' E. long., distant 12 miles S. by E. from Bury St. Edmunds, and 60 miles N.E. by N. from London. The population of the parish in 1851 was 1811. The living is a rectory in the archdeaconry of Sudbury and diocese of Ely.

Lavenham occupies a healthy situation on the declivity of a hill. The market-place is a spacious area. The parish church is a handsome edifice of the perpendicular style, 156 feet long by 68 feet wide; it has an embattled tower surmounted with a spire 141 feet high. There are chapels for Wesleyan Methodists and Independents; an Endowed Grammar school, which had 19 scholars in 1851; National schools; and several almshouses. A little wool-combing and spinning and some silk-weaving are carried on. The market on Tuesday is thinly attended. Fairs are held on Shrove Tuesday and October 11th.

LAVER, HIGH. [ESSEX.]

LAVINGTON. [WILTSHIRE.]

LAVORO, TERRA DI ('arable land'), is the name of a province of the kingdom of the Two Sicilies, corresponding to the greater part of the ancient Campania. It is bounded N. by Abruzzo, E. by Sannio, or Molise, S. by the province of Naples and the Mediterranean, and W. by the States of the Church. The boundary-line between the two states runs along the crest of a ridge that forms the western edge of the basin of the Liri for a few miles below Sora, then the Liri itself, and from the mouth of the Sacco the crest of an offset of the Monti Lepini, or Volscian Mountains, which runs down to the sea between Terracina and Fondi. Two roads lead from the Papal State into the province of Terra di Lavoro; one by Terracina between the mountains and the sea-shore, and the other by the valley of the Sacco, which opens into the valley of the Liri below Ceprano. This last road, which follows the track of the ancient Via Latina, has been restored by the present king of the Two Sicilies.

The province extends between the lower ridges of the Apennines, the shores of the Mediterranean Sea, and the volcanic group of mountains which encircle the Bay of Naples. The surface is a vast plain broken only by a few ridges thrown up by ancient volcanic agency. The soil itself, which is of the greatest fertility and most easily tilled, is for the most part of volcanic origin, and has been celebrated in all ages for yielding corn, wine, and oil of the best quality. The principal rivers that cross the plain are the *Liri* (ancient *Liris*), which after its junction with the Sacco is called *Garigliano*; the *Savone* (ancient *Savo*), which traverses the Falernian district at the eastern base of the Massic Hills; the *Volturno*, which flows south-south-east to its junction with the Calore, and then west past Capua to the sea; and the *Lagni* (ancient *Clanivus*), which enters the Mediterranean on the frontier of the province of Napoli.

It is divided into five districts, namely:—1. *The plain of Nola*, to the south-east, which embraces the fertile region between Mount Vesuvius and the Apennines. This plain looks like an immense grove of tall elms and poplars planted in rows to support the vines which grow at their feet, and which twist around them, and hang in festoons from tree to tree. Between the lines corn and pulse are sown without fallows; but in order to prevent the ground from becoming exhausted, early crops of lupines and beans are raised, which are hoed up before they bear fruit, and are buried for manure. The soil is a rich sandy loam. 2. West of Nola is *The district of Caserta*, which includes the central part of Campania, and is watered by the Volturno. The plains of Caserta and Capua near the mountains are tolerably healthy, well cultivated, and extremely productive; but the lower plain of the Volturno, from Capua to the sea, is very unhealthy: it is chiefly occupied by herds of horned cattle. The *Savone*, which rises in the hills above Teano and spreads into the plain north-west of the Volturno, forming pools of stagnant water, contributes to poison the atmosphere of this region. A range of hills, the *Massicus* of the ancients, here divides the basin of the Volturno from that of the Garigliano. The district of the great plain of Campania between the Massic Hills and the right bank of the Volturno was anciently called *Falerus Ager*, so celebrated in Roman times for its generous wines. 3. West of the above range begins *The district of Gaeta*, which includes the lower valley of the Garigliano and the plain of Fondi, which is separated from the Garigliano by the mountains of Itri, or the *Formian Hills*. The low lands of the Garigliano are as unhealthy and desolate as those of the Volturno; but where the *Formian Hills* stretch near the coast the country is healthy, fruitful, and well cultivated. The plain of Fondi is very unhealthy, owing to a stagnant lake near that town. The district between the Garigliano and the offset of the Volscian Mountains which forms part of the western boundary was included in ancient Latium, and inhabited by the Aurunci an Ausonian tribe. 4. North of Capua and beyond the defiles of Mount Tifate, *The district of Piedimonte* occupies the valley of the Upper Volturno to beyond Venafro, and as far as the great chain of the Apennines of Abruzzo. This part of the country is healthier, the low lands are cultivated with wheat and maize, and the lower slopes of the mountains are planted with olive trees, while the higher grounds afford pasture or are covered with chestnut-trees. 5. North-west of the district of Piedimonte, and divided by it from an offset of the Apennines, lies *The district of Sora*, which embraces the valley of the Upper Liri. This is partly a mountainous district, cold in winter, different

in character from the rest of the province, and partaking of the nature and climate of Abruzzo. Fairer complexions, especially among the women, are to be found in this district than in the maritime parts of the country.

Ancient Campania extended southward to the Mons Lactarius (Monte San Angelo), a long offset of the Apennines, which terminates in the Sorrentine Promontory, now Cape Campanella, between the gulfs of Naples and Salerno. The territory of the Picentini, who occupied the district between the Mons Lactarius and the Silarus (now Sele), was included in Campania for administrative purposes. The maritime district of Campania, from the Linterna Palus (Lago di Patria) to the Mons Lactarius, now forms the metropolitan province of Napoli. In this district, which is altogether volcanic, are Vesuvius, and the Mons Gaurus, now Monte Barbaro, celebrated for its wines. This territory is now included in Principato Citra.

The area of the province is 4952 square miles, and the population in 1851 was 752,012. The province is governed by an Intendente, or viceroy, assisted by a secretary and five councillors. It is divided into 5 districts, each governed by a subintendant, or lieutenant-governor, who as well as the Intendente is appointed by the king; and into 230 communes, each governed by a Sindaco, or mayor, two Eletti, or aldermen, and Decurionato, or council. The population is essentially agricultural. A good number are employed as herdsmen. From the fertile soil of the plains, which is almost everywhere of volcanic origin, large quantities of wheat, olives, raisins, fruits, wine, oil, hemp, &c., are raised. The vine, the olive, and the mulberry, for the production of silk, are leading objects of cultivation. The marshy regions near the coast are covered with herds of buffaloes. Wine, oil, and silk are the chief articles of export. Timber is abundant. Good silks are made in the royal manufactory of Santo Leucio, near Caserta; cottons and woollens at Piedimonte; common woollen-cloth at Arpino; and there are extensive tanneries at Santa Maria di Capua. There is a railway from Naples to Capua through Caserta, with a branch to Nola.

Towns.—*Caserta*, the residence of the Intendente, and the seat of the civil and criminal courts, has, including the hamlets near it, a population of 20,000, and is remarkable for the adjoining palace and gardens, which form one of the most magnificent royal residences in Europe. The two principal fronts of the palace are 787 feet in length, 125 feet high, and contain 4 stories of 37 windows each; the two other sides are 616 feet long, and consist also of 4 stories of 27 windows each. In the interior are 4 courts, and in the centre of the palace is a superb staircase, crowned by a circular hall, affording communication with the various suites of apartments. The richest marbles are displayed in profusion, most of them being from the quarries of the kingdom. The chapel is cased with panels of yellow marble, and adorned with paintings. The theatre is a masterpiece of art: antique columns of alabaster support the roof, and divide the house into 46 boxes, richly decorated. The gardens are adorned with numerous cascades, the water of which is brought by an aqueduct 21 miles in length from the neighbouring mountains. The aqueduct and palace were designed by Vanvitelli for Charles III., in whose reign they were commenced, in 1752. Near Caserta is the town of *Caserta-Vecchia*, built and fortified by the Lombards in the 8th century.

Nola, an episcopal town of great antiquity, famous for the resistance it made to Hannibal, and as the death-place of Augustus, stands in the plain to the north-east of Vesuvius. It has 9600 inhabitants, several churches and convents, and extensive barracks. A quantity of ancient pottery, and a great number of the ancient coins of Nola have been dug up in the neighbourhood. Church-bells were invented by Paulinus, bishop of Nola, in the 5th century. The railway from Nola joins the line to Caserta and Naples at the Cancellio junction, north of Aversa.

Maddaloni, a pretty town at the foot of the mountains, has a royal college, many handsome palaces and churches, and 12,500 inhabitants.

Capua and *Santa Maria di Capua* are noticed under CAPUA.

Piedimonte, 18 miles N. by E. from Capua, near the site of the ancient *Allifia*, is a modern well-built town with about 7000 inhabitants. It rose after the destruction of Allifia by the Saracens, A.D. 856, and many of the public buildings are said to be constructed with the materials of the old Samnite city. The town was raised to the rank of a city by the emperor Charles VI. in 1731, and is the seat of a bishop. Several paper, flour, and fulling-mills, and copper-works are driven by the water-power of a small feeder of the Volturno, which originates in a torrent that issues from the ravine of Val d'Inferno, near the town. This torrent and a few others in the valley are supposed to be fed by subterranean emissaries from Lake Matese, which lies a few miles north of Piedimonte. Cotton is manufactured and wine and oil of high repute are raised abundantly in the vicinity. The ruins of an amphitheatre and other buildings at *Allife*, a small village of 1600 inhabitants, mark with precision the site of Allifia.

Cerreto, 18 miles S.E. from Piedimonte, in the valley of the Titerno, a tributary of the Volturno, has 6000 inhabitants. A few miles south of Cerreto, in the plain between the Titerno and the Calore, is the village of Telesse, with a small lake of the same name, which constantly exhales sulphuretted hydrogen, rendering the neighbourhood extremely unhealthy.

At a short distance westward from the junction of the Calore with

the Volturno is *Ojasso*, which stands on the site of the ancient *Calatia*, the walls of the modern town standing on the foundation of the ancient ones, and constructed with the massive blocks of the ancient walls: population, 4000.

Seven miles N.W. from Capua, on the road to Teano, and in the plain between the Savone and the Volturno, is *Calvi*, a hamlet of about a dozen houses, built round a small ruined feudal castle. This place marks the site of the ancient *Cales*, the ruins of which cumber the ground for miles. The situation is extremely beautiful, but very unwholesome. Cales was celebrated for its wines.

Five miles farther N.W. is *Teano*, the ancient *Teanum*, capital of the Sidicini, which has a population of 8000, including the neighbouring hamlets. The town is beautifully situated on the southern slope of the Rocca Monfina, a quiescent volcanic region nine miles in circumference, and is approached by a terrace which commands fine views of the country. It is the residence of the bishop of Teano and Calvi. The streets are narrow. The most remarkable objects are the ruins of a theatre and an amphitheatre, the Roman inscriptions in the walls of the churches, and the massive remains of a baronial castle built by the Duke of Sessa in the 15th century. In front of the cathedral are two sphinxes of red granite, and within the building are a sarcophagus and many ancient columns. On the edge of the principal crater of Rocca Monfina district are remains of the walls of the ancient city of the Aurunci, which they were compelled to abandon in their war with the Sidicini in the 4th century before Christ.

Suessa Aurunca, the later capital of the Aurunci, was on the western side of the Massic Hills, on a small feeder of the Liris. Its site is marked by *Sessa*, a considerable town, which with the neighbouring hamlets has a population of 16,300. The town is built on a mass of volcanic tufa which covers a more ancient city, and lava-streams may be traced up to the extinct crater of Rocca Monfina. There is an ancient bridge at Sessa, besides an amphitheatre, inscriptions, and other antiquities in the town. The town is ill built, but contains a fine cathedral, five other parish churches, and several monasteries. The Massic Hills terminate on the coast near *Mondragone*, a village of 2350 inhabitants, which marks the site of the ancient *Sinuessæ*.

Northward from the remarkable peak called Rocca di Mondragone the coast is flat, and in many parts marshy and unhealthy. Beyond the Garigliano, which is crossed by a fine suspension-bridge on the coast-road to Gaëta, some ancient ruins mark the site of *Misurana*, celebrated in the history of Marius; and nearer Gaëta was *Formia* (not far from Mola di Gaëta), the birthplace of Vitruvius, near which was Cicero's Formian villa. [GAËTA.]

Six miles N.W. from Gaëta is *Itri*, a small town of 4500 inhabitants, picturesquely situated on a hill, which is crowned by a ruined castle. Some Italian writers suppose Itri to occupy the site of *Urbs Marmur-rorum*, mentioned in Horace ('Sat.' i. 5). Itri is the birthplace of the atrocious Michele Pessa ('Fra Diavolo'), a leader of banditti in the pay of England and Naples during the revolutionary war with France. There are some ancient polygonal walls on the outskirts of the town. South of Itri, near the coast, and at the foot of Monte Migliorano, is *Sperlunga*, a small place built on the site of *Spelunca*, a villa of Tiberius.

Six miles N.W. from Itri, on the road to Terracina, and near the frontier of the States of the Church, is *Fondi*, a poor miserable town of about 5500 inhabitants. It occupies the site of the ancient *Fundî*, a city of Latium, of which there are still some remains: these include an ancient gateway, the lower part of which is of polygonal masonry, the upper part is built in the Roman style; numerous fragments of ancient buildings scattered over the site, or built into the walls of the castle, cathedral, &c., of the modern town; and some remains of cyclopean walls. The Appian Way traverses the principal street of the town, the ancient pavement remaining almost entire. The cell of St. Thomas Aquinas is shown in the Dominican convent. In the marshy plain between Fondi and the sea is the *Lacus Fondanus*, a considerable lake, now called *Lago di Fondi*. The hills about Fondi have been celebrated in all ages for their vineyards, which produced the Cæcuban wine so famous among the Romans. In the 16th century Fondi was in possession of the family of Colonna, to whom it was given by Ferdinand of Aragon. The town was sacked and pillaged by Khair Eddin Barbarossa in 1534, and again by the Turks in 1594. Both Itri and Fondi have obtained a bad eminence as nests of bandits.

In the north of the department, on the right bank of the Liri, and near the frontier of the Abruzzo, is *Sora*, built at the foot of an isolated hill, which is crowned by the ruins of ancient walls and of an old gothic castle. The Liri, emerging from a narrow gulf, bends sharply round the city, changing its direction from south-east to south-west. The town is well built, the houses are large, the streets wide and well paved, and the population, apparently well-to-do, numbers about 7000. Sora retains its ancient name; it was one of the refractory colonies during the second Punic war. It was re-colonised by Augustus. On the hill above it stood the ancient citadel, of which there remain some cyclopean walls; the gothic castle was the stronghold of the Piccolomini and some other powerful families. Sora gives title to a bishop, and has several churches. It is the birthplace of Cardinal Baronius.

At a little distance south of Sora the *Fibreno*, the ancient *Fibresus*,

famous for the purity and coldness of its waters and for its trout, joins the Liri on the left bank, after forming some beautiful cascades and driving the machinery of a large paper factory. Cicero's Arpine villa stood near the Fibrenus; the church of the monastery of San Domenico Abate is built out of its ruins. Three miles down the river from Sora is *Isola*, a thriving town of 4000 inhabitants, built on an island formed by two branches of the Liri, at the base of a high platform crowned by an old feudal castle of the dukes of Sora. The arms of the river leaping down 100 feet perpendicularly on each side of the castle, form two of the finest cascades in Italy; and at the lower end of the town the principal branch of the river "rushes down an inclined plane many hundred feet in length, forming a majestic combination of cascade and cataract." (Blewitt, 'Southern Italy.') *Isola* is famous for the statuesque beauty of its women. It has important cloth-, linen-, and paper-mills, which are worked by water-power derived from the river at the foot of the fall. A little farther south is *Arce*, a custom-house station, at the foot of a steep hill crowned with the fortress of *Rocca d'Arce*, which occupies the site of the ancient *Arx*. There are many remains of polygonal walls on the hill. The country between *Arce* and *Sora* is in many parts very beautiful, abounding in vines, elms, and poplar-trees of exceedingly fine growth, and presenting almost at every turn some remains of antiquity.

Arpino, the ancient *Arpinum*, the birthplace of Cicero and Marius; and *Aquino*, the birthplace of Juvenal and St. Thomas Aquinas, are described in separate articles. [ARPIANO; AQUINUM.]

Between Arpino and Aquino flows the Melfa, the ancient Melfis, a feeder of the Garigliano, as the Liri is called after its junction with the Sacco. The roads in all this part of the province are excellent, and the plain is covered with rich corn and maize fields, and large vineyards interspersed with magnificent elms and oaks. On a hill high up among the bleak Apennines, and far above the plain of the Melfa, stands the city of *Atina*, which retains its ancient site and name. *Atina* was a very ancient Volscian (subsequently Sannite) town. Virgil speaks of it as powerful long before the foundation of Rome ('Æn.' vii. 630). It was a flourishing and populous place in the time of Cicero and during the empire. The extent and magnitude of the cyclopean walls which inclosed the whole platform of the hill attest the ancient importance of the place. Of later works there are remains of a grand Roman aqueduct, ruins of temples, and numerous sepulchral monuments and inscriptions. Several of the streets retain their ancient pavement, and there is a gateway of Roman architecture called *Porta Aurea*. *Atina*, surrounded by bleak Apennines, has a desolate aspect; it is one of the coldest places in the kingdom. The modern city, which occupies but a small part of the ancient inclosure, has a cathedral, a convent, an hospital, and about 6000 inhabitants.

Near the source of the Rapido a small feeder of the Garigliano, 6 miles E. from Aquino, stands *San-Germano* on part of the site of the ancient *Casinum*, and has about 5600 inhabitants. On a height above the town is the old turreted castle of San-Germano, famous in the wars of Manfred and Charles of Anjou. San-Germano is interesting for its healthy and charming situation, but more so for its ancient remains, among which are a small amphitheatre in unusually perfect preservation; ruins of a temple, a theatre, and a sepulchral monument, with considerable portions of ancient pavements, still showing the rut of chariot wheels, and some parts of the ancient walls. *Casinum* was originally a Volscian, next a Sannite, and then a Roman town. It received a Roman colony, probably a 'colonia civium,' B.C. 312. Hannibal encamped in its territory, which he ravaged for two days, but he made no attempt to take the town. The district between the city and the Liris was extremely fertile, and particularly famous for its olives; it was portioned out among military colonists in the second Triumvirate. The town continued to flourish during the empire; it was taken and in great part destroyed by the Lombards in the 6th century. On its ruins rose the modern town.

On the summit of the lofty hill above San-Germano, at the distance of about two miles, stands the celebrated monastery of *Monte Casino*, founded by St. Benedict A.D. 529, on the site of a temple of Apollo. This monastery, the most ancient in Europe, is a massive pile, without much pretension to architectural beauty, but imposing for its great magnitude and general simplicity. It consists of several quadrangles connected by arcades. In the central quadrangle, round which a cloister runs, supported by ancient granite columns, stands the abbey church, which for the tasteful elegance and costliness of its decorations is unequalled in Italy. The interior is adorned with rich marbles, paintings, and mosaics. The choir is lined with walnut-wood exquisitely carved; fifty corinthian columns separate the stalls, the backs of which are carved in every variety of pattern with flowers, birds, and foliage; under the high altar, which is richly decorated with precious stones, lie the remains of St. Benedict and his sister St. Scholastica: the organ is the finest in Italy. The library numbers above 10,000 select volumes, and is famous for classical and other manuscripts; it contains also the archives of the monastery, not the least interesting portion of the collection. The monastery was formerly rich in paintings, but the best of these have been taken away to adorn the gallery of Naples. The inmates of the monastery must be of noble family and independent fortune: the revenue of the establishment, formerly about 100,000 ducats, now hardly exceeds 20,000, but the courteous hospitality of the brethren to strangers

continues unabated. The view from the monastery over the rich and well cultivated plain of the Garigliano and the neighbouring mountains is extensive and beautiful.

Venafro, 11 miles E. from San-Germano, stands near the western edge of the basin of the Volturno on the lower slopes of the Santa Croce Mountains, which are still covered with olives as they were in the time of Horace. It gives title to a bishop, and has about 4000 inhabitants. The city retains the name though it stands a little below the site of ancient *Venafrum*, of which there remain only some vestiges of an amphitheatre, a portion of the polygonal walls; and some inscriptions. Above the town are a feudal castle belonging to the Caraccioli, dukes of Miranda, and an old ruined tower. The wild boar is hunted in the hills about Venafro.

In the valley of the Garigliano on both sides of that river, between the mouths of the Melfa and the Rapido, is an isolated district, belonging to the States of the Church, and called *Pontecorvo* from the chief town in it. This district is included in the delegation of *Frosinone*. It is fertile in corn and olives; somewhat hilly towards the north-west, and has a population of 7500. The town of *Pontecorvo*, founded in the 9th century, fell under the power of the Normans, and was sold in the 12th century by Robert count of Cajazzo to the monastery of Monte-Casino. In 1469 it passed under the direct protection of the Pope. It was seized by Carlo Borbone in 1768; Napoleon I. presented it to Bernadotte with the title of duke. At the Congress of Vienna it was united to the States of the Church. In the town are an old feudal castle, a cathedral, a fine bridge over the Garigliano, and an hospital. The sees of *Pontecorvo*, *Aquino*, and *Sora* are united under the same bishop. Nearly opposite *Pontecorvo*, on the left bank of the Liri, are the ruins of *Interamna-Lerinas*, an old Volscian city, colonised by the Romans B.C. 312. Hannibal in his march from Capua against Rome (B.C. 212) laid waste its territory; and soon after *Interamna* refused to furnish Rome with any further supplies. It subsequently passed into the state of a municipal town having lost its colonial rank. The spot on which it stood, though entirely deserted, is still called *Teramo*. It presents many remains of ancient buildings, with portions of walls, streets, and aqueducts.

(Petroni; Neigeaur; Serristori; Hoare; Keppel Craven; Romanelli; Blewitt, *Handbook of South Italy*; *Dictionary of Greek and Roman Geography*.)

LAWRENCE, ST. RIVER. [CANADA.]

LAWRENCEBURG. [INDIANA.]

LAYBACH. [KRAIN.]

LAYER-DE-LA-HAY, and LAYER MARNEY. [ESSEX.]

LEADHILLS. [LANARKSHIRE.]

LEAMINGTON PRIORS, Warwickshire, a market-town and inland watering-place, in the parish of Leamington Priors, is situated in 52° 18' N. lat., 1° 30' W. long., distant about 2 miles E. from Warwick, 92 miles N.W. from London by road, and 97½ miles by the London and North-Western railway. The population of the town in 1851 was 15,692. The living is a vicarage in the archdeaconry of Coventry and diocese of Worcester. For sanitary purposes the town is under the management of a Local Board of Health.

Leamington as a town is quite of modern date. Its mineral waters were noticed by Camden and Dugdale, though their valuable medicinal qualities were first publicly recognised by Dr. Kerr of Northampton in 1784, whose recommendation attracted a few patients, and more prominently by Dr. Lamb, about 1797. In 1811 Leamington contained but 60 houses, and 543 inhabitants. Its growth has since been very rapid. The town is situated in the valley of the Leam, in a situation sheltered by gentle and well-wooded declivities, and consists of two parts, the new and the old town, separated from each other by the lawn, gardens, and shrubberies of the Royal Spa, and by the river Leam, which joins the Avon about a mile below the town. The soil is dry and absorbent; the strata through which the waters percolate are of the new red-sandstone formation. The springs are saline, sulphureous, and chalybeate, containing, in varying proportions, oxygen, azote, and carbonic acid gases, the sulphureous springs containing also sulphuretted hydrogen, with sulphate of soda; the chlorides of sodium, calcium, and magnesia; and in some instances silica, peroxide of iron, and traces of iodine and bromine. The ordinary season for using the waters is from May to October.

Leamington contains many new streets regularly laid out, terraces, squares, crescents, and parades, chiefly in the new town, which is on the north side of the Leam. The river is crossed by a handsome stone bridge. The town is well paved and lighted with gas. The old well or spring noticed by Camden has a neat pump-room over it. Since 1784 new springs have been discovered, and in connection with these other establishments for drinking the waters or bathing, of which the Royal Spa is the principal, have been formed in different parts of the town. These establishments have hot, cold, vapour, and shower baths, and pump-rooms. The parish church, recently rebuilt in the decorated and perpendicular styles, is a very elegant structure. Trinity church is another handsome new church. The churches of St. Mary and Milverton, and the Episcopal chapel, are of little architectural merit. The Wesleyan Methodists, Independents, Baptists, Countess of Huntingdon's Connexion, and Roman Catholics have places of worship. There are National, British, and Infant schools, and a school

for the indigent blind. The proprietary college, founded in 1844, is a spacious and substantial edifice in the Tudor collegiate style, erected in 1847. The education is of the first order; the pupils are chiefly of the higher classes. The college had about 70 scholars in 1852. A superior school for the middle classes has also been established, called the Vicar's Grammar school. There is a literary and scientific institution. The benevolent institutions are very numerous: the chief is the Warnford Hospital, erected in 1832, mainly through the munificence of Dr. Warnford, who subscribed 2625*l.* for the purpose. There are also a savings bank, visiting societies, clothing societies, penitentiaries, &c. There are bath-houses and pump-rooms, two assembly-rooms, a theatre, a music-hall, a tennis-court, several libraries and reading-rooms, a town-hall, and a museum. The Jephson Gardens are an extensive area, well laid out and planted for public use; in them is a marble statue of Dr. Jephson. In the immediate vicinity of the town are numerous excellent rides, drives, and walks. Markets are held on Tuesday and Friday.

LEASOWES. [HALE'S OWEN.]

LEATHERHEAD. [SURREY.]

LEBADEA, or LIVADIA. [BEGOTIA.]

LEBANON. [SYRIA.]

LE-BUGUE. [DORDOGNE.]

LE-BUIS. [DROME.]

LECCE, a town in the kingdom of the Two Sicilies, in the province of Terra di Otranto, is situated in about 40° 21' N. lat., 17° 50' E. long., on the road from Brindisi to Otranto, and has a population of 16,000. Lecce is a bishop's see, and one of the best built towns in the kingdom, with wide streets, a handsome market-place, several fine churches, and a royal college. The town is surrounded by walls entered by handsome gateways. The principal public buildings are the palace of the Intendente, or governor of the province; the cathedral of Sant' Orosio, which is of Lombard architecture, and has a wooden roof richly carved and gilt; several other large churches and convents; a theatre, a foundling hospital, and a new town-hall. Considerable trade is carried on here in the agricultural products of the country, the principal of which are oil, tobacco, wool, cotton, flax, and gum. There are also manufactories of woollen, cotton, and silk goods; lace, linen thread, and snuff.

Lecce is situated about 200 miles E. from Naples, and 9 miles from the Adriatic coast, in a plain on the north-east side of the range of hills which traverse the Messapian peninsula in its entire length. It is connected by good roads with Gallipoli, Taranto, Brindisi, and Otranto. These are partly ancient Roman roads repaired. Lecce occupies the site of the ancient *Lupia*, a town on the Via Trajana, which ran south down from Brundisium to Hydruntum, and thence along the coast to Tarentum.

LECCO. [COMO.]

LECHLADE. [GLOUCESTERSHIRE.]

LECKHAMPTON. [GLOUCESTERSHIRE.]

LECTOURE. [GERS.]

LECTUM. [BABA, CAPE.]

LEDBURY, Herefordshire, a market-town and the seat of a Poor-Law Union in the parish of Ledbury, is situated in 52° 2' N. lat., 2° 24' W. long., distant 14 miles E. by S. from Hereford, and 120 miles W.N.W. from London. The population of the town of Ledbury in 1851 was 3027. The living is a vicarage in the archdeaconry and diocese of Hereford. Ledbury Poor-Law Union contains 22 parishes and townships, with an area of 47,627 acres, and a population in 1851 of 13,141.

Ledbury sent representatives to Parliament in the time of Edward I., but this privilege was only exercised on two occasions. The town consists chiefly of two streets, which are lighted with gas, and partially paved. Some of the more ancient houses have projecting stories; those which are of recent erection are constructed of red brick, and are of neat appearance. The market-house is an ancient structure. In the town are—a commodious church of Norman date, which has a detached tower surmounted with a fine spire 60 feet high; chapels for Wesleyan Methodists, Independents, and Baptists; National and British schools; a Grammar school, founded in 1612, with a small endowment, which had 41 scholars in 1853; a literary institution; the hospital of St. Catherine, founded by Bishop Foliot in 1282, for 11 old men and women and a nurse; a dispensary; a savings bank; and some parochial charities. Tuesday is the market-day. About 12 fairs are held in the course of the year. A county court is held in the town. Rope- and line-making and the sacking manufacture give employment to some of the population. In the neighbourhood are limestones and marble quarries. Hops are cultivated in the vicinity, and there are numerous orchards.

LEDESMA. [LEON.]

LEEDS, West Riding of Yorkshire, a market-town, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on both sides, but chiefly on the left of the river Aire, in 53° 49' N. lat., 1° 31' W. long., distant 24 miles S.W. from York, 189 miles N.N.W. from London by road, and 206 miles by the Great Northern railway. The population of the borough in 1851 was 172,270. The parish of Leeds is a vicarage; it is now divided into nine ecclesiastical districts. The livings are in the archdeaconry of Craven and diocese of Ripon. The borough, which is divided into 12 wards, is governed

by 16 aldermen and 48 councillors, one of whom is mayor. Leeds Poor-Law Union is co-extensive with the township of Leeds, and contains an area of 2672 acres, with a population in 1851 of 101,331.

History.—It appears probable that Leeds was a Roman station, for Roman remains have been found in various parts of the town. The great road from Tadcaster (Calcaria) to Manchester (Mancunium) passed through this place. The Northmen effected the subjugation of this district about the year 850, and it was again conquered by the Saxons previous to the Norman Conquest. The appellation Loidis (Leeds) is Saxon, derived probably from the name of the first Saxon possessor. No definite time can be named as the commencement of manufactures at Leeds, but we may judge from the efforts made early in the 16th century to provide the various accommodations required by an increasing population, that such efforts were immediately subsequent to the commencement of its manufacturing activity. In 1638 Leeds had to furnish its proportion of ship-money; the town also participated in the conflict between Charles and the Parliament. It suffered under several severe visitations of the plague, and in 1644-45 more than one-fifth of its population perished. The first charter was granted by Charles I. Of late years the town has continued to improve rapidly, and it possesses the local establishments requisite for a large commercial community, as well as the institutions and societies necessary for supplying the wants and advancing the interests of its population.

Situation and Inland Communication.—Leeds is situated on the slope and partly on the summit of a hill which rises from the left bank of the river Aire, and from the top declines to the east, west, and north. The northern and southern parts are connected by the old bridge, leading from the Briggate, or main street; it is a freestone bridge, over which the traffic is very great. Two suspension-bridges over the river, on the bow-and-string principle (which was first introduced here), were erected, the first in 1827 and the second in 1832. The Victoria and the Wellington bridges of stone, and the Crown Point bridge of iron, are modern bridges. Leeds is admirably situated for trade, being placed in the heart of the inland navigation of the country. It communicates with the eastern seas by means of the Aire and Calder Navigation to the Humber, and westward by the Leeds and Liverpool Canal with the Mersey. The warehouses of the Aire and Calder Company are of great dimensions, and suited to the immense traffic to which they are auxiliary. There are also convenient docks. Leeds is the centre of a network of railways converging to it from all points of the compass, and placing it in connection with every important town in Yorkshire and in England.

The streets of the older parts of the town are, with the exception of the Briggate, generally narrow and crooked. The more recently-formed streets are wider and straighter. There are a great many public buildings, and some of them are handsome; but on the whole the aspect of the town is inelegant and unpicturesque. Improvements are however in steady progress. Some years back an Improvement Act was obtained, which conferred great powers on the town council. Since then many valuable changes have been made, and others are in progress.

Manufactures.—The principal manufacture of Leeds is woollen-cloth; and the town is the centre and mart of a large number of clothing villages and hamlets. The woollen manufacture, flax spinning, and the manufacture of machinery, may now be considered as its staple occupations. The woollen factories are very numerous, and many of them are immense buildings; the entire process, from the breaking of the wool to the finishing of the cloth for the consumer, is carried on in them. In and around Leeds are also many small manufacturers who carry on separate stages of the operations. The dye-houses and dressing-shops at Leeds are very extensive. In these establishments both woollen and worsted goods are finished after being purchased in the rough at the cloth-halls and piece-halls. Great quantities of worsted goods are still brought to Leeds to be dyed and dressed. The mills for the spinning of flax for canvass, linen, sacking, thread, &c., are very extensive: that of Messrs. Marshall is indeed of enormous size, the great room covering an area of nearly two acres, and it is remarkably complete in all its arrangements. In the flax-spinning manufacture there was an increase in the county of York between 1835 and 1850 from 1560 to 2425 horse-power, by far the greater part of which is in and around Leeds. The manufacture of steam-engines is carried on very largely; as is also that of flax, worsted, and woollen machinery. The manufacture of locomotive engines, which was established in Leeds about 15 years ago, is now a very important feature of the industry of the town. Perhaps the most extensive tobacco manufactories out of London are at Leeds. The leather is an important and growing trade of the town. The manufactures of silk-thread and of felted-cloth and carpets are very considerable. Paper-staining is conducted on an extensive scale; and there are large manufactories of glass and earthenware. These and the other operations of the town and district are facilitated by the abundant supply of coals, produced from the mines in the vicinity.

Places of Worship, Schools, &c.—There are within the borough of Leeds in all 17 places of worship of the Establishment. Within the last 18 years there have been 3 old churches rebuilt, including the parish church, which cost upwards of 30,000*l.*; and 12 new churches erected, each having a parsonage. It is in contemplation to erect

several more churches. The increased church accommodation provided in Leeds has been obtained mainly by the efforts of the vicar, Dr. Hook. The architecture of some of the new churches is worthy of notice. St. Peter's, the parish church, is a spacious cruciform edifice in the decorated style, erected in 1840 from a design by Mr. Chantrell. St. John's, Holbeck, is an elaborately executed example of the early English style, with a good groined roof. St. Andrew's is in the same style: both are by Mr. Scott. St. Lawrence's is a striking and very lofty cruciform church in the decorated style, fitted up with rich stained glass and carved wood-work. Holy Trinity, Meanwood, is a very highly finished structure in the early English style, built, without regard to expense, at the cost of a single family. A new church, in St. Matthew's district, was consecrated in August 1851; it is in the decorated style. There are also in the borough 60 places of worship for 6 sections of Methodists, 13 for Baptists, 11 for Independents, 3 for Unitarians, 2 for Plymouth Brethren, and 2 for Jews. A chapel for English Presbyterians has been opened within the last three years. The total number of sittings provided at the date of the Census was 76,488. Two of the Wesleyan chapels are large and handsome buildings, each containing 3000 sittings. The Independent chapel in East Parade is an elegant building, and one or two of the other chapels belonging to the same body are large in size and costly in their accommodations. The Unitarian chapel on Mill Hill is a chaeste example of the perpendicular style. The Roman Catholic church of St. Ann is a fine building of the decorated style, with a spire 150 feet high. In 1835 the Leeds Cemetery, with a neat chapel, was opened on Woodhouse Moor; and more recently two public burial grounds have been provided by rates; a portion of each being left unconsecrated and set apart for Dissenters.

The Leeds Free Grammar school, founded in 1552 by the Rev. W. Sheffield, but enriched by subsequent benefactors, has a large school-house erected in 1823, and an income of about 2000*l.* It is free to all boys natives of Leeds, or sons of residents in the town. In 1851 there were 169 scholars. There are in the borough of Leeds 371 day-schools, of which 76 are public day-schools with 13,176 scholars, and 295 are private schools with 8658 scholars; the total number of scholars being 21,834. Of Sunday schools the number is 147, with 28,761 scholars, of which 60 schools belong to Methodists, 46 to the Established Church, 14 to Independents, and 11 to Baptists. The Industrial school opened in 1848 is a large and very complete establishment situated at Burmantofta. The buildings form a capacious and ornamental Elizabethan pile. The grounds cover 6 acres. Leeds possesses an excellent library founded by Dr. Priestley in 1768. The Literary and Philosophical Society is a superior institution, chiefly supported by the manufacturers and professional men of the town. It has a good museum. The number of members in 1851 was 219, and of volumes in the library 800. The mechanics institution is one of the most flourishing in the kingdom. It numbers about 1900 members, of whom 550 are artisans. It has a library of 8000 volumes, and well-attended news-rooms, lecture-rooms, &c. Leeds is the headquarters of the Yorkshire Union of 120 institutes existing in the county. A school of design has been in operation for several years. There is a medical school in the town. Leeds possesses a savings bank.

Charitable Institutions, Trusts, &c.—The Leeds Infirmary, established in 1767, now possesses accommodation for more than 150 in-patients. The House of Recovery, for the reception of persons attacked by infectious fevers, may be considered as an appendage to the infirmary. The other medical charities in Leeds are—the Dispensary, the Eye and Ear Infirmary, and the Lying-in Hospital.

In the hands of 'the Committee of Pious Uses' there are trusts for the repair of highways in and near Leeds, a trust for the poor, which is laid out in clothing, and distributed at Christmas, the estates of the Free Grammar school, and the property of several other charities. Harrison's Hospital was endowed in 1653. Jenkinson's almshouses, founded with money bequeathed in 1643, provide a residence for eight poor and aged persons. There are several other important charities.

Public Buildings.—The largest buildings in Leeds are the cloth-halls. The Coloured-Cloth Hall was built in 1758; the White-Cloth Hall in 1775. Previous to 1711 the cloth-market was held in an open street. In the cloth-halls woollen-cloths in their rough state are sold by the country manufacturers to the merchants. The Coloured-Cloth Hall is a quadrangular building 127½ yards long and 66 yards broad; divided into six departments which are called streets. An additional story erected on the north side of the Coloured-Cloth Hall is used chiefly for the sale of ladies' cloths in their undyed state. The White-Cloth Hall is nearly as large as the Coloured-Cloth Hall, and is built on the same plan. The markets for mixed and white cloths are held on Tuesday and Saturday. The Commercial Buildings are used as a commercial news-room, for the Leeds bankruptcy court, and for offices of companies, &c. It is a Grecian building of some architectural beauty. The entire edifice is of stone. The various markets of Leeds are exceedingly commodious. The Free Market occupies an area of 9758 square yards; the Central Market is a spacious covered building, and is one of the principal ornaments of the town. It has a handsome Grecian elevation, and cost 35,000*l.* The area is divided into three walks, with stalls. The South Market is used chiefly for the leather fairs. The Corn Exchange is a very handsome structure. The elevation is Ionic; between the columns is a niche with

a statue of Queen Anna. The corn-market is held every Tuesday, between the hours of eleven and one. The Court-house, under which are the prison and police-office, was completed in 1813. In it the quarter sessions and the petty sessions for the borough and the Michaelmas sessions for the West Riding are held. A new Town-hall, which promises to be a very fine building, is in course of erection in Park-place, and in front of it is to be placed the noble bronze statue by Behnes of the late Sir Robert Peel (now standing near the court-house), and also the statue of the late Edward Baines, Esq., M.P. for the borough. The Stock Exchange, completed in 1847, is an architectural ornament to the town. A new county court occupies a site nearly adjoining the Stock Exchange. The Leeds Club, established in 1850, ranks in the style and character of its arrangements with the clubs of the metropolis. A chamber of commerce was established in June 1851. The borough jail was erected in 1847 at an expense of 43,000*l.* Cavalry barracks, which with the parade-ground occupy above 11 acres of land, are just within the northern boundary of the township. The building in which are the public baths, has a neat Ionic elevation. The places of public amusement are the theatre (a plain building), the assembly-rooms, and the music-hall, the latter of which is used for various public purposes.

The general market is held on Tuesday and Saturday. Fairs are held fortnightly for cattle; and in July and November for general purposes. Leather fairs are held eight times a year.

About two miles from Leeds are the noble ruins of Kirkstall Abbey. In the villages and open spots around the town are many neat villas. At Bramley Fell, on the line of the Leeds and Liverpool Canal, about 3 miles from Leeds, are extensive quarries. Quarries of sandstone are at Woodhouse, about a mile from Leeds.

(Communication from Leeds.)

LEEK, Staffordshire, a market-town and the seat of a Poor-Law Union, in the parish of Leek, is pleasantly situated on an eminence above the river Churnet, in 53° 6' N. lat., 2° 1' W. long., distant 24 miles N. by E. from Stafford, 154 miles N.W. by N. from London by road, and 151½ miles by the North-Western and North-Staffordshire railways. The population of the town of Leek in 1851 was 8877. The living is a vicarage in the archdeaconry of Stafford and diocese of Lichfield. Leek Poor-Law Union contains 19 parishes and townships, with an area of 68,247 acres, and a population in 1851 of 21,827.

Leek contains several well-built and spacious streets, which are well paved and lighted with gas. The town has a good water supply. The town-hall is a neat building. The parish church was erected in 1180, but has been considerably altered by repairs. It occupies an elevated site, and has a square tower with eight pinnacles. In the churchyard is a dilapidated ancient cross. In the town are also St. Luke's church, erected in 1846, and places of worship for Wesleyan, Primitive, and Reform Methodists, Independents, Quakers, and Roman Catholics. The Free Grammar school, founded in 1723, has a small endowment; in 1853 it had 31 scholars. There are two National schools, two Infant schools, and a Roman Catholic school. Leek possesses a mechanics institute, a subscription library, a savings bank, a penny bank connected with the mechanics institute, a dispensary, and numerous parochial charities. A county court and petty sessions are held in the town. The market-days are Wednesday and Saturday; twelve fairs are held in the course of the year, three of which are cheese fairs; the others are chiefly for cattle. The principal source of employment in the town is the silk manufacture in its several branches—sewing silk, buttons, ribands, broad silk, &c. The Caldon Canal passes about 2 miles S. from Leek; a cut from it comes near to the town. Remains of Roman and British antiquities have been found in the vicinity. A short distance from the town are some remains of a Cistercian abbey.

LEER. [AURICH.]

LEEUWARDEN, the chief town of the Dutch province of Friesland, is situated in 53° 12' N. lat., 5° 47½' E. long., and has about 21,000 inhabitants. It is surrounded with an earthen rampart and a wide moat; the broad straight streets are intersected by canals, the banks of which, as well as the ramparts, are planted with trees, and afford very pleasant promenades. The town, which is well built, has manufactures of linen and paper, and has a considerable trade, which is much facilitated by canals communicating with the sea, and with Dokkum, Franeker, Haarlingen, and Groningen. The principal buildings are the town-hall, the palace of the princes of Orange, a synagogue, and twelve churches, the largest and handsomest of which contains several monuments of the princes of the house of Orange.

LEEWARD ISLANDS. The British Leeward Islands, in the West Indies, form a distinct government, which includes the islands of Antigua, St. Christopher's, Anguilla, Montserrat, the Virgin Islands, Nevis, and Dominica.

LEFKOSIA. [CYPRUS.]

LEFTWICH. [CHESHIRE.]

LEGHORN. [LIVORNO.]

LEGNANO. [VERONA.]

LEH, or LEI. [LUDAKH.]

LEICESTER, the chief town of Leicestershire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the right bank of the river Soar, in 52° 38'

N. lat., 1° 8' W. long., distant 96 miles N.N.W. from London by road, and 102½ miles by the North-Western and South Midland railways. The population of the municipal and parliamentary borough of Leicester in 1851 was 60,584. The borough is governed by 14 aldermen and 42 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. For sanitary purposes it is under the management of a Local Board of Health. The livings are in the archdeaconry of Leicester and diocese of Peterborough. Leicester Poor-Law Union contains 8 parishes and townships, with an area of 3960 acres, and a population in 1851 of 60,642.

Leicester was known to the Romans by the name *Ratae*, and was then, as well as subsequently under the Saxons, a place of importance. Some handsome tessellated pavements and other Roman remains were found here during 1851, and numerous vestiges of the Roman occupation have been found at various times. The name Leicester is derived from the river Leire, now Soar. It appears to have been the seat of a bishop's see transferred hither from Sidnacester. It was taken, and many of the inhabitants were massacred, by Ethilfrith, king of Northumbria. It was also taken by the Danes, and was one of the five Danish burghs. Being recovered it was repaired and fortified anew and enlarged by Ethelfleda, daughter of Alfred the Great, in the time of Edward I. (the elder). After the Conquest it was added to the royal demesne, and a castle erected, or an older fortress was enlarged and strengthened. In the civil wars of Henry II. both town and castle were nearly destroyed. During the reigns of the Lancastrian princes Leicester Castle was frequently a royal residence, and parliaments were held in it. On the overthrow of that dynasty it went to decay, and few remains now exist. During the civil wars of Charles I., Leicester, which was occupied by the Parliamentarians, was taken by storm by the king on May 31st 1645, but was recovered on the 18th of June in the same year by the Parliamentarians under Fairfax.

Leicester had a mint, in which were produced a succession of coins from the time of the Saxon Athelstan to Henry II. There were several religious houses or hospitals, among which the most important was the abbey of St. Mary Pré or De Pratis, founded for Black or Augustinian canons by Robert Boesu, earl of Leicester, in 1143. Of this great and wealthy establishment, to which, from its being the scene of Cardinal Wolsey's death, considerable interest attaches, little more than a mass of shapeless ruins remains.

The town is irregularly laid out; the principal line of street extends from north to south nearly a mile in length. It is well supplied with water and lighted with gas. The houses are for the most part of red brick. St. Nicholas church is partly built of the bricks from an adjacent Roman building, believed to have been a temple, of which a fragment called the Jewry wall, containing several arches, remains. The church, which consists of a nave, chancel, and south aisle, has a square western tower between the nave and chancel, and is chiefly of Norman architecture. St. Mary's church is a large building, partly Norman, partly early English, and partly perpendicular; it has a square western tower surmounted with a lofty spire rebuilt in the last century. The church of St. Martin is a large cruciform church, partly of early English and partly of perpendicular architecture: a tower, the lower part of which is Norman, rises from the centre, surmounted with a crocketed spire, which, as well as the upper part of the tower, is of later date. All Saints is a small church chiefly in the early English style, with a modern chancel. St. Margaret's is a handsome church, partly early English, with a chancel and a lofty tower of perpendicular character. A district church in St. Margaret's parish, dedicated to St. George, was erected in 1826 in the perpendicular style. Trinity district church is a neat brick building of recent erection. In 1851 there were 35 places of worship in the borough, of which 9 belonged to the Established Church, 10 to Baptists, 8 to Methodists, and 3 to Independents. The total number of sittings provided was 25,008. A Free Grammar school of ancient foundation has a school-house and an endowment of 47*l.* a year; to this the old corporation added a yearly sum of 75*l.*, but since 1836 this has been discontinued, and there is now consequently neither master nor scholar. A Proprietary school or college was established in 1835; in 1851 it had 110 scholars. There are several National, British, and Infant schools, and schools in connection with the Wesleyan Methodists and Roman Catholics. In the Female Asylum, in Newark liberty, from 10 to 16 girls between the ages of 13 and 16 are received for three years, clothed, maintained, and instructed. A School of Design was established some years back by the town council. There are several hospitals or almshouses, especially Trinity Hospital containing 90 inmates, and Wigston's Hospital containing 26 inmates; an infirmary or county hospital; a lunatic asylum; and other benevolent institutions. There are a mechanics institute, a philosophical society, and a good museum and library.

The guildhall is a commodious edifice; the borough jail and house of correction are modern buildings. A new county jail and house of correction have been built on the south side of the town. Wigston's hospital is an ancient building, with some good perpendicular work both in stone and wood. There are a convenient theatre, and a range of assembly-rooms, which were originally built for an hotel: the county assizes are held in them. The news-rooms form a handsome and convenient building. The Collegiate school is in the Tudor

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collegiate style. There are excellent public baths. The New Walk is a promenade on the south-east side of the town, planted with trees and commanding some pleasant prospects. There are four bridges over the Soar. South of the town is an extensive area laid down as a racecourse.

Worsted and cotton hosiery is the staple manufacture of the town, which is very largely carried on. There are very large spinning-mills in Leicester. Lace-making, wool-combing, and dyeing are carried on. Numerous hands are employed in the manufacture of the frames or other machinery required by the stocking weavers. The town is also the centre of a great agricultural and wool-raising district. The general market is held on Saturday, a market for vegetables is held on Tuesday and Thursday, and one for cattle on Wednesday. Fairs are held about 12 times in the year. The market-place is a large open area, in which stands the Exchange, wherein the magistrates hold their weekly meetings.

The assizes and quarter-sessions for the county are held in Leicester. Leicester has returned two members to Parliament since the time of Edward I. The magistrates of the borough hold quarter-sessions; and a county court is held here. There is a savings bank.

LEICESTERSHIRE, an English county, bounded N. by Nottinghamshire, N.E. by Lincolnshire, E. by Rutlandshire, S.E. by Northamptonshire, S.W. by Warwickshire, and N.W. by Derbyshire, is included between 52° 24' and 52° 59' N. lat., 0° 39' and 1° 37' W. long. The greatest length of the county is 44 miles; its greatest breadth 40 miles. The area is 803 square miles, or 514,164 statute acres. The population in 1841 was 215,867; in 1851 it was 230,303. A detached portion of Derbyshire near Ashby-de-la-Zouch is surrounded on three sides by Leicestershire, and on the fourth side by Warwickshire and Staffordshire.

Surface, Hydrography, Communications.—The surface of Leicestershire consists almost entirely of gently rising hills. The north-eastern part is occupied by the southern extremity of the Keateven Cliffe Row. These hills overlook the Vale of Belvoir, which is partly in this county and partly in Nottinghamshire. The south-eastern portion of the county from Ouston, south of Melton Mowbray, to Lutterworth, is occupied by the hills which separate the basin of the Soar from that of the Welland. The north-western portion, between Mount Sorrel, Loughborough, Ashby-de-la-Zouch, Market Bosworth, and Leicester, constitutes the district which, though now bare of wood, retains its ancient designation of Charnwood Forest. This district is occupied by a group of hills of inconsiderable elevation, but of a rugged character, with distinct sharp prominences. Bardon Hill, 853 feet high, between Leicester and Ashby, the most elevated point of the group, commands a very wide extent of landscape, extending in one direction to Lincoln cathedral, distant 60 miles, and in another direction, with a good telescope, to the Dunstable Hills, distant nearly 80 miles.

Leicestershire is chiefly included in the basin of the Trent, which just touches the county, and for a few miles divides it from Derbyshire. The principal tributary of the Trent belonging to this county is the Soar, which is formed by the junction of several small streams that rise near the south-western border between Hinckley and Lutterworth. In the lower part of its course the Soar forms the boundary between Nottinghamshire and Leicestershire; the upper part belongs wholly to Leicestershire. It was anciently called Leire, from which the town and county of Leicester derive their name. This river has a gentle current; it is navigable for about 7 miles from its junction with the Trent below Kegworth to the neighbourhood of Loughborough; a canal continues the navigation up to that town. The length of the Soar is nearly 40 miles.

The Wreak is a tributary of the Soar. Its true head is near Oakham in Rutlandshire, whence it flows in a winding channel to Melton, below which it receives the short stream from Ab Kettleby, which is the reputed head stream: before this junction it is called Eye, or Eie. It then flows into the Soar near Mount Sorrel, after a course of about 25 miles. Its channel, so far as it is navigable, forms part of the Leicester and Melton Mowbray Navigation. The Anker skirts the border of the county for 2 or 3 miles near Atherstone in Warwickshire; it joins the Tame, a feeder of the Trent, at Tamworth. The Sence rises in Charnwood Forest, and flows south-west 14 miles into the Anker near Atherstone. The Mease, a feeder of the Trent, which rises just within the border of Derbyshire, has a small part of its course in this county; it flows by Ashby, and in two places separates Leicestershire from the detached part of Derbyshire. The Devon, which joins the Trent at Newark, has its source in Croxton Park in this county; the Smyte, or Smite, which waters the Vale of Belvoir, rises just within the county, near Nether Broughton. These are all the streams belonging to the system of the Trent which claim notice.

The Avon, a tributary of the Severn, forms the boundary of the county for nearly 8 miles on the southern side, separating it from Northamptonshire. The Swift, a small stream which flows by Lutterworth, falls into it. The Welland, which rises just within Northamptonshire, forms, for 17 miles, the boundary between that county and Leicestershire. A small feeder of the Welland divides, for about 7 miles, the counties of Leicester and Rutland.

Leicestershire has several canals. The Leicester Navigation, which

consists partly of a canal, and partly of the river Soar made navigable, extends from Loughborough to Leicester, about 11 miles. The Leicester and Melton Mowbray Navigation, also 11 miles, commences at the junction of the river Wreak with the Leicester Navigation, and is carried along the channels of the Wreak and Eye, which are thus made navigable to Melton. The Leicestershire and Northamptonshire Union Canal extends from the Leicester Navigation at Leicester, to Foxton near Market Harborough, with a cut from Foxton to Harborough. Its length is about 17 miles; or, including the branch to Harborough, 21 miles. The Grand Union Canal forms a communication between the Grand Junction Canal, at Long Buckby in Northamptonshire, and the Leicestershire and Northamptonshire Union Canal at Foxton. Its course is about 8 miles in Leicestershire. The Oakham Canal runs from Oakham in Rutlandshire to Melton Mowbray, where it unites with the Leicester and Melton Mowbray Navigation. Its whole length is about 15 miles, of which more than half is in Leicestershire. The Ashby-de-la-Zouch Canal commences in the Coventry Canal, about 3 miles from Nuneaton in Warwickshire, and runs to the coal-field south-west of Ashby. Its whole length is about 26 miles, of which the greater part is in Leicestershire. There are three railways connected with this canal at the Ashby end; one from the Ticknall lime-works, 8½ miles long; a second branching off from this to the Cloudbill lime-works, 4½ miles long, with two short branches; and a third from a colliery near Moira, half a mile long. Ashby is connected with the canal by a tram road about 2 miles long.

The south branch of the Midland railway enters Leicestershire about 2 miles W. from Lutterworth, and runs north by east past Leicester, 5 miles beyond which the main line turns north-west, and quits the county near Loughborough, while the Syston and Peterborough branch turns north-east to Melton Mowbray, where it turns round east, and near Wymondham south-east; soon after which it enters Rutlandshire. The old-goods railway from Leicester to Swanington has been converted into a passenger line. It runs in a somewhat serpentine, but generally west-north-west direction past Ashby-de-la-Zouch to Burton; but quits the county soon after it passes Ashby. The Rugby and Stafford railway enters the county near Lutterworth, which town it passes, but soon after enters Northamptonshire, though it runs for some distance along the borders of Leicestershire.

The principal coach roads through the county are as follows:—The Chester and Liverpool road enters the county from Northamptonshire, near the village of North Kilworth, and runs through Lutterworth and Hinckley to the neighbourhood of Atherstone, where it enters Warwickshire. The Leeds road enters the county from Rutlandshire, and runs through Melton Mowbray into Nottinghamshire. The Halifax road enters the county from Northamptonshire, and passes by Market Harborough, Leicester, and Loughborough into Nottinghamshire. The Carlisle and Manchester road coincides with the Halifax road as far as Loughborough, from which town it runs by Kegworth to Derby. Roads lead from Leicester by Melton Mowbray to Grantham; by Bingham in Nottinghamshire to Newark; by Ashby-de-la-Zouch to Burton-on-Trent; to Hinckley; to Lutterworth; and to Uppingham in the adjoining county of Rutland.

Geology, Mineralogy, &c.—Some portions of the east side of Leicestershire are occupied by the formations which constitute the third or lowest system of oolites. The Great Oolite extends over the summit of the sandy hills which overhang the Vale of Belvoir. From beneath the Great Oolite the beds which intervene between it and the lias crop out; they skirt the Vale of Belvoir and occupy the border of the county towards Rutlandshire. The lias occupies the rest of the eastern side of the county, skirting the valley of the Soar at the distance of 2 to 3 miles eastward from that river. The rest of the county, with the exception of Charnwood Forest, the coal-fields near Ashby-de-la-Zouch, and some isolated hills of mountain limestone to the north-west of Charnwood Forest, is occupied by the new red or saliferous sandstone. The Ashby coal-fields lie to the north-east and the south-west of Ashby, and extend into Derbyshire. The south-western field is of an oblong figure, extending north-west and south-east about 11 miles. The strata dip in different directions. More than 20 coal-works have been opened in this field. One of the coal-beds has a thickness of 17 to 21 feet. The other coal-field is also oblong, and extends in the same direction as that just mentioned: its length is about 6 or 7 miles. The isolated beds of mountain limestone are quarried at the village of Osgathorpe, near Ashby, at a spot near the road from Ashby to Loughborough, and in other places. Charnwood Forest district is occupied by rocks of the transition series, sienite, greenstone, and slate. Some of these rocks are quarried under the name of granite. This district yields coarse slate for roofing and other common purposes. Gypsum is quarried near Leicester; and limestone, which makes excellent cement for works under water, at Barrow-upon-Soar. Freestone for building and clay for bricks are procured in several parts of the county.

Climate, Soil, Agriculture.—The climate of Leicestershire is mild and genial, without being so moist as in those counties which lie nearer the Atlantic. There are few high hills to intercept the clouds. The soil is loamy, without the extremes of stiff clay, loose sand, or chalk. It varies in fertility. The most fertile soils are generally kept in pasture, for which this county is pre-eminent; the poorer and

thinner soils only being kept in arable cultivation. Out of above 500,000 acres of surface, fully one-half is in permanent grass. The quantity of woods or wastes is very small. There are many large landed proprietors who have family seats in this county, and they have in general some portion of their domains in hand. By employing intelligent bailiffs they greatly contribute to the improvement of husbandry. Grazing and the breeding of cattle and sheep are the chief objects of the Leicestershire farmers, and they have succeeded admirably both with oxen and sheep. The arable land has however not been neglected; and the quantity of stock kept, for which artificial food must be provided in winter, has not only supplied abundant manure to recruit the land, but also made the cultivation of green crops more general and extensive than in many other counties. The natural meadows along the banks of the rivers are considerable, and most of them of excellent quality. The upland meadows are also good. There are considerable dairies, especially on the borders of Derbyshire, and very good cheese is made there. The cheese known by the name of Stilton is chiefly made in Leicestershire.

The principal breed of cattle in Leicestershire is the improved long horn, which bears a very high character. The sheep, for which this county is also renowned, are large, with very long wool, and fatten very readily at an early age. As fox-hunting is followed with great eagerness in this county many good horses are bred, and the rich pasture favours the rearing of this useful and noble animal.

Divisions, Towns, &c.—Leicestershire is divided into six hundreds, as follows:—West Goscote, north-west and central; East Goscote, central; Framland, north-east; Gartree, south-east; Guthlaxton, south; Sparkenhoe, west. It contains the borough, market, and county town of LEICESTER; the market towns of ASHBY-DE-LA-ZOUCH, BOSWORTH, MARKET HARBOURGH, LUTTERWORTH, MELTON MOWBRAY, Mount Sorrel, and Whitwick, and the town of Castle Donington. The last three we notice here; the other towns are described under their respective titles.

Castle Donington, 21 miles N.W. from Leicester, population 2729 in 1851, is on the border of the county, on the road from Ashby-de-la-Zouch to Nottingham. There are remains of an old castle, from which the place has its name; also a noble park and mansion, the residence of the Marquis of Hastings, which contains a valuable collection of paintings and an extensive library. The church is a venerable edifice with a lofty spire. The Wesleyan Methodists, Independents, Baptists, and Quakers have places of worship, and there is a Wesleyan school. Basket-making, frame-work knitting, and the making of silk stockings, lace, and gloves, give employment to the inhabitants. Tanning and brick-making are carried on. A customary market is held on Saturday; fairs are held on March 18th, Thursday in Whitsun-week, and Michaelmas Day.

Mount Sorrel, 7½ miles N. by W. from Leicester, on the road to Loughborough, population 1597 in 1851, stands in a romantic situation on the left bank of the Soar. The extremity of a range of hills extending from Charnwood Forest overhangs the town, presenting a steep slope; it is called Castle Hill, from a fortress which anciently crowned it. The principal street is paved with red granite, as it is termed, from the adjacent rocks of the Charnwood Forest group. Many houses are built of the same stone. The Wesleyan and Association Methodists and Baptists have places of worship; and there are National, Infant, and Free schools. A small market-house stands on the site of an ancient cross. The principal manufacture is of stockings; bobbin-net lace is also made. The market is on Monday, but is very small. A fair is held on July 29th.

Whitwick, on the border of Charnwood Forest, 13 miles N.W. from Leicester, population 2336 in 1851, is a place of considerable antiquity. Of Whitwick Castle there are now few remains. The church is an ancient gothic building, which has been recently restored. There are places of worship for Wesleyan and Primitive Methodists, Baptists, and Roman Catholics. There are a Free and an Infant school. In Charnwood Forest is a Trappean monastery called St. Bernard's Abbey. In the neighbourhood of Whitwick are extensive collieries. The market, which was for many years disused, has been revived, and is held on Wednesday.

The following are some of the more important villages; the populations are those of the parishes in 1851:—

Arnesby, 8 miles S. from Leicester, population 567, was once a market-town. The village is pleasantly situated at the foot of the Saddington Hills. It has a fine old church and a Baptist chapel. A Mutual Improvement Society here had 50 members in 1851. Frame-work knitting employs some of the inhabitants. *BARROW-UPON-SOAR*, *BILLESDON*, and *BLABY* being the seats of Poor-Law Unions are noticed under their respective titles. *Barwell*, 11 miles S.W. from Leicester, population 1613. Besides the parish church, which is ancient, there are places of worship for Wesleyan and Primitive Methodists, and a Free school. The inhabitants are chiefly engaged in frame-work knitting, or dependent upon agriculture. *Belgrave*, a mile and a half from Leicester: population, 1398. There are here an ancient church, chapels for Wesleyan and Primitive Methodists and Baptists, and a National school. Frame-work knitting and brick-making give some employment. *Belton*, 17 miles N.W. from Leicester, population 751, has a handsome old church, a Wesleyan Methodist and a Baptist chapel, and a National school. A great fair for horses is held here on

Trinity Monday. *Belvoir*, at the north-eastern angle of the county, is noticeable on account of Belvoir Castle, the magnificent seat of the Duke of Rutland. The castle and a large part of the park are in Leicestershire. Belvoir village is in Lincolnshire. Belvoir Castle occupies nearly the summit of a hill, on the southern slope of which are terraces and shrubberies. It surrounds a quadrangular court, and has undergone many alterations during the present century; in its situation and general appearance it bears some resemblance to Windsor Castle. It contains a very fine collection of paintings. *Bottesford* is on the river Devon, in the picturesque Vale of Belvoir: population, 1874. The village is on the road from Grantham to Nottingham. The church is cruciform, of the perpendicular style, with a tower and a lofty ornamental spire; it has been recently restored at a great expense. In the interior are several handsome monuments of the earls of Rutland of the Manners family. Four dukes of Rutland are buried here, but have no monuments. There are chapels for Wesleyan and Primitive Methodists, Independents, and Baptists, an Endowed Free school, and almshouses for 17 poor men and 6 women. *Burbage*, 18 miles S.W. from Leicester: population of the chapelry 1894, mostly frame-work knitters. The church, a fine old building, was repaired at a great expense in 1843. There are chapels for Wesleyan and Primitive Methodists and Independents, and a Free school for boys and girls. *Coleorton*, 17 miles N.W. from Leicester, 2 miles E. from Ashby-de-la-Zouch: population, 549. The chief object of interest here is Coleorton Hall, which was the seat of Sir George Beaumont. Sir George's choice collection of paintings, which he munificently presented to the nation, formed the nucleus of our National Gallery. Coleorton Hall is a neat Grecian building. In the beautiful grounds are inscriptions by Wordsworth, whose taste contributed to the laying out of the grounds. In the church are a rich painted glass window, and a painting by Alston, both presented by Sir George Beaumont. *Countesthorpe*, 7 miles S. from Leicester, population of the chapelry 949, is a large straggling village; the inhabitants are mostly frame-work knitters. It has a church, rebuilt, except the tower, in 1842; chapels for Primitive Methodists, Independents, and Baptists; and a station of the Midland railway. *Croxton Keyriol*, on the Lincolnshire border, 3 miles S. by E. from Belvoir Castle, population 621, is chiefly celebrated for its races, held in Croxton Park, a seat of the Duke of Rutland, which annually attract large numbers of visitors. Besides the church there are a Wesleyan Methodist chapel and a National school. *Deaford*, 8 miles W. from Leicester, population 1025, is a station on the Leicester and Swannington railway. The church, which is ancient, is large and has a very lofty spire. There are meeting-houses for Baptists and Primitive Methodists, and a National school. *Earl Skilloe*, 9 miles S.W. from Leicester: population, 2364. Besides the parish church there are chapels for Wesleyan and Primitive Methodists, Independents, and Baptists, and a Free school. Petty sessions are held here. Frame-work knitting employs many of the inhabitants. *Enderby*, 5 miles S.S.W. from Leicester: population 1835, mostly employed in frame-work knitting. The church contains some interesting monuments. There are an Independent chapel and a Free school. Enderby Hall is a handsome mansion. *Hallaton*, 16 miles E.S.E. from Leicester: population, 691. The church, which is ancient, has a lofty spire. Some curious Norman carving is built up in the walls; in the interior of the church are sedilia and some interesting old monuments. The Independents have a chapel, and there are a Free school and some almshouses. Hallaton was formerly a market-town; the market-cross is still standing. Two cattle fairs and a statute fair are held in the course of the year. *Ibstock*, 13 miles W.N.W. from Leicester: population of the township, 1188. Besides the church there are chapels for Wesleyan Methodists and Baptists, and National and British schools. Many of the inhabitants are employed in the Ibstock collieries, to which there is carried a branch from the Leicester and Swannington railway. *Keyworth*, 19 miles N.N.W. from Leicester, on the road from Loughborough to Derby, and on the Midland railway: population of the township, 1782. There was formerly a market here. The church is a handsome cruciform structure: there are chapels for Wesleyan Methodists, Independents, and Baptists; a National and a Free school. Four fairs are held during the year. Framework-knitting and lace-working afford the chief occupations. Malting is carried on, and there are flour-mills. *Kibworth*, 8 miles S.S.E. from Leicester, population 1752, was formerly a market-town. The church is a spacious and handsome building. The Independents, Baptists, and Primitive Methodists have places of worship. The Free Grammar school has an income from endowment of about 300*l.* a year, and had 39 scholars in 1852; there are also a National and an Infant school. The inhabitants are chiefly frame-work knitters. *Oadby*, 3 miles S.E. from Leicester, population 1196, consists of a long street on the road to Market Harborough. Besides the church, which is ancient and contains some interesting monuments, there are a Baptist chapel, a National and an Infant school. The inhabitants are mostly frame-work knitters. *Packington*, 15 miles S.W. from Leicester, is partly in an outlying part of Derbyshire: population of the township, 644. Besides the parish church there are a Wesleyan Methodist and a Baptist chapel, and a Free, a National, and an Infant school. A market was formerly held here. *Quorn*, 8 miles N. by W. from Leicester, population of the township 1876, is a busy village on the navigable

branch of the Soar, with a station on the Midland railway. The inhabitants are employed in frame-work knitting, lace- and glove-making, and tanning. Besides the church, which is ancient, there are chapels for Wesleyan and Primitive Methodists and Baptists, and National and Infant schools. Quorn has some celebrity as the head-quarters of the Quorndon or Quorn hunt. Some good mansions are in the neighbourhood. *Ratby*, 5 miles W. by N. from Leicester, population of the township 719, is a large irregularly-built village, near the Leicester and Swannington railway. Besides the church, which is a large old building, there are a Primitive Methodist meeting-house and an Infant school. Frame-work knitting is carried on. *Rothley*, 5½ miles N. from Leicester, population of the township 985, many of whom are frame-work knitters. On the green is an ancient manorial court-house. Besides the church there are chapels for Wesleyan and Primitive Methodists and Baptists, a Free school for 15 poor boys, a National and an Infant school. The mechanics institute had 80 members in 1851, with a library of 190 volumes. *Sheepshed*, 4 miles W. from Loughborough, on the edge of Charnwood Forest: population, 3759. The stocking manufacture is the chief employment; glove-making and needle-making are also carried on. In the middle of the village is a stone cross, consisting of a single shaft, standing on steps. Besides the church there are chapels for Baptists and Roman Catholics. *Sileby* is 7¼ miles N. from Leicester on the Midland railway, which has a station here: population 1680, chiefly frame-work knitters. The church is a fine example of the perpendicular style. There are chapels for Wesleyan and Primitive Methodists and Baptists, and a National school. *Syston*, 5 miles N. by E. from Leicester, near the junction of the Midland and Peterborough railways, and of the Soar and Wreak navigations: population, 1669. The village is large and increasing; it consists of several streets of shops, and there are large coal-dépôts by the railway. The church is a spacious building, partly of Norman date. There are chapels for Wesleyan and Primitive Methodists and Baptists; and Free, National, and Infant schools. Frame-work knitting is the chief source of employment. Malting, brewing, tanning, needle-making, rope-making, and currying are carried on. *Waltham-on-the-Wolds* is situated, as its name implies, in the Wold district in the north-eastern angle of the county, 5½ miles N.N.E. from Melton Mowbray: population, 732. The church, a handsome cruciform structure chiefly of the decorated style, was restored within the last few years. There are a Wesleyan chapel and a National school. An agricultural association is established here, for whose meetings a neat Grecian building has been erected. Yearly meetings are held for the exhibition of stock, awarding of prizes, &c. A large cattle and horse fair is held on September 18th and 19th. *Wigston-Magna* is a large village, 4 miles S. by E. from Leicester: population, 2189. Wigston has grown into a small town within the last few years. There are some extensive hosiery manufacturers in the place, who employ many hands. There are two churches, chapels for Wesleyan and Primitive Methodists and Independents, National and British schools, and almshouses for six poor persons. *Wymenold*, 13 miles N. from Leicester, on the Nottinghamshire border of the county, population 1235, is a large and well-built village, formerly a market-town. The inhabitants are employed in frame-work knitting and lace-making. The handsome gothic church was lately restored at a considerable expense. There are chapels for Wesleyan and Primitive Methodists, and National schools. *Wymondham*, 7 miles E. from Melton Mowbray, near the junction of the county with Lincolnshire and Rutlandshire, is a place of considerable antiquity: population, 800. The church is a handsome cruciform structure, with a lofty spire. There are chapels for Wesleyan Methodists and Independents, and a British school. A Free Grammar school was founded here in 1637 by Sir John Sedley; its income from endowment is about 153*l.* a year: in 1851 it had 40 scholars.

Divisions for Ecclesiastical and Legal Purposes.—This county is in the diocese of Peterborough and in the ecclesiastical province of Canterbury. It constitutes the archdeaconry of Leicester. Leicestershire is in the Midland Circuit; the assizes and quarter sessions are held at Leicester. By the Poor-Law Commissioners Leicestershire is divided into 11 Unions:—Ashby-de-la-Zouch, Barrow-on-Soar, Billesdon, Blaby, Hinckley, Leicester, Loughborough, Lutterworth, Market Bosworth, Market Harborough, and Melton Mowbray. These Unions include 325 parishes and townships, with an area of 508,684 acres, and a population in 1851 of 235,494. County courts are held at Ashby-de-la-Zouch, Hinckley, Leicester, Loughborough, Lutterworth, Market Bosworth, Market Harborough, and Melton Mowbray. Leicestershire formerly returned four members to Parliament, namely, two for the county, and two for the borough of Leicester. By the Reform Act the county was divided into a northern and a southern division, each division returning two members. The borough of Leicester still returns two members.

History, Antiquities, &c.—Leicestershire was anciently comprehended in the territory of the Coritani: and when the Romans had subjugated Britain and divided it into provinces, it was included in the province of Flavia Caesariensis. The Romans established several stations within or near upon the limits of the county: *Ratae* (Leicester); *Vernometum*, near Willoughby (on the road from Leicester to Newark); *Manduessedum* (Manchester, near Atherstone); *Benone*, or *Venone* (High Cross, between Lutterworth and Hinckley); and

Tripointium, on the Avon, near Catthorpe, a village south of Lutterworth. Of these stations however only Ratae strictly belongs to this county. Venonæ and Tripointium are just on the border; the others are beyond it. Ratae, as it is termed in the Itineraries of Antoninus, and Bagæ and Ratisorion, according to Richard of Cirencester, was on the site of the modern Leicester. Many tessellated pavements, coins, urns, and domestic and military utensils have been discovered at different times. A Roman mile-stone was discovered in 1771, about two miles north from the town, on the side of the Fosse road: it is cylindrical like the shaft of a column with a roughly carved inscription, showing it to have been set up in the time of the emperor Hadrian. It is now in the Museum at Leicester. South of Leicester town are two remarkable parallel embankments, called the 'Raw Dykes,' extending about three furlongs in length, and about 16 yards apart. There do not appear to be any remains of Venonæ, which probably stood at the intersection of Watling-street and the Fosse Way; but Camden reports that great foundations of square stones had been discovered under ground, and, since his time, coins have been found here. There are traces of Tripointium near Catthorpe. There are remains or traces of encampments, probably Roman, at four or five places in the county. Tessellated pavements have been found at Rothley and Wanlip. At Wanlip were found also coins and broken urns.

The Roman road Watling-street forms the boundary between this county and Warwickshire from Tripointium, or Catthorpe, to the neighbourhood of Manduessedum (Manchester, near Atherstone). The Fosse Way, another ancient road, which intersects Watling-street at Venonæ (High Cross), runs in a direct line north-east to Ratae (Leicester); and thence north-north-east to Vernomestum, near Willoughby, just within the border of Nottinghamshire. The Via Devana enters the county on the south-east, crossing the Welland near Medbourne, and runs north-west by Ratae (Leicester) and Ashby into Derbyshire. Some remains of the Fosse Way and Via Devana may be traced.

During the Heptarchy, Leicestershire was included in the kingdom of Mercia. In the year 680, or according to others 737, Leicester was made the seat of a bishopric transferred thither from Sidnacester. The diocese was afterwards united to the previously existing see of Dorchester (in Oxfordshire).

By the treaty between Alfred and Guthrun the Dane (878 or 880), Leicestershire was included in the Danelagh, or Danish territory; and Leicester became one of the great Danish burghs. It was recovered by Ethelfleda, governess of Mercia, during the reign of Edward the Elder.

Upon the Norman conquest, Leicestershire was divided between the followers and relatives of the Conqueror. Several of these or their descendants, to secure the territory thus acquired, erected castles or repaired older ones at Ashby-de-la-Zouch, Leicester, Mount Sorrel, Shilton, Whitwick, Groby, Hinckley, Donington, Melton Mowbray, Ravenston, Thorpe, Saucy, and Belvoir. Of these castles, except that at Ashby, there are few remains. The present Belvoir Castle is a more modern edifice, erected or restored by the first Earl of Rutland, in the end of the 15th or beginning of the 16th century. Most of the other castles are mentioned elsewhere. Of Groby (near Leicester) the earth-works and a few fragments of the masonry remain.

Upon the accession of William Rufus, Leicestershire was ravaged by Hugh Grentemaisnell, who supported the cause of Robert, duke of Normandy. It was on this occasion that Leicester Castle was taken by William Rufus. The county was again the scene of contest in the civil troubles of the reigns of John and Henry III. The civil war of the Roses was closed by the defeat and death of Richard III. at Bosworth Field in this county, 1485.

In the civil war of Charles I. the men of Leicestershire seem generally to have taken the side of the Parliament. Several severe skirmishes took place in the county in 1643-45. On the 31st of May 1645 the king took Leicester by storm; the garrison consisted of about 450 soldiers and 500 to 600 townsmen; the resistance was obstinate but unavailing. The besieging army was estimated at 4000. The triumph of the king was short: the decisive battle of Naseby in Northamptonshire, was won by the Parliament a fortnight after the capture of Leicester; and Leicester was retaken four days after. In his subsequent marches the king came once or twice to Belvoir and Ashby. Belvoir was taken by storm in November the same year, and the garrison at Ashby surrendered in the February following.

Religious Worship and Education.—According to the Returns of the Census of 1851, it appears that there were then in the county 655 places of worship, of which 289 belonged to the Church of England, 201 to six sections of Methodists, 85 to Baptists, 41 to Independents, 12 to Roman Catholics, 7 to Mormons, 3 to Quakers, and 3 to Unitarians. The total number of sittings provided was 159,215. The number of Sunday schools in the county was 432, of which 227 belonged to the Church of England, 103 to Methodists, 61 to Baptists, 26 to Independents, 6 to Roman Catholics, and 3 to Unitarians. The total number of scholars was 36,282. The number of day-schools in the county in 1851 was 709, namely, 278 public day-schools, with 19,392 scholars, and 431 private day-schools, with 8862 scholars. The number of evening-schools for adults was 20, with 784 scholars. There were 14 literary and scientific institutions, with 1849 members, and possessing in their libraries about 10,000 volumes.

Savings Banks.—In 1852 the county possessed 7 savings banks, at Ashby-de-la-Zouch, Hinckley, Leicester, Loughborough, Lutterworth, Market Harborough, and Melton Mowbray. The total amount owing to depositors on the 20th of November 1852 was 226,256*l.* 10*s.* 1*d.*

LEIGH. [Essex.]

LEIGH, Lancashire, a market-town and the seat of a Poor-Law Union, in the parish of Leigh, is situated in 53° 30' N. lat., 2° 31' W. long., distant 13 miles W. by N. from Manchester, 197 miles N.W. from London by road, and 192½ miles by the London and North-Western railway. The population of the town of Leigh in 1851 was 5206. The living is a vicarage with the curacy of West Leigh annexed in the archdeaconry and diocese of Manchester. Leigh Poor-Law Union contains 10 townships and chapelrys, with an area of 24,352 acres, and a population in 1851 of 32,733.

The town of Leigh is chiefly dependent on the silk and cotton manufactures. Glue-works, coal-pits, stone-quarries, and flour-mills in the neighbourhood also afford employment. The town is lighted with gas. In the town-hall, erected in 1840, the petty sessions and the county court are held: the great room is also used for concerts and meetings. Leigh parish church is an ancient edifice of stone, consisting of nave, chancel, and aisles, with a tower. The Wesleyan, Primitive, and Association Methodists, Baptists, and Swedenborgians have places of worship in Leigh. The Free Grammar school, founded in 1656, has an income from endowment of 24*l.* 16*s.* a year, and had 70 scholars in 1853. There are also National and British schools, a Charity school for girls, a Quakers school, and a Roman Catholic school; a mechanics institute, which in 1851 had 183 members, and 1125 volumes in its library; and a savings bank. The district around Leigh is famous for the production of cheese. Leigh communicates with Manchester by the Duke of Bridgewater's Canal, and with the Leeds and Liverpool Canal by a branch canal to Wigan. The market-day is Saturday; fairs are held on April 24th and 25th, and on December 7th and 8th.

LEIGHLIN, a bishop's see in the archiepiscopal province of Dublin, in Ireland, comprehends the county of Carlow, and extends into the counties of Wicklow, Wexford, Queen's County, and Kilkenny. The chapter consists of a dean, precentor, chancellor, treasurer, archdeacon, and four prebendaries. The number of benefices is 62. The founder of this diocese was St. Lasserian, who supported the Roman mode of celebrating Easter at the Synod of Leighlin, A.D. 630. Prior to that time the church of Leighlin had been ruled by an abbot. The bishoprics of Leighlin and Ferns were united in 1600, and have been lately incorporated with the see of Ossory under the Church Temporalities Act. The income of the united bishopric is 3850*l.* The cathedral is the parish church of Old Leighlin. [CARLOW, County of.]

LEIGHLIN BRIDGE. [CARLOW, County of.]

LEIGHTON, or LEES. [Essex.]

LEIGHTON BUZZARD, Bedfordshire, a market-town and the seat of a Poor-Law Union in the parish of Leighton Buzzard, is situated in 51° 55' N. lat., 0° 39' W. long., distant 20 miles S.S.W. from Bedford, 41 miles N.W. from London by road, and 40½ miles by the London and North-Western railway. The population of the town of Leighton Buzzard in 1851 was 4465. The living is a vicarage in the archdeaconry of Bedford and diocese of Ely. Leighton Buzzard Poor-Law Union contains 16 parishes and townships, with an area of 37,980 acres, and a population in 1851 of 17,141.

Leighton Buzzard is a place of considerable antiquity. An ancient market-cross, an elegant erection of the perpendicular style, pentagonal in form, is in the market-place. The streets are lighted with gas. A town-hall was built in 1851 by Lord Leigh. The parish church, erected about 1220, was originally early English in style, but it has been much modernised. There are chapels for Wesleyan Methodists, Baptists, and Mormons; a British school, a new school in connection with the church, a savings bank, and several benevolent institutions and charitable foundations. The Leighton Institute, chiefly for the delivery of lectures, formed about 5 years ago, has a library connected with it. Straw-plat is made in almost every cottage in the town. Cattle are extensively raised in the vicinity for sale in the London market. A large cattle market is held weekly on Tuesday: 5 fairs are held in the course of the year: the wool fair, in July, is frequented by buyers from the west and north of England. A county court is held in the town.

LEININGEN, or LINANGE, formerly a county situated between the Lower Palatinate and the bishoprics of Spire and Worms, gives its name to one of the wealthiest of the mediatised German houses. The principal line obtained in 1779 the dignity of princes of the empire: in 1803 it lost its possessions on the left bank of the Rhine, which had an area of 250 square miles, with a revenue of 168,000 florins, and obtained instead Amorbach, Miltenberg, and several other bailiwicks, the area of which is 520 square miles, with 86,000 inhabitants, in 15 towns, 9 market villages, and 171 other villages, producing a revenue of 568,000 florins, which form together the present principality of Leiningen. The principality was mediatised in 1806; 410 square miles of it are under Baden, 100 under Bavaria, and 10 under Hesse-Darmstadt. The population of the principality is now about 107,000. The present Prince Charles is half-brother to the queen of Great Britain. He resides at Amorbach, in the Odenwald, 28 miles west from Würzburg and south from Aschaffenburg, on the Müdt,

a small feeder of the Mayn: population about 3000. It has some manufactures, a new palace, with fine gardens, and a very handsome church. The religion of this branch is Lutheran. There are four other branches of the house of Leiningen, two Lutheran and two Roman Catholic.

LEINSTER, one of the four provinces of Ireland, extends from 52° 6' to 54° 7' N. lat., 6° to 8° 3' W. long., including the eastern half of the central and south-eastern parts of Ireland.

Leinster possesses greater advantages than the other provinces in point of soil and surface, being little incumbered with mountains, and having consequently superior facilities for internal communication. The navigable Shannon forms part of its western boundary, and the navigable Barrow intersects its central and southern counties. The Boyne also, the basin of which lies within its north-eastern limits, is partly navigable, and the Grand and Royal canals traverse it from east to west. The coast is inferior in point of natural harbours to that of the remainder of the island, but it is more sheltered from the prevalent winds.

Upon the conquest of Ireland by the English in 1170 the present province was divided into the two petty kingdoms of Meath and Leinster, and embraced also a part of the then kingdom of Ulster, in the present county of Louth. The first counties erected were those of Dublin, including the present county of Wicklow; Meath, including the present counties of West Meath and Longford; Louth; Kildare, including the present King's and Queen's counties; Carlow, Kilkenny, and Wexford. Meath was divided into Meath and West Meath in the reign of Henry VIII.; King's and Queen's counties were separated from Kildare and erected into separate counties in the reign of Mary; Longford was made shire-ground in the time of Elizabeth; and Wicklow was made a county in the reign of James I.

The area of the respective counties, and of the three chief towns in the province, with the population of each at the four decennial periods of 1821, 1831, 1841, and 1851, are given in the article IRELAND, col. 298.

LEINTWARDINE. [HEREFORDSHIRE.]

LEIPZIG, a circle or province in the north-west of the kingdom of Saxony, is bounded W. and N. by Prussia, E. by the circle of Dresden, and S. by the circle of Zwickau and the principality of Saxe-Altenburg. Its area is 1826 square miles, and the population in 1852 amounted to 446,826. The circle belongs to the basin of the Elbe. The western part of it is drained by the White Elster, which receives the Pleisse and the Partha; the eastern districts are watered by the Mulda, which is here formed by two head-streams, both called Mulda, which rise in the Erzgebirge and flow past Zwickau and Freiberg respectively. There are a few small lakes. The soil is fertile in corn and pasture; tobacco is grown extensively. The country is level, except in the south and south-east, where there are some offsets of the Erzgebirge. The land is generally well cultivated; the country is deficient in wood, which is procured from the Erzgebirge and the circle of Voigtland. There are no metals, but there are fullers' earth and potters' clay, limestone, marble, porphyry, jasper, and great quantities of peat. There is a very good breed of sheep, of which the circle possesses a large number.

This is not one of the manufacturing circles of Saxony: there are however flourishing manufactures of woollens, cotton, linen, and pottery in all the towns; but in the villages, which are above 1000 in number, all hands, generally speaking, are required for agriculture. The climate is temperate and healthy.

Leipzig, the capital of the province, forms the subject of the next article. [LEIPZIG.] The other towns are small. Among them we name the following, with the population in round numbers:—*Grimma*, a walled town on the Mulda, here crossed by a stone bridge, 5100; *Döbeln*, on an island in the Mulda, 6000; *Leisnig*, a walled town defended by a castle, on the Freiberg Mulda, 4800; *Rochlitz*, on the Zwickau Mulda, 4100; *Geithayn*, west of Rochlitz, 4800; *Mitweyda*, on the Zschopau, a feeder of the Freiberg Mulda, 6800; *Colditz*, on the Zwickau Mulda, 3000; *Borna*, on the Wyhra, a feeder of the Pleisse, 3800; *Pegau*, on the White Elster, 3500; *Würzen* on the Mulda, here crossed by three bridges, 4100; and *Mügelin* on the Döllnitz, a small feeder of the Elbe, about 2200.

Most of these towns have manufactures of broadcloth, cotton, linen, beer, &c. The province is traversed by several railroads which connect Leipzig with all parts of Germany. One line proceeds from Leipzig southward through Borna to Augsburg and Munich; another south-east to Dresden, Prag, and Vienna, with a branch from the Riess junction through Döbeln to Chemnitz; and a third line northward to Magdeburg and Berlin.

LEIPZIG, the capital of the province of Leipzig, and the second city in the kingdom of Saxony, is situated in 51° 20' 16" N. lat., 12° 21' 45" E. long., 72 miles W.N.W. from Dresden, in an extensive plain watered by the Pleisse, into which the White Elster, the Parde, and the Luppe flow. The swamps that formerly existed in this plain have been filled and drained, and it is now extremely fertile and healthy, and covered with flourishing villages. The town, including its four suburbs, is nearly a mile in length from north to south, parallel to the course of the Pleisse, and three-quarters of a mile in breadth. It contained in 1852 a population of 66,682. It was formerly well fortified, but the ramparts have been converted into public walks, and

partly laid out as gardens. The only remaining part of the fortifications is the castle, called the Pleissenburg, upon which the observatory now stands.

Leipzig is irregularly built; the streets are generally narrow, though well paved and lighted, but it contains many very handsome parts, numerous elegant public buildings, private houses resembling palaces, and many seats, with fine gardens, in the suburbs. The most remarkable edifices are St. Thomas's church; St. Nicholas's, a venerable and magnificent building, adorned with paintings; St. Paul's, or the University church; St. John's, in which is the marble monument of Gellert; the theatre; the town-hall, built in 1599; the cloth-hall; the Pleissenburg, with the observatory, which is furnished with excellent instruments, and stands in 51° 20' 19" N. lat., 30° 1' 52" E. long. of Ferro, 10° 1' 45" E. of Paris; and the Königshaus, or King's House, near the town-hall on the great market square. In this house Napoleon I. lodged during the battle of Leipzig, and Field-Marshal Schwarzenberg, who then commanded the allies, died in it in 1820. The great building called Auerbach's House is in the time of the fairs a kind of bazaar, where the finest and most costly articles are exposed for sale. There are numerous excellent schools and academies, and many literary and learned societies, a deaf and dumb institution, an academy of painting and architecture, many museums, several picture galleries, a public library containing 120,000 volumes and 2000 manuscripts; and several charitable institutions. Besides its great publishing and printing establishments, noticed in a subsequent part of this article, Leipzig possesses large type-foundries, oil-mills, paper-mills, and manufactories of musical, optical, and mathematical instruments, bronzed ware, hats, leather, and hardware. Leipzig though comparatively small, has become one of the most important cities in Europe, owing to its university, its fairs, and its book-trade.

The University was founded in 1409 by the Elector Frederick on the model of the universities of Prague and Paris. The 4th of December, 1409, is considered as the date of the foundation, and the Bull of Alexander VI. confirming it is of the same year. The establishment is richly endowed. There are four faculties—Protestant theology, law, medicine, and philosophy;—94 professors and teachers; the number of students in 1850 was 846. Connected with the university are a philological seminary, a clinical institution, a school of midwifery, a botanic garden, a chemical laboratory, an ophthalmic institution, &c. The library of the university contains 80,000 printed volumes, and 2000 manuscripts; it is particularly rich in works on philology, medicine, and divinity. A great ornament of the university is the Augusteum, erected in memory of King Frederick Augustus, and opened in 1835. It is a very fine building, 300 feet in length and three stories in height, and contains a great hall, lecture-rooms, and apartments for the library and the collections of natural history. Besides the university Leipzig possesses two gymnasia for superior instruction, the Thomasschule with 213 pupils in 1850, and the Nicholaschule with 150 pupils.

The origin of Leipzig was the Slavonian village in the angle between the Parde and the Pleisse, which is said to have received its name from the lime-trees growing about it, which are called in Slavonian Lip, Lipa, or Lipsk. It is not spoken of as a fortified town till the 12th century, when Margrave Otho the Rich granted it a license to hold two fairs at Easter and Michaelmas. At that time the number of the inhabitants was between 5000 and 6000. Otho's son Dietrich designed to curb the mutinous spirit of the citizens by erecting in 1213 three castles, of which only the Pleissenburg still exists, but in a very different form. The first fair at New Year was proclaimed in 1458, and the three fairs were confirmed by the emperor in 1507. These fairs laid the foundation of the prosperity and wealth of Leipzig. The concourse of merchants from various countries is very great. The value of the goods sold at the Easter Fair is estimated by Mr. Macgregor, in his 'Commercial Statistics,' at upwards of 3,000,000 sterling. The goods sold at these fairs comprise the products and manufactures of Saxony and the States of the Zollverein—broad-cloths, merinoes, calicoes, printed cottons, damasks, hosiery, hard- and glass-ware, wool, books, paper, leather, &c.; the cotton manufactures, thread and yarns, woollens, and hardwares of England; the shawls, silks, lace, jewellery, and watches of France; the toys of Nürnberg; the glue, furs, bristles, and cantharides of Russia; the plated goods, glass, fine broadcloths, shawls, and embroidered goods of Austria; and the clockwork, embroidery, and printed cottons of Switzerland. Merchants from nearly every country in Europe, Americans, Armenians, Persians, Turks, and occasionally Australians, attend these Leipzig fairs.

The singular concentration of the German book-trade in Leipzig has been a main cause of the celebrity and wealth of that city. The first catalogue appeared in the 16th century. The number of new works announced has gradually increased. It was not till 1816 that above 3000 new works appeared in Germany; since then the number annually published has more than doubled. The peculiar feature in the German book-trade is, that every publisher has his commissioner at Leipzig to whom he sends prospectuses and specimens of his new publications, which the commissioner distributes and makes known. At the Easter Fair booksellers from all Germany, Sweden, Denmark, the Russian Baltic provinces (where the German language is spoken), from the Netherlands, and even France and England, to the number

of above 300, meet at Leipzig to settle their accounts, &c.; and this meeting has acquired additional importance by the establishment of a Booksellers' Exchange, a handsome building, opened in May, 1836. There are in the city about 120 publishing establishments, and 23 great printing-houses, with 260 presses, 14 of which are worked by steam.

In September 1631 the great victory obtained by Gustavus Adolphus over Tilly was fought on the plain of Leipzig. In 1642 the city was besieged by the Swedish general Torstenson, after defeating the imperial army under the Archduke Leopold William and Piccolomini, who came to its relief. In the fearful battle of Leipzig, fought on the 16th, 17th, and 18th of October, 1813, Napoleon I. was totally defeated by the allied armies under Prince Schwarzenberg. Gesner, Ernesti, Fischer, and Reiske have been rectors of the schools of Leipzig; and Leibnitz, Thomasius, Fabricius, and Teller were natives of this city.

(Leonhardi, *Geschichte und Beschreibung der Kreisstadt Leipzig*, Leipzig, 1799; Dolz, *Versuch einer Geschichte von Leipzig*, Leipzig, 1818; Gretschel, *Leipzig und seine Umgebungen*, Leipzig, 1828.)

LEIRIA. [ESTREMADURA; PORTUGAL.]

LEITH, Edinburghshire, Scotland, a sea-port town and a municipal and parliamentary burgh, is situated on the banks of the Water of Leith, at its confluence with the Frith of Forth, in 55° 58' N. lat., 3° 9' W. long., about 2 miles N.E. from Edinburgh. The population of the municipal burgh or town of Leith in 1851 was 30,919. The burgh is governed by 4 bailies and 12 councillors, of whom one is provost; and, conjointly with Portobello and Musselburgh, returns one member to the Imperial Parliament.

Leith is mentioned as early as the reign of David I., and has for several centuries maintained a respectable rank among the maritime towns of Scotland. In 1313, and again in 1410, the English burned the vessels in the harbour. In 1541 the town was fired, and almost destroyed, by the English fleet. In 1549 the French, in the interest of Mary of Guise, took possession of the town. In 1560 the forces of Queen Elizabeth besieged it, in conjunction with the Scottish Protestant forces under the Lords of the Congregation. Leith fort was repaired, and a citadel, with 5 bastions, erected by Cromwell. In 1715 the citadel was held for a short time by the adherents of the Pretender. In 1822 George IV. landed on the pier.

The town is irregularly built, and in some parts not well paved; in the older portions of the town the streets are narrow and inconvenient, and the houses closely built; of late years some good streets and numerous dwelling-houses of a superior character have been erected, particularly in the neighbourhood of the Links, on the south-east side of the town. The town is lighted with gas, and has a good supply of water. Two draw-bridges and a stone bridge over the Water of Leith connect North Leith and South Leith. Among the public buildings are the town-hall, or court-house, erected in 1828, in which are held the burgh and sheriff courts; the exchange buildings, a Grecian structure, containing commodious assembly-rooms, reading-rooms, and the post-office; the Trinity-house, or mariner's hospital, erected in 1817; the custom-house, on the west side of the harbour, erected in 1812, at a cost of 12,000*l.*; the female asylum for incurables, erected by the late Sir John Gladstone, Bart., of Fasque, a native of Leith; and a new poor-house for the parish of South Leith. The parish church of South Leith, erected probably about 1490, has been recently repaired at an expense of about 3000*l.* North Leith Church is a neat and spacious modern structure in the Grecian style, erected in 1814 at a cost of 12,000*l.* St. Thomas's church was built and endowed by Sir John Gladstone, in connection with the asylum erected by him. The Free Church has four chapels, besides the Mariners' church; the United Presbyterians have four chapels, and there are one each for Original Seceders, Wesleyan Methodists, Episcopalians, Independents, the Evangelical Union, and Roman Catholics. There are several public schools including the High school, which is conducted by six teachers, and is under the management of the town-council and the ministers of South Leith; Dr. Bell's school, in which about 700 children receive instruction on the Madras system; and a Charity school for boys. There are also a savings bank, a public library comprising 8000 volumes, belonging to 185 annual subscribers, and a mechanics subscription library. The incorporated trades are the ship-masters, usually termed the Trinity House, combining the features of a benefit society with those of a board for licensing pilots; the traffickers, or merchant company; and the conveyers of trades, representing eight trades. The position of the town near the mouth of the estuary of the Forth causes considerable difficulty in keeping the harbour clear from accumulations of sand brought down by the river. Great expense has been at various periods incurred to deepen the harbour, and render it commodious for shipping. For this purpose two wet-docks were constructed and opened, one in 1806, the other in 1817, each 250 yards long, and 100 yards broad; three dry, or graving docks, 136 feet by 45 feet, were also made, and the eastern pier was carried out on a level with the Martello Tower. The eastern pier, which is constructed in part of timber, extends about 3000 feet into the Frith, and forms a fine promenade. A new pier, nearly parallel to the old one, was erected in 1852, and another wet-dock to the north of the previous existing eastern dock, was constructed. The new dock is of nearly similar size to the other docks, but the depth of water is greater. These operations have caused a considerable expenditure, to which govern-

ment has largely contributed, but greatly increased accommodation has been afforded to the shipping. A large proportion of the Leith vessels is engaged in the Baltic trade. Steamers sail from Leith to various ports in the Frith of Forth, to the east and north of Scotland, to Hull, to London, Hamburg, and Rotterdam. The number and tonnage of vessels registered at the port of Leith on December 31st, 1853, were:—Under 50 tons 79, tonnage 2350; above 50 tons 102, tonnage 22,007; steam-vessels, 13, of 274 tons, and 15 of 3672 tons. In the coasting-trade, during 1853, there entered the port 1069 sailing-vessels of 66,931 tons, and 614 steam-vessels of 182,496 tons. During 1853 there cleared out 734 sailing-vessels of 55,387 tons, and 615 steam-vessels of 184,059 tons. In the colonial trade 24 vessels of 7993 tons entered, and 32 vessels of 11,307 tons cleared from the port. In the foreign trade there entered 236 British vessels of 34,322 tons, and 891 foreign vessels of 86,912 tons; and there cleared out 86 British vessels of 14,696 tons, and 265 foreign vessels of 28,769 tons; with 78 British steam-vessels of 18,005 tons, and 2 foreign steam-vessels of 320 tons inwards, and 73 British steam-vessels of 16,965 tons, and 1 foreign steam-vessel of 160 tons outwards. The chief imports are flax, tallow, hides, hemp, wines, &c. In Leith are several rope, cordage, and sail-cloth manufactories, and sail-making establishments; ship-building yards and slips; oil and colour works; chemical works; glass-works; soap and candle factories; an extensive meat preserving establishment; corn-mills; iron-foundries; engineering works; and other establishments. Leith has communication by the North British and the Edinburgh and Northern railways with all parts of the kingdom.

LEITMERITZ, an episcopal town in Bohemia, is situated on the slope of a hill above the left bank of the Elbe, in 50° 30' N. lat., 14° 5' E. long., and has about 5000 inhabitants. The Elbe is here navigable, and spanned by a bridge 843 feet in length. The town is surrounded with walls and a moat. It has a very fine cathedral, dedicated to St. Stephen, and eleven churches, the principal of which is All Saints; an episcopal palace, a handsome town-hall, a gymnasium, a theological seminary, &c. The surrounding district is extremely fertile; it is laid out in corn-fields, vineyards, hop-gardens, and orchards; the best Bohemian wines are produced in the neighbourhood, and vast quantities of fruit. The town has an active trade in corn, fish, and wine. The Elbe contains sturgeon, shad, and salmon. The bridge across the Elbe connects the town with Lobositz, a station on the Dresden-Prag railway, distant 65 miles S. by E. from Dresden, and 53 miles N. by W. from Prag.

LEITHRIM, a maritime county of the province of Connaught in Ireland, is bounded N. by the Bay of Donegal and by the counties of Donegal and Fermanagh, E. by Fermanagh, Cavan, and Longford, S. by Longford, and W. by Roscommon and Sligo. It lies between 53° 47' and 54° 27' N. lat., 7° 35' and 8° 25' W. long., and extends from north-west to south-east 51 miles, with a breadth varying from 5½ to 21 miles. The area is 613 square miles, or 392,363 acres, of which 249,850 acres are arable, 3396 acres in plantations, and 23,784 acres under water. In 1831 the population was 141,524; in 1841 it was 155,297; in 1851 it was 111,841.

The outline of Leitrim is very irregular. Lough Allen stretches across the narrowest part of the county, dividing it into two nearly equal parts. The district lying south and east of Lough Allen is an irregular parallelogram of about 18 by 20 miles, the western and south-western sides of which are formed by the lake and the line of the Shannon, and the north-eastern and south-eastern sides by the boundaries of the counties of Cavan and Longford respectively. The southern portion of this district, abutting on the counties of Longford and Roscommon, is to a considerable extent occupied by low, narrow, and steep ridges, shutting in numerous small lakes, and flanking the streams and roads by which the intermediate valleys are traversed. Of the lakes the principal is Lough Rinn, which is about two miles in length by half a mile in breadth; it is formed by an expansion of the river Rinn, which runs southward out of Leitrim through the north-western extremity of Longford to the Shannon. The Ealin, which brings down the waters of several small lakes situated between the Rinn and the Shannon, joins the latter river at the southern extremity of Lough Boffin. Northward from this hilly tract extends an open undulating plain, interspersed with numerous lakes and streams as far as the southern extremity of Lough Allen. This district forms part of the great limestone plain of Ireland, and contains some excellent arable land, but is in general better adapted for grazing. The surface is irregularly traversed by a great number of clay and gravel ridges. The principal heights on this plain are Sheemore and Sheebeg, two hills of moderate elevation rising from the left bank of the Shannon. The main drainage of the limestone district is southward and westward to the Shannon, but several streams in the north-eastern division of it run eastward to the lakes on the border of Cavan. Of the streams the principal is the Yellow River, which runs past Ballinamore into Lough Garadice, and thence, under the name of the Woodford River, to Lough Erne. A cluster of lakes, of which the largest are Lough Sour and St. John's Lough, occupies a tract of about 6 miles in length on the north of the limestone district near Ceshcarrigan; and there are upwards of fifty other lakes, varying from a quarter of a mile to a mile in length, scattered throughout the same portion of the county.

That part of the basin of Lough Allen which is in this county is bounded by the Slieve-an-Ierin Mountains on the east, by the Lackagh range on the north, and by a part of the Munterkenny and Braulieve ranges on the west. The group of Slieve-an-Ierin extends from above Drumshambo into the west part of Cavan, a distance of about 12 miles. Its highest point, called Slieve-an-Ierin, is at its southern extremity, and has an altitude of 1922 feet. The summits of Bencroy and Larganacailagh, which are farther north, rise to 1707 and 1494 feet respectively. East of the two latter mountains the Yellow River descends by a broad and precipitous channel to Lough Garadice; and the Shannon, which has its source in Cavan, enters the northern extremity of Lough Allen through the valley intervening between Larganacailagh and the Lackagh group. The highest summit of the Lackagh range is 1448 feet, and between it and the Munterkenny group a wide valley intervenes watered by the Diffagher, the outlet of Lough Belhavel, which lies on the watershed between Lough Allen and the bays of Sligo and Donegal. The Munterkenny Mountains, on the west shore of Lough Allen, attain the height of 1377 feet, and bound on the north the valley of the Arigna, which river for some distance constitutes the boundary between Leitrim and Roscommon, and runs into the southern extremity of Lough Allen through a portion of the latter county. Lough Allen is 8 miles in length, and from 1 to 3 miles in breadth, and lies nearly north and south. The Shannon issues in a noble stream from its southern extremity, at which point the scenery is highly picturesque, as well as at the opposite end of the lake, where several islands and peninsulas diversify the outline. The general aspect of the lake however is gloomy; the high grounds that bound it are bleak and deficient in grandeur, rising gradually and with gentle slope from its shores. Its summer level is 159 feet, and its winter level 163 feet above the level of the sea at low water. The Shannon, in its passage from Lough Allen to the extremity of the county has a fall of 30 feet, which is principally distributed over the first 7 miles of its course, where the difficulty of navigation has been obviated by the construction of lateral canals. By the improvements lately effected by the commissioners for the improvement of the Shannon, steamers of considerable size now ply between Killaloe and the northern extremity of Lough Allen.

Beyond the range of Lackagh and the table-land occupied by the Lake of Belhavel rise four detached mountain groups, including, with the heights of Lackagh, five distinct valleys, which unite in a pleasantly-situated plain occupying nearly the centre of the northern division of the county. The town of Manorhamilton and the village of Lurganboy are situated in the common terminus of these valleys, and through these towns the entire inland communication between Leitrim and Sligo and the northern counties is carried on. Of the valleys the best defined is that of the Bonnet. The Bonnet, rising in Lough Glenade, near the north-western extremity of the county, runs south-east, between the heights of Dartree on the north and a prolongation of the Benbulbin range in Sligo on the south, to within a mile of Manorhamilton, where it is joined by the Owenmore on the left bank. The river then sweeps round nearly in a semicircular course past Dromahair into Lough Gill, the waters of which are discharged by the Garogue River into the Bay of Sligo. The valley of the Bonnet between Dromahair and Manorhamilton is inclosed by the brow of Lackagh on the east, and on the west by the mountain of Benbo (1400 feet) and its subordinate range. The slopes on each side of the valley are well wooded, and the whole scene is one of considerable beauty. North of the group of Benbo lies the valley of Glencar, watered by the Differen, which runs westward through Lough Car into Sligo Bay. Glensfarn, another valley terminating in the open country round Manorhamilton, lies nearly due east and west, and is watered by a considerable river running eastward into Lough Macnean, which is included in the basin of Lough Erne. This valley is bounded by the northern brow of Lackagh on the south, and by the heights of Docey on the north, the mountains rising on each side to a height of 1400 to 1500 feet. Steep sides and flat extended summits are the characteristics of all the mountains in this district of Leitrim.

Loughs Macnean and Melvin stretch along the north-eastern boundary of the county, separating it from Fermanagh, in which they partly lie. Lough Macnean is 4 miles long by 2 miles broad; it is 172 feet above the sea-level, and is connected by a short stream about half a mile in length with Lough Nitty (sometimes called Lower Lough Macnean), whence the superfluous waters of both lakes are carried to upper Lough Erne by the Arney River. [FERMANAGH.] Lough Melvin is a dreary sheet of water 8 miles long by 2 miles broad, diversified by four small wooded islands. It lies between the north-eastern base of the Dartree Mountains in Leitrim, and the bleak moorlands of the barony of Magheraboy in Fermanagh on the east. The Leitrim shore of the lake is skirted by the road from Garrison to Kinlough, over which Aghabohad, one of the Dartree summits, frowns from a height of 1346 feet. The sides of these mountains present numerous ravines formed by the action of the streams that rush into the lake. At the western extremity of Lough Melvin is the village of Kinlough, in an open tract expanding towards the sea, and drained by the Drowes River, which carries the surplus waters of Lough Melvin into the Bay of Donegal at the hamlet of Bundrowes. The river Duff, which separates Leitrim from Sligo, runs into the Bay of Donegal at the eastern extremity of the coast-line. The coast

extends for about six miles along the south shore of Donegal Bay. It is for the most part a rocky bluff, rising above a rough stony beach, and is exposed to the whole swell of the Atlantic. There is no shelter on any part of the coast. There are salmon fisheries at the mouths of the Drowes and Duff rivers.

Communications.—A road runs from Bundrowes, through Glenade to Manorhamilton, and thence by the west side of Lough Allen to Carrick-on-Shannon and Drumsna, whence the Dublin and Sligo road runs along the left bank of the Shannon. The other principal roads in the northern district pursue the lines of the several valleys radiating from Manorhamilton. The chief roads in the southern district run east and west, connecting the towns and villages which occupy the northern and southern margins of the open limestone country.

Geology, Mineralogy, &c.—The varieties of surface in Leitrim indicate the internal structure with peculiar precision. The flat-topped mountain groups showing steep escarpments and natural terraces belong to the millstone-grit or Lough Allen coal-formation. The undulating open country has the stratified limestone for its substratum, and the rough coarse land, when not belonging to the Lough Allen basin, generally consists of sandstone, conglomerate, and grauwacke. Where the millstone-grit formation terminates, the stratified limestone reappears, and occupies the greater portion of the district watered by the Bonnet and its tributaries. The grit and sandstone occur however in the detached formation of Dartree, and a stripe of yellow sandstone and conglomerate intervenes between the external limit of the limestone and the sea. The only primary rock within the county occurs along the western boundary of the valley of the Lower Bonnet, where the granitic and trap formation of the Ox Mountains of Sligo is prolonged to within a few miles of Manorhamilton. Benbo, which rises about the middle of this range, is a mass of gneiss passing into mica-slate.

The smelting of iron was carried on in several places round Lough Allen while the wood of the native forests lasted. The iron-ore of the Lough Allen basin, and especially that raised in the Arigna mines, is very rich, yielding when roasted 58.2 per cent. of metallic iron. The chief workable beds of coal are in the Slieve-an-Ierin Mountains and in the valley of Arigna, where they are worked to some extent for smelting purposes. Lead-ore is abundant, but no mines are now worked. Copper-ore and manganese are found on the north side of Benbo. Fullers'-earth, potters'-clay, steatite, and marls are also obtained in the district between Dromahair and Lurganboy. Chalybeate springs are numerous on the borders of the Lough Allen district.

Climate, Soil, Agriculture.—The climate is raw and damp in the northern division of the county. In the sheltered vicinities of Dromahair and Manorhamilton, there is a kindly soil resting on a limestone bottom, and the vegetation is luxuriant. The southern division is more genial, if not less damp, than the northern. The soil is for the most part stiff, cold, and very retentive of wet; but fertile in the valleys where the subsoil is limestone. The best tracts are along the Shannon, Rinn, and Bonnet rivers, and in the vicinity of Drumsna, Mohill, Dromahair, and Manorhamilton. The principal crops are potatoes, oats, and hay. In 1853 there were 84,695 acres under crops, namely:—wheat, 258 acres; oats, 29,516; barley, bere, rye, peas, and beans, 516; potatoes, 22,601; turnips, 1635; mangels, carrots, parsnips, cabbage, and green crops, 1746; flax, 1316; meadow and clover, 27,127. Including an equivalent for detached trees, in 1841 there were 4528 acres growing timber. The system of agriculture is rude and backward in the extreme. Leitrim is more a grazing than an agricultural county. Large quantities of young stock, chiefly horned cattle, are raised on the pasturable plains of the southern district. On 14,206 holdings in 1852 there were 3188 horses, 5100 mules and asses, 77,898 head of cattle, 10,450 sheep, 15,729 pigs, 4789 goats, and 167,571 head of poultry. The total value of the live stock thus enumerated was estimated at 575,622*l.* Turf fuel is everywhere abundant.

The occupations of the people are almost entirely agricultural; linens and coarse woollens for domestic use are the only manufactures of any importance. Some coarse pottery is made at Dromahair. The trade of the county is chiefly in corn, butter, and live stock.

Divisions and Towns.—The county is divided into five baronies:—Rossclogher, north; Dromahair, between Rossclogher and Lough Allen; Carrigallen, south-east; Leitrim, south-west; and Mohill, south. CARRICK-ON-SHANNON, MANORHAMILTON, and MOHILL, the only towns of any importance in the county, are noticed under their respective titles.

The following places may be noticed: the populations are those of 1851:—*Balinsmore*, a neat and thriving market-town with 704 inhabitants, is situated on the Yellow River, nearly mid-way between Lough Garadice and St. John's Lough, 14 miles N.E. from Carrick-on-Shannon. It contains a court-house in which quarter and petty sessions are held, a bridewell, a church, and chapels for Roman Catholics and Methodists. There is a dispensary. The market is held weekly on Tuesday, and fairs are held on May 12th and November 12th. *Carrigallen*, is situated 16 miles E. from Carrick-on-Shannon, and consists chiefly of one long miserable street: population, 337. A market is held weekly on Monday, and five yearly fairs are held. In the neighbourhood are Drumsillagh, the residence of A. O'Brien, Esq., and Cloncarrick Castle, the seat of H. Simpson, Esq. *Cashcarrigan*,

a poor village 8 miles N.E. from Carrick-on-Shannon, is situated in the barony of Leitrim, and is noticed only as being famous for its stock fairs, of which 10 are held in the year. *Dromod*, a village 10 miles S. by E. from Carrick-on-Shannon, is prettily situated on the eastern shore of Lough Boffin, an expansion of the Shannon, and has a population of 213. The neighbourhood of this town presents, perhaps, the finest scenery in the county. Six annual fairs are held in Dromod. *Dromahair*, a small neat village of 346 inhabitants, is prettily situated in the valley of the Bonnet, 22 miles N. by W. from Carrick-on-Shannon. Here are the ruins of an old castle of the O'Rourks, and a fortified mansion, erected by Sir E. Villiers in 1626, which has been of late partially repaired. Near the village are the ruins of Creevelea Abbey, and some other conventual remains. *Drumkeeran*, population 400, a village in the barony of Dromahair, about 2 miles from the northern extremity of Lough Allen, has a church, a Roman Catholic chapel, a dispensary, and a petty sessions court. A market is held weekly on Wednesday, and fairs are held eleven times in the year. *Drumshambo* is situated half a mile east of the southern extremity of Lough Allen: population, 522. There are a dispensary and a petty sessions court in the town. The completion of the navigation of the Shannon, and the formation of a harbour at the junction of the short lateral canal of the Shannon with the southern extremity of Lough Allen, have rendered this an improving place. A market is held weekly on Friday, and nine yearly fairs are held. *Drumsna*, 4 miles S.E. from Carrick-on-Shannon, population 384, is beautifully situated on the mail-coach road to Dublin, and on the left bank of the Shannon, which is here crossed by a bridge of 8 arches. The village, which is nearly surrounded by the plantations of Mount Campbell, the demesne and residence of J. Rowley, Esq., is neatly built, and has a comfortable, thriving appearance. The river bank is formed into quays, where agricultural produce is shipped. *Jamestown*, a small village of 212 inhabitants, is situated about 1 mile W. from Drumsna, and on the left bank of the Shannon. Jamestown was formerly a walled town and a parliamentary borough, and returned two members to the Irish House of Commons. Of the fortifications there remain some old walls and a gateway; there are also some vestiges of the castle built here by Sir C. Coote in 1623 to command the passage of the Shannon. The river is here crossed by a bridge of seven arches. The town was named in honour of James I., who granted it a charter of incorporation in the 19th year of his reign. The Shannon between Drumsna and Jamestown forms a beautiful curve, the concave side of which is entirely occupied with the extensive well-wooded park of Charlestown, the seat of Sir Gilbert King, Bart. A market is held on Saturday, and four fairs are held in the year. *Killyclogher*, population 321, a village possessing a market, which is held weekly on Friday, is situated near the northern border of the county, about 7 miles N.E. from Manorhamilton. *Leitrim*, population 256, besides 182 in an auxiliary workhouse, a miserable village which gives name to the county and barony of Leitrim, is situated on the left bank of the Shannon, 3 miles N.N.E. from Carrick-on-Shannon, and is joined by a bridge to the hamlet of Battlebridge on the Roscommon side of the river. A canal joins the Shannon at Leitrim with the southern extremity of Lough Allen. *Lurganboy*, a small village, is situated about 2 miles W. from Manorhamilton, at the base of Benbo Mountain, and in the beautiful vale of the Bonnet. Five fairs are held here in the year. Lead and copper ores have been found in the mountain above Lurganboy. *Newtowngore*, population 193, about 4 miles N. by W. from Carrigallen, has a market, which is held weekly on Friday from September to March. *Tullaghan*, a small village on the sea-coast about a mile W. from Bundrowes, is frequented by seabathers in summer, and has on the land side several marine villas.

Leitrim lies partly in the diocese of Ardagh, but chiefly in that of Kilmore. Prior to the Union it returned six members to the Irish parliament; it now returns two members to the House of Commons. Leitrim county is in the Connaught circuit. The assizes for the county are held at Carrick-on-Shannon, where the county jail and court-house are situated. Quarter-sessions are held at Carrick-on-Shannon, Ballinamore, and Manorhamilton; the two last have court-houses and bridewells; petty-sessions are held in 13 places. The district lunatic asylum, to which the county is entitled to send 34 patients, is at Ballinasloe, in the county of Galway. The medical charities of the county comprise the county infirmary at Carrick-on-Shannon, a fever hospital at Mohill, and 10 dispensaries. The Union workhouses are at Carrick-on-Shannon, Manorhamilton, and Mohill. Loan funds are in operation in Annaduff and Cloone. The constabulary force, numbering 327 men and officers, has its head-quarters at Carrick-on-Shannon, where also are military barracks. The staff of the county militia is stationed at Mohill. Stipendiary magistrates are stationed at Manorhamilton and Ballinamore; revenue police at Drumshambo, Manorhamilton, Drumkeeran, and Mohill. The county is in the Military District of Belfast. In September 1852 there were 116 National schools in operation, attended by 6056 male and 5259 female children.

Leitrim anciently formed a portion of the territory called Breifne, or Brenny O'Rourk, to distinguish it from Brenny O'Reily, the present county of Cavan. The O'Rourks maintained their independence until the reign of Elizabeth, when Leitrim was first reduced to shire-ground. During the earlier period of Anglo-Irish history it is said to have formed

part of the county of Roscommon. Brian O'Rourk broke out into open rebellion in 1588, and assisted by MacSweeney and a body of Munster troops held the castle of Dromahair until compelled to retreat towards Donegal by Sir Richard Bingham and the Earl of Clanricarde. From thence he fled to Scotland, where he was delivered up to the English authorities by James VI., carried to London, and executed for treason. On the breaking out of O'Donnell's rebellion in 1596, Teague O'Rourk, the son of Brian, joined the insurgents, and in conjunction with Maguire, prince of Fermanagh, defeated Sir Conyers Clifford in a pass of the Curlew Mountains, with considerable loss to the English, in the month of June 1597. He finally submitted in 1603, and took out a patent of the residue of his estate, which was allotted to him on an English tenure. On the breaking out of the rebellion of 1641, the Irish, headed by Sir Owen O'Rourk, seized all the places of strength in the county, with the exception of the castles at Carrick-on-Shannon and Manorhamilton. The confiscations which followed on the termination of these wars included almost all the lands that had been allowed to remain to the native proprietors under former attainders, and may be said to have extinguished the family of O'Rourk.

The remains of antiquity in Leitrim are not very interesting. There are some ruins of the abbey of Fenagh, founded by St. Cailin in the 5th century, and celebrated during the early period of Irish church history as a school of divinity. The abbey of Creevelea, near Dromahair, founded by the wife of Owen O'Rourk in 1508, was an extensive pile, of which the principal walls are still standing: it contains some curious tombs and monuments. O'Rourk's Hall at Dromahair, Castle Longfield, Cloncarrick Castle, Castle Car, and several others now in ruins, belonged to the O'Rourks. Amongst the more modern fortified structures the most perfect is the castle of Manorhamilton, erected in the reign of Elizabeth.

LEIXLIP. [KILDARE.]

LEMAN LAKE (Genfersee, Lake of Geneva), one of the largest lakes in Europe, extends in the form of a crescent from east to west between Switzerland and Savoy. Its northern or convex bank, which forms an arc of about 53 miles in length, not reckoning the sinuosities, belongs to the Swiss canton of Vaud, and the southern or concave side, forming an arc of 46 miles, belongs for the greater part to Savoy, the canton of Geneva possessing about 8 miles of it at the south-western, and the canton of Valais 4 miles of it at the south-eastern extremity. Its breadth varies greatly, being between 8 and 9 miles in the middle, 4 miles towards the eastern extremity between Vevay and St. Gingouph, 3 miles in its western part opposite Nyon, after which it becomes narrower, being reduced to 1 mile just before reaching Geneva. This narrow part, which is about 14 miles in length from Nyon to Geneva, is called the Little Lake, and more especially the Lake of Geneva. The greatest depth of the Leman below the cliffs of Meillerie, on the Savoy shore, is nearly 1000 feet; it is 500 feet deep near the castle of Chillon, on the opposite shore, and from 600 to 300 feet in other places. The lake seldom if ever freezes; the temperature of its water below 150 feet depth is 41° of Fahrenheit. Its surface is 1150 feet above the level of the sea, but in summer it rises sometimes from 6 to 8 feet higher, owing to the melting of the snows in the Alps. The water reflects a bright azure tinge like that of the Mediterranean Sea. The Rhône, coming from the Valais, enters the lake at its south-east extremity, where the waters of the river are muddy coloured; and they issue out of the lake again at Geneva, clear and of a deep blue tinge. The other rivers that enter the lake are—1, the Dranse on the Savoy side, coming from the Alps of Faucigny; 2, the Venoge, on the northern or Swiss side, which rises in the Jura and enters the lake between Morges and Lausanne; 3, the Vevayse, a mountain torrent, which rises in the canton of Freyburg, and enters the lake near Vevay. Though the Leman Lake does not abound so much with fish as most of the other Swiss lakes, still it affords some very fine and large sorts, especially trout, pike, carp, perch, and a species of salmon called 'omble chevalier,' which is much esteemed. The east and north-east winds are the most violent on this lake, and when they blow fresh for some time the waves rise to a considerable height, and the surface of the lake resembles an agitated sea. The most dangerous wind is the Bornand, or south wind, which blows in sudden gusts from the mountains of Savoy. A regular communication is kept up between the towns along the shores of the lake by means of steam-boats. The scenery around this lake has been always a subject of admiration to travellers. The mountains of the Chablais, being a lower offset of the Alps, rise dark and abrupt along the southern shore, some of their summits being 5000 feet above the lake, and beyond them, through their openings, the spectator from several points of the Swiss coast sees the higher Alps of Faucigny and Mont Blanc itself covered with perpetual snow. The eastern extremity of the lake presents the wild and imposing scenery of the narrow deep entrance into the Valais between the lofty groups of the Dent de Morcle and Dent du Midi, between 8000 and 9000 feet high above the lake, while the northern or Swiss coast displays a milder and more cheering landscape of hills rising, in the form of an amphitheatre, covered with vineyards and gardens, and studded with numerous towns and villages having all the appearance of comfort and industry.

LEMBERG, LEOPOL, LWOW, the capital of the circle and of the crownland or kingdom of Galicia, is situated in 49° 52' N. lat., 24°

E. long, in a narrow valley which winds round the southern base of the Sandberg, a hill crowned with the ruins of the old castle of Lowenburg. The situation is pleasant, but not suited to a great city, there being no large river, but only a small stream, the Peltew, which is dry in summer. The city is 868 feet above the level of the sea. The population, exclusive of the military and foreign students, exceeds 56,000, nearly 20,000 of whom are Jews. When Lemberg belonged to Poland it was a very ill-built place, consisting chiefly of wooden houses, but it has been extremely improved since it came into the possession of Austria. There are now many handsome buildings, broad straight streets, and lofty houses built of freestone, which, with the cupolas and steeples of the cathedrals and churches, give the city, especially when viewed at a distance, an air of grandeur. The city was formerly strongly fortified, and made a successful defence in 1666 against the Russians, and in 1672 against the Turks. In 1704 Charles XII. of Sweden took it by storm, and had Stanislas Leczinski, who was a native of the town, crowned king of Poland in the cathedral. Under Joseph II. the fortifications were pulled down, and low ramparts erected instead, which are planted with trees and laid out in public walks. The city is small, and surpassed in size by any one of its four suburbs—Halicz, Krakow, Zolkiew, and Brody—which contain also the largest houses. There are in Lemberg a handsome cathedral and 13 other Roman Catholic churches, an Armenian and a Greek cathedral, a Lutheran chapel, 3 synagogues, and 9 convents. Besides being the residence of the Roman Catholic, Armenian, and Greek archbishops, of the Lutheran superintendent, and a chief rabbi, and all the chief military and civil authorities of the crownland, Lemberg has a university, two gymnasia, a Roman Catholic and a Greek Catholic theological seminary, numerous schools, and several large hotels, with many hospitals, infirmaries, and other charitable institutions. In the central market-place stands the rath-haus, or town-hall, completed in 1835. In the Dominican church is a monument by Thorwaldsen to the Countess of Dunin-Borowska. The Armenian cathedral and archiepiscopal palace form a handsome pile of buildings in the Krakow suburb. The Jews occupy one of the suburbs exclusively, where they have the finest synagogue in the Austrian empire. The University of Lemberg is one of the most numerous attended in Europe; it has 4 faculties—Catholic theology, law, medicine, and philosophy, taught by 35 professors: the number of students in 1850 was 4203. The university library contains 50,000 volumes. The academical gymnasium in the same year had 22 professors and 822 pupils, and the Dominican gymnasium 21 professors and 559 pupils. There is a museum of the productions of the crownland in the town; a public library of 60,000 volumes rich in Polish literature; and a theatre. The manufactures of broadcloth, cotton-goods, and leather have become much more extensive and important within these few years than they formerly were. Lemberg is the most important trading town in Galicia. The commission trade is very extensive, and an immense amount of business is done at the annual fair called Dreikönigs Messe commencing on the 6th of January, and in the six weeks beginning on the 14th of January, which is called *Contractzeit* ('contract time'), when the nobility of Galicia and a vast concourse of strangers, Christians and Jews, resort to this place. The transit-trade and the corn and cattle markets of Lemberg are very important. Lemberg is connected with Vienna by electro-telegraphic wires.

LEMGO. [LIPPE DETMOLD.]

LEMNOS, now STALIMENE, one of the northern islands of the Ægean Sea, situated nearly half-way between Mount Athos and the entrance of the Dardanelles, and about 22 miles south-west of Imbros. Its area is about 147 square miles, and its population 8000, all Greeks, with the exception of the Turkish garrison and governor. The harbours of Sant' Antonio and Paradiso, on the south and north sides of the island respectively, divide it into two peninsular portions. The surface is hilly. The western and more fertile part of the island produces wine and corn, hemp, flax, and fruits; but it is deficient in timber-trees and in wood for fuel. The principal harbour, called Sant' Antonio, in the south-west part of the island, is large and safe. The principal town, called Lemnos, or Stalimene, is a small place on the west coast with about 1000 inhabitants, ship-building docks, and a castle in which the Turkish governor and garrison reside.

Lemnos is known in ancient mythology as the spot on which Vulcan fell after being hurled down from heaven, and where he established his forges. A volcano which once was burning on the island may have afforded ground for the fable. The Pelasgi, being driven out of Attica, are said to have taken possession of Lemnos; and it is also said that, having stolen some Athenian women and carried them to the island, the children of these women despised their half-brethren born of Pelasgian women: in consequence of which the Pelasgians took the resolution of murdering both the Athenian women and their children. On account of these atrocities Lemnos had a bad name among the ancient Greeks. The Athenians, led by Miltiades, took Lemnos after their conquest of the Chersonesus. (Herod., vi. 140.) A labyrinth is mentioned by Pliny ('Hist. Nat., xxxvi. 19) as having existed on the island, like those of Egypt and Crete, adorned with 150 columns, and with gates so well poised that a child could throw them open. Pliny says that remains of it existed in his time. Lemnos had two towns, Hephæstia and Myrina: the present castle is supposed to be on the site of the latter.

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The 'terra sigillata' of Lemnos is a kind of earthy substance which was once and is still supposed by Greeks and Turks to have wonderful medicinal properties. It is dug out of a hill in the island with great ceremony and at particular times, in presence of the Turkish governor and the Greek clergy, and is shaped into little balls stamped with the governor's seal. It is also used for tanning leather.

LENA, RIVER. [SIBERIA.]

LENHAM. [KENT.]

LENKORAN. [GEORGIA.]

LENNEP. [DÜSSELDORF.]

LENNOXTOWN. [STIRLINGSHIRE.]

LEOMINSTER, Herefordshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Leominster, is situated on the left bank of the river Lugg, in 52° 13' N. lat., 2° 43' W. long, distant 13 miles N. by W. from Hereford, and 137 miles N.W. by W. from London. The population of the borough in 1851 was 5214. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of Hereford. Leominster Poor-Law Union contains 25 parishes and townships, with an area of 60,271 acres, and a population in 1851 of 14,910.

Leominster, locally called Lemster, has a considerable trade in wheat. There are some neat modern houses. The market-place is old and inconveniently situated. The Butter Cross is a quaint structure of wood and plaster, erected about two centuries ago. The House of Industry was originally part of the buildings of a priory. The church, a handsome edifice, was rebuilt about the beginning of the last century: there are chapels for Baptists and some other Dissenters. The Free Grammar school, founded by charter of Queen Mary in 1554, is under the patronage of the corporation, who pay 20*l.* a year to the master; but the school has been for a number of years a private school. In the town are National schools and a savings bank. The market-day is Friday: eight fairs are held in the course of the year. A county court is held in the town. Races are annually run at Leominster in the month of August.

LEON, one of the old provinces of Spain, previously a kingdom, is bounded N. by Asturias, S. by Estremadura, E. by Castilla la Vieja, and W. by Galicia and Portugal. It is situated between 40° 4' and 43° 4' N. lat., 3° 44' and 7° 13' W. long. The greatest length north to south is about 175 miles; the greatest width east to west is about 155 miles, but the average width is less than 100 miles. The area is 20,059 square miles. The population in 1849 was 1,098,833. It is now divided into five modern provinces, as follows:—

Provinces.	Area in Square Miles.	Population in 1849.
Leon	5,894	238,833
Salamanca	5,680	240,000
Valladolid	3,239	210,000
Zamora	3,563	180,000
Palencia	1,733	180,000
Total	20,059	1,098,833

Surface.—The modern provinces of Leon and Palencia occupy the northern part of the old province. The provinces of Zamora and Valladolid fill up the central part (that of Zamora including the district of Toro). The province of Salamanca occupies the southern part.

The province of Leon is divided from Asturias by that part of the Pyrenean chain which is called the Asturian Mountains, whence several offsets extend southward into Leon, especially one great mountain range called the Sierra de los Cilleros, which, commencing at the Peña de Peñaranda, a summit 11,000 feet high, unites with the range of Monte Teleno, and extends into Portugal, separating the basin of the Miño (Minho) from that of the Duero (Douro). At the point, near Braganza, where this mountain range reaches the boundary of Portugal it divides into two branches, one of which takes a westerly direction through Portugal, and the other, called the Sierra de Culebra, an easterly direction, forming for some miles the boundary between the provinces of Leon and Zamora. Also, at the point where the Asturian Mountains enter Galicia, another mountain-range runs southward from the Peña de Peñamarela (9450 feet high), at first bearing to the west, but afterwards to the east till it joins the Monte Teleno north of Braganza. Thus, at the north-western angle of Leon there is a district hemmed in by mountains forming a sort of circumvallation round a central concavity, which was probably once a large lake, the waters of which burst a way through the narrow gorge where the Sil is joined by the Cabrera. The district inclosed by this amphitheatre of mountains is called the Vierzo, and is about 40 miles in length by 30 miles in width. Besides this mountainous district several other offsets from the Asturian Mountains enter the provinces of Leon and Palencia, but they soon sink down and terminate in a lofty and extensive plain, which is a portion of the great table-land of Castilla la Vieja. This plain is not level, but undulating, intersected by ravines, and cut by numerous river-channels. The south part of the province of Salamanca is mountainous, being separated from Estremadura by

the Sierra de Gredos and Sierra de Gata, the former of which occupies the south-eastern angle. The great central plains of the province consist for the most part of the fresh-water limestone of Castilla la Vieja, which furnishes the building material for Valladolid and other towns.

Rivers.—The province belongs entirely to the basin of the Duero, with the exception of the small portion at the north-western angle, which is cut off by the Sierra de Cilleros: this portion belongs to the basin of the Miño, and is watered by the Sil and its tributaries.

The Duero crosses the central part of the province in a direction from east to west, and here it receives many of its largest affluents. On the right or northern bank it receives in the province of Valladolid the Pisuerga with its tributaries the Carrion and the Esquivia; in the province of Zamora it receives the Rio Seco with its affluent the Sequillo, and the Esla, which has many tributaries, the largest of which are the Tera, the Orvigo, the Bernesga, and the Cea. All these rivers have a southern course from the Asturian Mountains and the ridges connected with them. When the Duero reaches the boundary of Portugal it takes a southern direction, and then receives on its left or eastern bank the Tormes, the Agueda, and other smaller rivers, all of which rise in the Sierra de Gredos and Sierra de Gata, and have a north-western course. [DUERO.]

Climate and Productions.—The climate is mild in the spring and hot in the summer, but the cold in winter is severe. The Bierzo and the other mountainous parts of the province are well wooded with chestnut, walnut, and other trees. The extensive plains in the central part of the province produce abundance of corn, though the agriculture is very imperfect. These wide plains are without trees, and almost without houses, dreary and wearisome to the traveller, dusty in summer and muddy in winter. The villages are built with mud mixed with straw; most of the houses are without windows, and where there are windows they are seldom glazed. A large door answers all purposes. Wine and flax also form part of the produce, and fruit and vegetables are grown in abundance. Large herds of cattle and flocks of sheep are reared, and the asses and mules of this province are celebrated throughout Spain for their size and usefulness as beasts of burden. There are few manufactures: coarse woollen and linen cloths are made, and much flax is spun by the distaff, and bleached, and forms an article of export.

Towns.—The city of Leon, now a decayed town, with a population of only 5750, was formerly the capital of the kingdom of Leon and of the ancient province. It is now the capital of the modern province of Leon. It is situated in 42° 30' N. lat., 5° 35' W. long., about 180 miles N.W. from Madrid. It stands in the angle formed by the junction of the Torio with the Bernesga, in a pleasant district abounding in fruit-trees. It is the see of a bishop not subject to any primate, and the residence of the provincial authorities. The walls are much decayed, but are best preserved on the north side, where they are flanked by numerous semi-circular towers not higher than the walls themselves. A wall runs also through the centre. The city still looks well at a distance, and the approach over the bridge passes along a pleasant alameda; but the interior is gloomy, dull, and ruinous. The cathedral is the boast of Leon. It is an early specimen of pointed gothic architecture, built of a beautiful cream-coloured stone, and is an exceedingly light and elegant structure. The west entrance has an open plaza in front, with a fountain. It has a tower on each side, three doorways of pointed arches, and a noble rose-window surmounted by a pinnacle. The south front has also a plaza, and three pointed doorways. The north entrance has been modernised with balustrades. The east end is semicircular, with flying buttresses and pinnacles. All the fronts are enriched with elaborate sculpture. The interior is light and simple, but is now without pictures. In its pristine state it must have been one of the most beautiful cathedrals then existing in the world. Opposite the cathedral is the bishop's palace. The church of San Isidoro was begun in 1063; the burial place of the kings of Leon is at the west end of the church; it is low and dark, and contains many tombs of wood and stone. Outside the town, near the bridge over the Bernesga, is the convent of San Marcos de Leon, which formerly belonged to the order of Santiago. It is of the renaissance style, and is of very great extent, though one wing was never commenced. There are still some of the palaces of the old nobles of Leon, the Gusmans, the Condes, the Ponces; and there is a Casa de Ayuntamiento, or town-hall, built in 1585. The Casa de Espositos (hospital for orphans) is a very large building outside the town, north of the rose-perfumed alameda.

Astorga, in the province of Leon, 32 miles W. by S. from the city of Leon, is all that remains of the *Asturica Augusta* of the Romans, which in the time of Pliny ('Hist. Nat.,' iii. 3) was "urbs magnifica," a magnificent city, capital of the Astures. Even now it presents evidences of high antiquity, in its walls and in two Roman tombs near the Puerto de Hierro (Iron-Gate). The walls are similar to those of Leon, but are in a more perfect state, flanked by many semi-circular towers, none of which rise higher than the walls. It is the see of a bishop, and contains a population of about 3000. The cathedral, built in 1471, has been disfigured by repairs and alterations. It has two towers, one of gray-stone, the other of red-stone. The retablo, a carved altar-piece representing subjects from the life of the Saviour, was executed in 1569 by Gaspar Becerra, and is perhaps the

most remarkable work of the kind in the Peninsula, but has been injured by re-painting. Astorga has long been the chief town of the Maragateria, or country of the Maragatos, a peculiar race of people, who are almost all carriers (arrieros), celebrated for their fine beasts of burden (asses and mules), and distinguished for the extent and honesty of their transactions. The Maragateria comprises a district of about 200 square miles, with 36 villages. For an account of this singular people, see Ford's 'Handbook,' vol. ii. p. 593.

Benavente, in the province of Zamora, 38 miles S. from Leon, contains a population of 2600. It is situated in the angle formed by the junction of the Orvigo with the Esla, but not close to either river. It is surrounded by mud-walls, and has a fine old ruin of a castle, but the town is now a poor place. The church of Santa Maria has a remarkable tower, and round Saxon arches.

Ciudad Rodrigo, a fortified town in the province of Salamanca, 60 miles S.W. from the city of Salamanca, and 16 miles E. from the frontier of Portugal, is situated on a slight eminence, on the right or eastern bank of the Agueda. A bridge of seven arches crosses the river. The town contains a population of 4700, and is rather a poor place. It is the see of a bishop, and has a cathedral, begun in 1190, and enlarged in 1538; it was much injured during the sieges of the fortress. The fortifications consist of a wall, ditch, and citadel. Though not in itself very strong, it was considered, during the Peninsular War, as a military position of the highest importance. It was taken by Massena from the Spaniards July 10th, 1810, and retaken from the French by Wellington, January 19th, 1812.

Ledesma, in the province of Salamanca, 22 miles N.W. from the city of Salamanca, stands on the left or south-west bank of the Tormes, over which there is a fine bridge built on Roman foundations. The walls of the town are of singular construction, and are thought to be older than the times of the Romans. The town is very ancient, and many inscriptions have been found in and around it. Population, 2000. The warm baths of Ledesma are about 7 miles to the south-east.

Medina del Campo, in the province of Valladolid, 30 miles S.S.W. from the city of Valladolid, is the chief town of the Campo, or level district, which produces corn in abundance. This town was formerly one of the principal cities of Spain, and the residence of the court, but is now an inconsiderable place with a population of 2800. The great square is remarkable, surrounded by a massive piazza, over which rise dark-looking buildings of great antiquity. Ruins are scattered round the town on every side, attesting the former greatness of this city of the plain.

Medina de Rio Seco, in the province of Valladolid, and 27 miles N.W. from the city of Valladolid, stands on the right or north-west bank of the Sequilla, the largest affluent of the Rio Seco. It is a very ancient town, with narrow ill-paved streets. The population is 4700.

Palencia, capital of the province of Palencia, 30 miles N.N.E. from the city of Valladolid, is an ancient city, which had a university founded in the 10th century, but transferred to Salamanca in 1239. It stands on the east bank of the Carrion, over which there is a good stone bridge. It is inclosed by old walls, which are surrounded with alamedas. The town stands in the midst of wide treeless plains, but is well situated for commerce, and is famous for its trade in wool. It contains a cathedral of light and elegant architecture, built after the model of that of Leon, 1321-1504, and containing some beautiful paintings by Murillo. The hospital of San Lazaro was once the palace of Rodrigo Diaz, the Cid Campeador, who was here married to Ximena.

Ponferrada, in the Bierzo of the province of Leon, 65 miles W. from the city of Leon, stands in the angle formed by the junction of the Baeza with the Sil. The bridge here was built for the passage of the pilgrims to Santiago in Galicia, and the town afterwards belonged to the Knights Templars. Population, 2500.

Sahagun, in the province of Leon, 37 miles S.E. from the city of Leon, stands on the east bank of the Cea. There are remains of walls and a castle. The celebrated Benedictine abbey of San Facundo was founded in 905, and refounded by Alonso VI. The gothic church was finished in 1188. Alonso and his five wives were buried here. The marble sepulchre with a statue of the king is superb. There are other tombs. The abbey was plundered by the French in 1810. The population of this town is about 2500.

Salamanca is the capital of the province of Salamanca. [SALAMANCA.]

Toro, in the province of Zamora, 20 miles E. from the town of Zamora, and 40 miles N. by E. from Salamanca, is situated on the north bank of the Duero. It was formerly a city of importance, and capital of the province of Toro. It is inclosed by old walls, has a fine bridge over the Duero, and contains a ruined palace of the Infante Don Garcia, a palace of the dukes of Berwick, a town-hall, and a plaza-de-toros (bull-arena). The streets are tolerably wide, but dirty, and the iron-barred windows (rejas) give it a prison-like look. Population, 6900.

Valladolid is the capital of the province of Valladolid. [VALLADOLID.]

Villafranca del Bierzo, in the province of Leon, and 72 miles W. from the city of Leon, is a Swiss-like town, built in a mountain-gorge. It is surrounded by vine-plantations. At the entrance is a large

square fortress-mansion, and a large Franciscan convent on an eminence which over-looks the town. Population, 8000.

Zamora, capital of the province of Zamora, 66 miles S. by W. from the city of Leon, stands on the north bank of the Duero, which is here crossed by an old stone bridge. It is a city, and the see of a bishop, suffragan of Santiago. It stands on an elevation, and in Moorish times is said to have been inclosed by seven lines of walls, with a moat between each. It is now a decayed place, but contains a good deal of curious but dilapidated mediæval architecture. The cathedral is very ancient. It has a massive square tower, and has round Norman arches, with the capitals of the pillars of the same style. The present cloisters, of simple Doric, were completed in 1621. Near the cathedral is the bishop's palace. The palace of Doña Urraca, which occupies the extreme point of the city, is a ruin. The church of La Magdalena, which belonged to the Templars, and afterwards to the order of San Juan of Jerusalem, is a simple solid edifice of the 12th century. Outside the walls is a pleasant alameda, with fountains and stone benches. The population in 1845 was 9926.

History.—Leon was one of the earliest of those kingdoms which were formed by the Christians out of the territories conquered from the Moors. The kingdom of Asturias, or Oviedo, as it was afterwards called, having been established by Pelayo and his successors, Alfonso the Catholic (A.D. 789-757) extended it by the conquest of the towns of Leon, Astorga, Zamora, and others. These places however were held on the precarious tenure of either paying tribute to the neighbouring Moors, or having to defend them against their incursions. It was Garcia, son and successor of Alfonso III., who about A.D. 910 transferred the seat of sovereignty from Oviedo to Leon. Henceforth the Christian kingdom in northern Spain was called the kingdom of Leon and Oviedo, and was independent of the kingdom of Navarra, which was on the other side of the Ebro. The counts of Castilla, who had formed another Christian state between the two, were for a time dependent, nominally at least, on the kings of Leon, until A.D. 1025, when Castilla became an independent kingdom under a branch of the royal house of Navarra. The boundaries of all these kingdoms were of course not clearly or fixedly determined. Almost always at war, either with the Moors or among themselves, the extent of their respective territories varied with every reign, or rather with every fresh campaign. The male line of the kings of Leon in 1037 became extinct with Bermudo III., whose sister had married Fernando, king of Castilla, thus uniting the two crowns; but at his death, Sancho, one of his sons, had Castilla, and Alfonso had Leon and Oviedo. The two kingdoms remained distinct, although their crowns were sometimes worn by the same person, for nearly two centuries, until Fernando III., in 1230, permanently united them, assuming the title of King of Leon and Castilla, which his successors retained.

(Ford, *Handbook of Spain*; Mudoz, *Diccionario de España*; Hoskins, *Spain as it is*, 1851.)

LEONARD'S, ST. [HASTINGS.]

LEONESSA. [ABRUZZO.]

LEPANTO, GULF OF, a narrow sea 75 miles in length from west to east, extending between the northern coast of the Peloponnesus and the mainland of Greece. It is entered from the west from an outer bay called the Gulf of Patras, by a strait about a mile and a half wide (called the Strait of Lepanto, and sometimes the Little Dardanelles), which is defended by two castles—the castle of Morea, on the promontory anciently called *Rhium*; and the castle of Roumili, on the promontory of *Antirrhium*. This strait seems to have been not quite a mile wide in ancient times, according to the testimony of Thucydides, Strabo, and Pliny. A few miles inside of the straits, on the northern coast, is the town of *Lepanto*, the ancient *Nepactos*, and still called by the Greeks *Nepactos*, built on a hill, and commanded by a castle, with a good harbour, and between 2000 and 3000 inhabitants. The town was for a long time in possession of the Venetians, who fortified it and sustained several sieges against the Turks, to whom it was finally given up by Venice at the peace of Carlowitz in 1697, as well as the castle of Roumili and the fortress of Prevesa, while the republic retained the Morea. The country around Lepanto, which is part of ancient *Locris*, produces wine, oil, corn, rice, and tobacco. Leather is also an article of export.

The sea of Lepanto widens towards the middle to the breadth of 12 or 13 miles, exclusive of several deep bays which indent its northern coast, especially the Bay of Salona, the ancient Crissæan Gulf, which stretches about 8 miles to the north. The eastern extremity of the Sea of Lepanto terminates in two bays: that of Corinth to the south-east, where the Lechæum, or western harbour of Corinth once was; and the other, called the Alcyonian Sea, which is deeper and extends to the north-east, bordering on the territory of Megaris and stretching to the foot of Mount Cithæron. This last bay is now called Livadostro. The ancient Corinthian Gulf comprised the Gulf of Patras as well as the Gulf of Lepanto; its western boundary extending from the mouth of the Evenus, according to Strabo (or according to others, from the mouth of the Achelôus), to the promontory of Araxus now Kalogria, the most north-western point of Achaia. The whole of the inner bay east of Rhium and Antirrhium to the Isthmus of Corinth was originally called the Crissæan Gulf; it was also sometimes called the Delphian Gulf. In later times, when the name Corinthian Gulf (which most probably was originally

applied to the bay on which Lechæum, the harbour of Corinth, stood) was extended to the whole of the inner sea, the term Crissæan Gulf was generally confined to the inlet now called the Gulf of Salona. The inner gulf resembles a large inland lake; it is surrounded by mountains, and in scenery surpasses the most picturesque of the lakes of Switzerland and north Italy.

Lepanto has given its name to a celebrated naval battle between Turks and Christians, fought on October 7th 1571, in which the Ottomans were utterly defeated. The Christian allied fleet, consisting of Spanish, Venetian, Genoese, and Papal ships, about 210 in all, was commanded by John of Austria. The Turks, with about 800 sail, were commanded by Ali Pasha. The Christian fleet was stationed off the mouth of the Achelôus, at the entrance of the Gulf of Patras, when the Turkish fleet came out of the Gulf of Lepanto, to meet it. The Christians broke through the centre of the Turkish line, took the admiral's ship, and killed the admiral Ali. At the same time the Turkish right being repulsed in an attack on the Venetian ships the defeat of the Ottomans became complete. More than 8000 of the Christians were killed, and a still greater number were wounded. The Venetian commander, Barbarigo, who contributed greatly to the victory, was mortally wounded, and expired after seeing the Turks utterly defeated. The loss of the Ottomans was much greater, as the Christians gave no quarter during the heat of the battle. Several thousand Christian slaves, who were employed to row the Turkish galleys were liberated: 107 Turkish ships were taken, and most of the others were sunk; about 30 or 40 escaped. This defeat completely destroyed the ascendancy of the Turkish navy in the Mediterranean. Herrera, the Spanish poet, wrote some of his finest odes in commemoration of the battle. Cervantes, who served on board one of the ships, was severely wounded, and lost for life the use of his left hand. The battle of Lepanto is often called by Italian writers the battle of the *Curzolari*, from the modern name of the islands at the mouth of the Achelôus, where the Christian fleet was stationed before the engagement.

(Leake; Ulrich, *Reisen in Griechenland*; Herrera; Botts, *Storia d'Italia*; *Dictionary of Greek and Roman Geography*.)

LE-PONT-DU-BEAU-VOISIN. [ISÈRE.]

LERENA. [ESTREMADURA.]

LERICI. [GENOA.]

LERIDA. [CATALUÑA.]

LERMA. [CASTILLA LA VIEJA.]

LERWICK. [SHETLAND.]

LESBOS, a large island of the Ægean Sea, near the coast of Asia Minor, being separated from the coast of Troas by the Adramyttian Gulf. Its length is 60 miles, from Cape Sigrium, which is its north-western extremity, to Cape Malia, at its south-east end, which last looks directly into the entrance of the Gulf of Smyrna. The breadth of the island is very unequal, owing to some deep gulfs which indent its coast, and varies from 7 to 15 miles. *Mitylene*, the chief town of the island, lies on the south-eastern shore, opposite the coast of the ancient Æolia. It had formerly two harbours, was a place of great importance, and sent out numerous colonies. *Mitylene* still exists as a village, and gives its name to the island. *Methymna*, another ancient town of Lesbos, stood on its north-east coast, opposite Cape Lectum on the coast of Troas. The deep Bay of Pyrrha, which indents the middle of the island, was called *Euripus Pyrrhaeus*, now Porto Kaloni; the other bay, farther south, west of Cape Malia, is now named Porto di Jero. The island has many villages, but no town of any importance, and contains about 40,000 inhabitants, Greeks and Turks. It is considered one of the most fertile and beautiful of the Greek islands. The island is intersected by a long range of mountains clothed with pine-woods, skirted on the lower slopes by olive-groves and vineyards. The plains are partially cultivated; but for the most part they are planted with fruit-trees. Grapes, figs, oil, and pine-timber for ship-building are the chief exports. The wine now made on the island is inferior. Sufficient corn is not grown for the inhabitants. In ancient times Lesbos was known as a place of refinement, luxury, and licentiousness.

The earliest inhabitants of Lesbos are said to have been Pelasgians; it was afterwards colonised by the Æolians in their great migration. The children of Orestes are said, after fifteen years of vicissitudes and strife, to have conquered the island of Lesbos.

Pittacus, who flourished about B.C. 600, became tyrant of Mitylene, and he sustained a war against the Athenians, whom he ultimately defeated. This was in the time of the Lydian monarchy, after the fall of which Lesbos was obliged to submit to the power of Persia. After the battle of Mycale (B.C. 479) Lesbos freed itself from Persian dependence, and became the ally of Athens. During the Peloponnesian war, the people of Mitylene being accused of a secret negotiation with the Lacedæmonians, Athens sent a fleet against them; the walls of Mitylene were razed, and many of its wealthier inhabitants put to death. The whole island, except the territory of Methymna, which was spared, was distributed among the Athenians, by whom they were rented to the former proprietors. (Thucydides, iii. 36-49; Strabo, xiii.)

Lesbos passed successively under the dominion of the Macedonians, the Romans, and the Byzantines; it was afterwards captured by the Venetians, A.D. 1185, recaptured by the Greeks, and at last seized by the Turks, who retain it to this day. In the war of Greek independence Lesbos lost nearly half of its population.

LESGHISTAN. [GEORGIA.]
 LESLIE. [FIFESHIRE.]
 LES-MARTIGUES. [BOUCHES-DU-RHÔNE.]
 LESNEVEN. [FINISTÈRE.]
 LESPAREE. [GIRONDE.]
 LES-RICEYS. [AUBE.]
 LESSINES. [HAINAULT.]
 LESSOE. [AALBORG.]
 LETHAM. [FORFARSHIRE.]

LETTERKENNY, county of Donegal, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated on the side of a steep hill above the left bank of the Swilly, at about a mile above its entrance into Lough Swilly, in 54° 57' N. lat., 7° 44' W. long., 15 miles N.W. from Lifford, 140 miles N.N.W. from Dublin. In 1851 the population was 1947, besides 233 inmates of the workhouse. The Poor-Law Union contains 14 electoral divisions, with an area of 101,207 acres and a population of 20,665 in 1851. The town of Letterkenny consists principally of one long straggling street, which however contains some good retail shops. The chief buildings are the parish church, a Roman Catholic chapel, three chapels for Presbyterians, a court-house, fever-hospital, and the Union workhouse. There are also a dispensary, a bridewell, and a loan-fund. Quarter and petty sessions are held in the town, which is the head-quarters of the county police. The creek of Ballyraine, called the Port of Letterkenny, is a mile distant from the town, and admits vessels of 160 tons. The exports are chiefly corn, butter, eggs, and hides; the imports consist of colonial produce, manufactured goods, iron, coal, oak-bark, fish, &c. The scenery of Glen-Swilly above Letterkenny, and of Lough Swilly below, presents much picturesque beauty.

LEUCADIA. [IONIAN ISLANDS, *Santa Maura*.]

LEUCATE. [AUDE.]

LEUCHTENBERG is a lordship in the kingdom of Bavaria, which has an area of 84 square miles, and a population of about 6800. It is situated on the western slope of the Böhmerwald, and is traversed by the Luhe, a feeder of the Naab, which river joins the Danube just above Ratisbon. Till 1806 it was a landgraviate, the prince of which had a seat and vote in the Diet of the Empire. It is called after the ancient mountain castle of Leuchtenberg, in the village of that name situated on the Luhe, the original seat of the landgraves. The male line becoming extinct in 1646, the country fell to Bavaria. In 1817 the late king of Bavaria, Maximilian Joseph, gave it, with the principality of Eichstätt, to his son-in-law Eugene Beauharnois, who assumed the title of Duke of Leuchtenberg. The title of royal highness was conferred on the duke and his successors according to the order of primogeniture, and the rank of princes and princesses of Leuchtenberg, with the title of serene highness, on the other members of the family. The dukes of Leuchtenberg were also declared capable of succeeding to the throne in case the royal line of Bavaria should become extinct; and on the other hand, on the extinction of the male line of the house of Leuchtenberg, its possessions return to the crown of Bavaria, on the payment of an indemnity of 2,320,312 Rhenish florins to the female line. [EICHSTADT.]

LEUZE. [HAINAULT.]

LEVANT, LEVA'NTE, an Italian word, which means the East, and which is also commonly used, especially among seafaring and commercial people of the countries bordering on the Mediterranean, to designate the eastern or Asiatic shores of that sea, namely, those of Syria and Asia Minor, the harbours of which are styled 'Scale di Levante,' in French 'Echelles du Levant' ('Stairs of the East'). Smyrna, Alexandretta, Beyrout, Acre, the harbours of Cyprus and other islands near the coast of Asia, are included within this denomination. The inhabitants of those countries, and more particularly that mixed population which is found in the sea-port towns, the descendants of Europeans settled there, and of Greek, Armenian, or Syrian mothers, are called Levantines. They speak Greek among themselves, but their medium of intercourse with European seamen and traders is a very corrupt Italian mixed up with modern Greek words, which is known by the name of 'Lingua Franca.'

Levant is also the name of one of the Hyères Isles. [HYÈRES.]

LEVANTO. [GENOA.]

LEVEN. [FIFESHIRE.]

LEVEN, LOCH. [KINROSS-SHIRE.]

LEVROUX. [INDRE.]

LEWES, Sussex, a market-town, parliamentary borough, and the seat of a Poor-Law Union, is situated chiefly on the right bank of the river Ouse, in 50° 52' N. lat., 0° 1' E. long., distant 35 miles E. by N. from Chichester, 50 miles S. from London by road, and 50 miles by the London, Brighton, and South Coast railway. The population of the parliamentary borough of Lewes in 1851 was 9533. The borough returns two members to the Imperial Parliament. The livings are in the archdeaconry of Lewes and diocese of Chichester. Lewes Poor-Law Union contains 7 parishes, with a population in 1851 of 9821.

Many Roman remains have been found in Lewes and its immediate vicinity. The town had acquired its present name some centuries prior to the Norman conquest. Lewes, with a wide tract of country besides, was given by William I. to William earl of Warrenne, who had married his daughter Gundreda. The earl made Lewes his chief residence; and in the priory of Lewes, which they had founded, he

and his wife were buried. The bodies of both the earl and Gundreda were discovered in their original leaden coffins when the priory ground was excavated in 1845. On May 14th, 1264, a battle was fought at Lewes by Henry III. with his brother Richard, king of the Romans, and his son, Prince Edward, against the Confederated Barons under Simon de Montfort, which ended in the defeat of the royal army, and the capture of the king of the Romans.

The town of Lewes is built on the uneven slope of a chalk hill, one of the South Downs, while other and loftier hills of the same range surround and shelter it on almost every side. The streets are well built, paved, and lighted with gas. The principal public buildings are the churches, the assize-hall, and the house of correction. St. Anne's, though one of the smallest of the churches in the town, is the most interesting; it is a very neat example of the early English style. The church of St. Thomas à Becket at Cliffe is of the perpendicular style. St. Michael's and St. John the Baptist, at Southover, have been modernised and denuded of all architectural character. All Saints and St. John's are modern brick buildings. Malling church was erected in 1628. The Wesleyan Methodists, Independents, Baptists, Countess of Huntingdon's Connexion, Huntingdonians, Calvinists, Quakers, and Unitarians have places of worship in the town; and there are National, British, and Infant schools. The Free Grammar school of Lewes and Southover, originally founded and endowed by Agnes Morley in 1512, is free to 12 children of the burgesses of Lewes, and had 42 scholars in 1852. In the town are a mechanics institute, subscription library, assembly-room, record-room, &c. The county-hall was erected in 1812 at an expense of 15,000*l.* It is a handsome building, 90 feet long and about the same width, and comprises a council-chamber, the civil and criminal courts, record-rooms, and other convenient apartments. The house of correction was erected in 1793, and enlarged in 1817. A county jail has been recently erected outside the town. The summer and winter assizes are held at Lewes; likewise the general quarter-sessions for the eastern division of the shire, and a county court. The borough has returned two members to Parliament continuously from the reign of Edward I. Grain and malt, sheep and cattle, are now the principal articles of traffic. Brewing, tanning, rope- and twine-making, and lime-burning are extensively carried on. Newhaven, at the mouth of the Ouse, about eight miles below the town, is the port of Lewes. The fairs for cattle are held on May 8th and the beginning of June; those for sheep on September 21st and October 2nd. The average number of sheep sold annually at these fairs is estimated to exceed 100,000. There is a savings bank.

Lewes Castle is of Norman date; the chief portions remaining are the gatehouse and the keep, both of massive proportions, but much altered. The interior is now fitted up as a local museum. Of the priory the remains are few, and in a very dilapidated condition. The building is situated just outside the town, in the suburb of Southover. The railway is carried through the priory precincts, and in constructing it a place of interment, besides the priory burial-ground, was cut through. Thirteen waggon-loads of bones are said to have been removed. It was supposed, with much probability, that they were the bones of those who fell in the great battle.

LEWIS, ISLAND OF. [ROSS-SHIRE.]

LEWISHAM, Kent, a village, and the seat of a Poor-Law Union, in the parish of Lewisham, is situated in 51° 27' N. lat., 0° 1' W. long., distant about 6 miles S.E. from London. The population of the village in 1851 was 6097. The living is a vicarage in the archdeaconry of Middlesex and diocese of London. Lewisham Poor-Law Union contains 7 parishes and townships, with an area of 15,767 acres, and a population in 1851 of 34,738.

The village of Lewisham stretches along the road to Bromley for above a mile. Many of the houses are large and well built, and the road for a good part of the way is bordered by lofty elms. Lewisham is a favourite place of residence for London merchants. There are three or four corn-mills on the Ravensbourne river. Brewing, brick-making, &c., are carried on. There are extensive nursery grounds. The church, a plain brick structure, was rebuilt, except the tower which is ancient, in 1744; but was largely altered after a fire in 1831. In the interior are monuments by Flaxman and Banks. There are chapels for Wesleyan and Primitive Methodists, Independents, Bible Christians, and Unitarians. The Free Grammar school was founded in 1656 by the Rev. Abraham Colfe, vicar of Lewisham, who also founded an English Free school and almshouses for six poor females. The Grammar school had 44 scholars in 1851. The present master, the Rev. J. Prendergast, D.D., has filed a bill in Chancery against the trustees for the recovery of considerable property for the benefit of the foundation. There are several National and Infant schools; a British school; a Congregational school for educating the children of Congregational ministers, which had 35 scholars in 1851; and a mechanics institute. A handsome range of almshouses for persons who have become reduced in their circumstances was built and endowed a few years back by J. Thackeray, Esq. A station of the North Kent railway is at Lewisham.

LEXDEN, a hundred in the county of Essex, which conjointly with the hundred of Winstree in the same county constitutes a Poor-Law Union. The hundreds of Lexden and Winstree are bounded E. by Tendring hundred; Lexden hundred is bounded N. by the river Stour, which here separates Essex from Suffolk; Winstree hun-

dred is bounded S. by the estuaries of the Colne and the Blackwater; the adjoining hundreds on the west are Thurstable, Witham, and Hinokford: the two hundreds comprise 48 parishes with an area of 89,345 acres, and a population in 1851 of 28,768. Lexden and Winstree Poor-Law Union contains 35 parishes with an area of 73,492 acres, and a population in 1851 of 21,485. The village of Lexden, which gives name to the hundred, is pleasantly situated on the main road about 2 miles W. from Colchester. From remains which have been found in the neighbourhood, it has been supposed that Lexden occupies the site of an outpost of the Roman station Camelodunum. Some extensive earth-works are traceable on Lexden Heath, and to the west of the village is an excavation, supposed to have been an amphitheatre.

LEXINGTON. [MASSACHUSETTS.]

LEYBURN, North Riding of Yorkshire, a small market-town and the seat of a Poor-Law Union in the parish of Wensley, is situated in 54° 18' N. lat., 1° 50' W. long., distant 46 miles N.W. from York, and 235 miles N.N.W. from London. The population of the township of Leyburn in 1851 was 800. The living of Wensley is a rectory in the archdeaconry of Richmond and diocese of Ripon. Leyburn Poor-Law Union contains 41 townships and chapelries, with an area of 91,570 acres and a population in 1851 of 9942. Leyburn is pleasantly situated in the midst of picturesque scenery. The houses are chiefly arranged in the form of an oblong square, in the centre of which the market is held. There are a small episcopal chapel, places of worship for Wesleyan Methodists and Independents, an elegant chapel for Roman Catholics, a school supported by the Roman Catholics, and a savings bank. A county court is held. The market-day is Friday. Fairs are held on the second Friday in February, May, October, and December. In the neighbourhood are lead and coal-mines and limestone quarries. Remains of Bolton and Middleham castles, and of the abbeys of Jervaux and Coverham are in the vicinity. Leyburn Shawl, a romantic road along the edge of a ridge of rocks commanding extensive views of picturesque scenery, is the scene of a popular annual tea festival.

LEYDEN, a city of the kingdom of the Dutch province of South Holland, is situated in 52° 9' 30" N. lat., 4° 29' 13" E. long.; 10 miles by railway N.N.E. from the Hague, on a branch of the Rhine, and has about 40,000 inhabitants. The town stands in a level part of the country, and is traversed by many broad canals, bordered with trees, which, intersecting each other, divide the town into fifty small islands, connected together by 145 bridges, some of which are of wood. It is surrounded with a rampart, partly covered with turf and partly faced with brick, on which are fine shady walks; and outside there is a deep and broad moat, with eight bridges leading to as many gates. The city is well built, and the principal streets are broad and well paved. That in which the town-hall is situated extends nearly across the city from east to west; it is almost two miles in length, and is reckoned one of the handsomest streets in Europe. The houses are mostly of brick, with the gable-ends to the streets. Among the public buildings the most worthy of notice are the town-hall, a magnificent edifice, containing a valuable collection of paintings; St. Peter's church, the finest of the seventeenth in the city, a large and handsome gothic building, which contains the sarcophagus of Boerhaave and other monuments. An ancient castle or fort, ascribed by tradition to the Romans, is in the middle of the city, and, rising above the highest houses, commands an extensive prospect of the town and the surrounding country. The handsome new Roman Catholic church, the custom-house, and hospitals likewise deserve notice. The manufactures of linen and woollens were formerly celebrated, and the chief source of wealth to the inhabitants, but they have greatly declined. It is however still the chief seat of the woollen manufactures and of the wool trade of Holland, and has an annual wool fair, which is much frequented. There are likewise extensive manufactures of soap and indigo, tanneries famous for their shamoy leather and parchment, salt-works, &c. Printing, especially of classical works, was formerly a great branch of trade. The most remarkable event in the history of Leyden is its successful resistance to the Spaniards in 1573. The University, which was founded in 1575, has a library of 60,000 volumes and 14,000 manuscripts, a valuable botanical garden, an observatory, a museum rich in Egyptian and Etruscan antiquities, a cabinet of natural history, &c., &c. Grotius, Descartes, Fielding, and Goldsmith studied at Leyden. There are likewise many fine private libraries and museums, and various learned societies. In 1655, 4000 of the inhabitants were carried off by the plague; and in 1807 a boat, with 40,000 lbs. of gunpowder on board, blew up, and destroyed a large portion of the finest part of the city: several hundred persons lost their lives on that occasion.

LEYTE. [PHILIPPINE ISLANDS.]

LEYTON. [ESSEX.]

LEYTONSTONE. [ESSEX.]

LEZARDIEU. [CÔTES-DU-NORD.]

LEZIGNAN. [AUDE.]

L'HASSA. [TIBET.]

LIBANUS. [SYRIA.]

LIBAU. [COURLAND.]

LIBERIA, Republic of, occupies a considerable extent of the West Coast of Africa. Liberia was originally confined to the tract of country lying west of the Grain Coast, of which the town of Monrovia on Cape

Mesurado is the centre; but the republic, though its limits are not accurately defined, now, we believe, claims the entire coast (including the whole of the Grain Coast) from the Cavally River east of Cape Palmas, 4° 20' N. lat., 7° 30' W. long., to the Sherboro River, opposite Sherboro Island, 7° 23' N. lat., 12° 31' W. long., bordering on the colony of Sierra Leone; a length of about 450 miles, with a breadth at present ranging from 20 to 50 miles, but the settlers are gradually extending farther into the interior. The area may be about 17,000 square miles. We find some difficulty in stating the population. In a semi-official statement published in 1848 by the American Colonisation Society, in which the extent of the territory is made nearly as wide as that given above, the population is said to consist of 4200 colonists (including 700 in Maryland-in-Liberia) and "from 10,000 to 15,000 natives;" while in some popular works recently published in this country we find the colonists variously estimated at from 6000 to 10,000, and the natives at 250,000 to above 300,000. This no doubt is a great exaggeration; and we think the population, including the additions by immigration and extension of territory, cannot exceed 7000 colonists and 50,000 natives: perhaps the native tribes in the interior with whom the Liberians have entered into treaty may number 150,000 to 200,000, but they are not inhabitants of Liberia.

Liberia owes its origin to the efforts of the American Colonisation Society, founded in 1816, for the colonisation of the free coloured people of the United States. The first settlement was made on Sherboro Island, off the coast of West Africa, opposite the present western boundary of Liberia; but several of the settlers having died, and the others experienced much suffering, the settlement was abandoned, and the settlers removed to Sierra Leone. A second party was however sent out, who established themselves, early in 1822, on the site of the present town of Monrovia, on Cape Mesurado, 6° 19' N. lat., 10° 48' W. long. At first the settlers encountered many difficulties, owing to the unfriendly disposition of the native tribes; but after a time, as they increased in numbers and were more abundantly provided with fire-arms and some pieces of artillery, they were able not only to keep the natives in check, but to act on the offensive, and to drive them into the interior, or subject them to their authority. In about a dozen years the colony had become sufficiently numerous and energetic to seek the privileges of self-government. In 1839 a constitution was framed and a governor appointed by the Colonisation Society to carry out its provisions. The new constitution appears to have worked very well in home matters, but difficulties occurred in enforcing the laws on foreign traders; and the English government, which had displayed the friendliest feeling and rendered important assistance to the infant community, announced that it could not recognise the right of the Liberian authorities—the colony being neither an independent state nor an acknowledged dependency of the United States—to impose duties on goods imported into the country by British subjects. The Liberian council forwarded a resolution to the Colonisation Society, importing that the existence of the colony was dependent on its possession of complete political jurisdiction; and the Society replied by a resolution admitting that the time had come for the "commonwealth of Liberia to take into their own hands the whole work of self-government, including the management of all their foreign relations." Accordingly, the question was put to the vote of the people whether the settlement should declare itself an independent state, and carried in the affirmative. A convention was then appointed to draw up a constitution, and on the 24th of August, 1847, the flag of the 'Independent Republic of Liberia' was hoisted with much ceremony. The chief events in the history of the settlement have been the numerous encounters with the natives, and since its independence the visits of the president to England and America with a view to the arranging of certain treaties. The republic was recognised by England as an independent state soon after its declaration of independence, and has since been recognised by France, Prussia, Brazil, and some other powers, but not by the United States.

The coast of Liberia has a general direction north-west and south-east, and is broken by several inlets and coves, of which those formed by Cape Mount, Cape Mesurado, and Bassa Cove are of much value as harbours. The greater part of the coast is low and sandy, or marshy; but about Cape Mesurado and Cape Mount (which is 1060 feet above the sea) the shore is considerably elevated. Between those points however there is a low continuous beach of light brown sand, backed by an unbroken tract of forest. Towards the south-eastern extremity the coast is in many parts bold and rocky, the cliffs in many places being from 40 to 60 feet above the sea, with large irregular blocks of granite on the beach, over which the sea breaks heavily, and many rocks lie a short distance off the shore; but between the higher parts everywhere occur long stretches of low sandy beach, in many places bordered by sand-banks: so that nearly all along the coast it is necessary for the mariner to keep a sharp look-out.

From the coast the land rises for the most part gradually towards the interior. About 20 or 30 miles from the shore is a succession of hills covered, like a large part of the lower country, with forests, rising farther inland into mountain ridges, and divided by wide and fertile valleys. The rivers are numerous, and some of them are good-sized streams; but all have their mouths obstructed, and some entirely closed, by sand-bars; and, owing to the prevalence of rapids,

none appear to be navigable far inland. The chief river is the St. Paul, which falls into the sea by Cape Mesurado. The sand-banks at its mouth leave only a narrow channel for boats, with 7 feet of water in it at low-tide. It is half a mile wide 40 miles from its mouth, has a considerable body of water, flows through an extremely fertile valley, and has along its banks numerous native villages as well as settlements of the Liberians; but its course is greatly obstructed by rapids; boats of light draught can only ascend it for about 25 miles. The other most important streams are the St. John, which falls into the sea at Bassa Cove; the Junk, which lies between the St. Paul and St. John, and has a very narrow channel through the bar at its mouth; the Cape Mount River, which falls into the sea at Cape Mount, and has its entrance almost closed by a narrow spit of sand; the Grand Cestos, some distance eastward; and the Droo, still farther east, which has about 6 feet of water over its bar, deepening inside to 4 fathoms.

The climate is hot and oppressive. During the dry season, which lasts from May to November, the temperature averages 86°; but in the wet season it falls to 75° or 74°. The extreme heat is alleviated by gentle breezes, which blow daily from the sea. To whites, whether natives of Europe or America, the climate is very prejudicial; but the negro colonists, though the descendants of families long settled in America, experience no inconveniences from it after they have passed through the 'seasoning,' or 'acclimatising fever,' which visits all the newly-arrived alike, but is now comparatively seldom fatal in its attacks. Nothing like an epidemic has ever appeared in Liberia.

The following brief extract from an 'Address of the Citizens of Liberia to the Free Coloured People of the United States,' 1847, may serve, with allowance for a little heightening in the colouring, to convey a tolerably clear idea of the character and capabilities of the country:—

"A more fertile soil, and a more productive country, so far as it is cultivated, there is not, we believe, on the face of the earth. Its hills and its plains are covered with a verdure which never fades; the productions of nature keep on in their growth through all seasons of the year. Even the natives of the country, almost without farming tools, without skill, and with very little labour, make more grain and vegetables than they can consume, and often more than they can sell. Cattle, swine, fowl, ducks, goats, and sheep thrive without feeding, requiring no care but to keep them from straying. Cotton, coffee, indigo, and the sugar-cane are all the spontaneous growth of our forests, and may be cultivated at pleasure, to any extent, by such as are disposed. The same may be said of rice, Indian corn, Guinea corn, millet, and too many species of fruit to enumerate. Add to all, we have no dreary winter here. . . . Nature is constantly renewing herself, and is also constantly pouring her treasures all the year round into the laps of the industrious."

It is thought that when labour becomes more abundant, sugar, cotton (which yields two crops in the year), coffee, and indigo will come to be staple products of Liberia. The coffee-tree has already been somewhat extensively planted; at one place there is a plantation of 30,000 trees. At present the chief articles of export, besides fruits, vegetables, and salted meats supplied to ships calling at the ports, are palm oil, which has become an article of great importance, dye-woods, ivory, and rice, with some gold, tortoise-shell, gums, hides, wax, ground-nuts, ginger, and pepper; a good proportion of which is brought by natives from the interior. The exports in the two years ending September, 1843, amounted to 25,767*l.*, the imports to 32,830*l.*; the exports are said now to average upwards of 100,000*l.* annually. The supply of dye-woods, especially cam-wood, appears to be inexhaustible. It is said that from about 30 miles east of Bassa Cove there "extends a forest-region of unknown extent, where scarcely any tree is seen except cam-wood." Liberia has a considerable coasting-trade, carried on by schooners belonging to the country; and a large trade with the interior. For home consumption as well as export there is a great variety of timber-trees suitable for building purposes; good building-stone abounds; as do also shells for lime, and clay of excellent quality for bricks.

Liberia is divided into the counties of Mesurado, or Montserrado, Bassa, and Sinoe. The chief town is *Monrovia*, the capital, on Cape Mesurado, a busy sea-port town and the principal place of trade. It contains a court-house, a public library, two or three churches and schools; several stores, warehouses, and good wharfs; a fort and a lighthouse; and has about 1600 inhabitants. The other larger towns and settlements along the coast are Marshall at the mouth, and on the right bank of the Junk River; Edina and Grand Bassa at the mouth, but on the opposite banks of the St. John, in Bassa Cove; Bexley, and the new town of Cresson in the same neighbourhood; Greenville on the Sinoe; Trade Town, a populous place 4 miles W. from Young Cestos; and Cestos, or St. George's Point in Cestos Bay. The chief inland towns and settlements are Caldwell on the St. Paul; New Georgia; and Millsburg. Along the coast are several factories, chiefly for the trade in cam-wood, belonging to Liberians, and some to English and American merchants: and both along the coast and inland are numerous native towns and villages, some of them, as Grand Cestos and Great Neefoo, of considerable size.

On Cape Palmas, the south-eastern extremity of Liberia, is esta-

blished the colony of *Maryland-in-Liberia*, consisting of free coloured emigrants sent thither from the state of Maryland by the 'State Colonisation Society.' The colony was founded in 1834, and a considerable number of free coloured persons have since been sent to it by the Society, which is assisted in its operations by an annual grant from the state legislature of 20,000 dollars. The colony, which is independent of Liberia, is governed by an agent, or governor, appointed by the Colonisation Society, and a council and other officers elected by the colonists; and appears to be in a tolerably flourishing condition. *Harper*, the chief town, contains about 700 inhabitants, and carries on a good deal of trade. The Palmas River is about a hundred yards wide towards its mouth, but several rocks lie in the channel; it has a depth of 3 feet over the bar at low water. The colonists have erected a lighthouse on Cape Palmas, which shows a fixed light 100 feet above the sea. There are two or three villages and smaller settlements.

The constitution, adopted at the declaration of the independence of Liberia, and said to have been drawn up by Professor Greenleaf, of Harvard College, Massachusetts, is founded on that of the United States, which it greatly resembles in its leading principles. It proclaims the equality of all men; establishes perfect religious freedom, and the liberty of the press; prohibits slavery; gives the right of every one to be tried by a jury of his peers, of bail, and of habeas corpus; makes nearly all offices elective, and gives the suffrage to every male citizen 21 years of age possessing real estate—citizenship belonging however exclusively to persons of colour; and of such, at present at least, only to the free coloured emigrants from the United States, who immediately on arriving are admitted to full citizenship, and receive a grant of five acres of land, with liberty to purchase more. The executive government is vested in a senate elected from the counties, and a house of representatives elected after the American system, according to a ratio of representative population; and a president who is elected for two years, is to exercise supreme executive power, is the commander-in-chief of the army and navy, and has a qualified veto on the acts of the legislature. The judicature consists of a supreme court, and districts courts: the judges are only removable by the president on a vote of two-thirds of the houses of legislature. The annual revenue and expenditure average about 7000*l.* a year each. The republic appears to be making steady progress.

There were in 1847 in Liberia (without including the Maryland colony) 23 churches with 1474 communicants, of whom 469 were natives; there are now above 30 churches. Schools are provided for all the children of citizens. In 1847 there were 16 schools with 562 scholars, of whom 192 were the children of native Africans: in 1851 the scholars were said to exceed 2000. Three high-schools are in operation in Monrovia; and an Act has passed the legislature for the establishment of a college. The 'Liberia Herald,' a very respectably conducted newspaper, has now continued to be published for above 20 years: one or two others have been issued within the last few years.

(*Constitution and Declaration of Independence of the Independent Republic of Liberia; Publications of the American Colonisation Society; Parliamentary Papers on African Slavery; Africa Redeemed; Travels in Africa, &c.*)

LIBOURNE. [GIRONDE.]

LIBYA. [AFRICA.]

LICHFIELD, Staffordshire, an episcopal city, a county in itself, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on a small stream, a feeder of the Trent, in 52° 41' N. lat., 1° 49' W. long., distant 18 miles S.E. from Stafford, 119 miles N.W. from London by road, and 115½ miles by the London and North-Western railway. The population of the city and borough of Lichfield in 1851 was 7012. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Stafford and diocese of Lichfield. Lichfield Poor-Law Union contains 30 parishes and townships, with an area of 58,701 acres, and a population in 1851 of 25,278.

The name Lichfield is Saxon. Edward II. granted a charter of incorporation to the city; and Queen Mary in the first year of her reign constituted the city and suburbs a distinct county. Charters were also granted by James I. and James II. The houses in the principal streets are handsome and well built; the city is well supplied with water, and is paved and lighted. Among the public buildings are the guildhall, the market-house, theatre, jail, and house of correction. A county court is held in the town.

The cathedral is partly of the early English, but much of it is of a later period. It sustained considerable injury during the civil wars, but was restored by Dr. Hacket in 1661; and very extensive repairs and alterations have since been effected. Its total length is 410 feet; the width along the transepts is 153 feet. It has three spires, of which the central rises to the height of 230 feet, the whole being ornamented with a profusion of very elaborate workmanship. As the building occupies an elevated site it forms a prominent object in the approach to the city. In the interior of the cathedral are numerous monuments, and among them is one of Dr. Samuel Johnson, who was born in this city, and to whose memory a statue has been erected. There are chapels for Independents and other Dissenters: a Free Grammar school (not now free to any), said to have been founded by

Edward VI., which has an income of nearly 100*l.* a year, with nine exhibitions, tenable for three years, and had 28 scholars in 1858; several National schools; an hospital for the aged widows or unmarried daughters of aldermen; a savings bank, and other benevolent institutions. In the town are extensive carpet manufactories and breweries. The market days are Tuesday and Friday. Fairs are held on January 10th, Shrove-Tuesday, Ash-Wednesday, and the first Tuesday in November. There are seven incorporated trade companies. The Grand Junction Canal passes Lichfield on the south.

The diocese of Lichfield comprises the three archdeaconries of Stafford, Derby, and Salop, including parts of Staffordshire, Derbyshire, Warwickshire, and Shropshire. Besides the archdeacons the chapter includes a dean, 4 canons, 19 prebendaries, a chancellor, and 5 minor canons. The income of the bishop is fixed at 4500*l.* a year. The livings are 491. The episcopal palace adjoins the cathedral in the precinct of the Cathedral Close.

LICHTENBERG, a principality situated between the Bavarian circle of the Rhine, the Prussian province of the Lower Rhine, and two isolated districts belonging to Oldenburg and Hesse-Homburg, has an area of 286 square miles. The old lordship of Baumholder was ceded in 1816 by Prussia to the Duke of Saxe-Coburg, who gave it the rank of a principality, calling it Lichtenberg after an ancient castle. The duke ceded the principality, with all the rights of sovereignty, to Prussia in 1834. The territory of the principality is mountainous, being covered by the western offsets of the Wasgau, which are furrowed by the narrow valleys of the Nahe and the Blies. It now forms part of the government of Trèves. Its chief town, *Wendel*, situated on the Blies, a feeder of the Saar, has about 2600 inhabitants. *Baumholder*, a village of about 1000 inhabitants, lies N.E. of *Wendel*. Iron, copper, and some valuable stones are found in the principality.

LIDFORD. [DEVONSHIRE.]

LIECHTENSTEIN, a sovereign principality, the smallest of all the states composing the German Confederation, consists of the counties of Schellenberg and Vaduz, and is situated between Switzerland and the Tyrol, on the northern slope of the Rhaetian Alps. It is bounded N. and E. by the Tyrol, S. by the canton of Grisons, and W. by the Rhine, which separates it from the canton of St. Gall. Its area is only 52 square miles, with a population of 6351, all Roman Catholics. The country is very mountainous; but it produces corn, flax, wine, fruit, and timber, sufficient for the consumption of the inhabitants, who have also a good breed of horned cattle. Liechtenstein, together with several other small German states, forms the fifteenth member of the diet, but in the full council each of them has a vote of its own. Its contingent to the army of the Confederation is 55 men.

The principal place in the principality is *Vaduz*, a village of 1700 inhabitants, situated on the right bank of the Rhine. Above it is the castle of Liechtenstein, built on a lofty rock.

Though the prince of Liechtenstein, as a sovereign, has a smaller territory than any other of the German princes, he possesses in the Austrian empire mediated principalities and lordships of great extent, which comprise the principalities of Troppau and Jagerndorf in Upper Silesia, and vast estates in Moravia, making together an area of 2200 square miles, with a population of 360,000, and yielding to the prince an annual revenue of 1,500,000 florins. The house of Liechtenstein is one of the most ancient and illustrious in Europe; it is believed to have a common origin with the house of Este.

LIÈGE, a province of Belgium, is bounded N. by Limburg, E. by Rhenish-Prussia, S. by Luxembourg, and W. by Namur and South Brabant. Its area is 1115 square miles, and the population on January 1, 1849, numbered 460,663, the great majority of whom are Walloons. The smaller and northern portion is hilly and undulating; the southern is mountainous. The Ardennes cover a great part of the south of the province. The soil differs much in quality. On the west side of the Maas, and on the east side towards Limburg, the plains, valleys, and low hills are fertile and well cultivated; on the east side of the Maas, where it is joined by the Ourthe, especially towards Luxembourg, the soil is rocky and stony. In this part of the province there are extensive forests. The principal river is the Maas, which comes from Namur, and forms at first the boundary between the two provinces. After receiving the Ourthe it flows between high, steep, and often perpendicular rocks to Liège, where it becomes broader, and enters the province of Limburg. The Ourthe is joined on the right bank by the Amblève, which rises in the Eifel, and passes Malmedy; and near its mouth by the Vesdre, which also rises in the Eifel, and runs west through a pretty valley past Eupen, Limburg, and Verviers. The climate is healthy and temperate, though somewhat damp; in the southern parts the air is keener and the winter longer than in the north. The country produces hops, corn, and a little wine; the pastures are good, and maintain great numbers of horned cattle and sheep. The mineral wealth of the country is considerable; there are mines of calamine, alum, lead, and iron ore; but more important than all these together are the numerous coal-mines of the province. Of the mineral waters those of Spa are the most celebrated. The manufactures, which are very important, consist of all kinds of steam-machinery for railroads and factories, mill-castings, fine woollens, merinoes, linen, cotton-stuffs, cutlery, surgical instruments, fire-arms, glass, hardware, &c. There are zinc and calamine works of con-

siderable magnitude near Huy, and at other places in the valley of the Maas. The province is crossed by the Liège-Namur railroad, and by the line from Ostend to Cologne. The number of steam-engines of different kinds in the province for manufacturing, mining, and locomotive purposes exceeds 500.

The province of Liège was formerly a bishopric belonging to the circle of Westphalia; the bishop, who was suffragan of the archbishop of Cologne, was a prince of the empire, and had also the title of Duke of Bouillon. The French however took possession of the province in 1789, and retained the country till the overthrow of Napoleon I., after which it was united with the kingdom of the Netherlands: from this it was severed by the revolution of 1830. [BELGIUM.]

Towns.—The capital is LiÈGE. *Glons*, a small place of 2000 inhabitants, N. of Liège, is the centre of a great straw-hat manufacture, which gives occupation to upwards of 6000 people. *Herstal*, or *Heristal*, on the left bank of the Maas, has important coal-mines, iron- and steel-works, iron-foundries, and 6000 inhabitants. The village extends nearly 3 miles along the river towards Liège. Pepin le Gros took the name of D'Heristal from having resided here. *Herve*, a few miles E. of Liège, has 3500 inhabitants, who manufacture woollen-cloth, stockings, and shoes, and trade in cheese and butter. *Huy*, situated in a narrow valley, hemmed in by lofty rocks, on the Maas, here crossed by an ancient stone bridge, is strongly fortified and further defended by a formidable citadel, which commands the valley of the Maas. This town is admired for its romantic situation. It has an interesting cathedral and town-hall. The collegiate church of Notre Dame, situated below the citadel, is a graceful gothic structure, which dates from A.D. 1811, and is approached by a gateway adorned with sculptures in relief, representing incidents in the life of the Blessed Virgin. The grave of Peter the Hermit, who died A.D. 1115, is still shown on the site of the old church of the monastery of Neufmoustier, in one of the suburbs of the town. The population is 8000. Beer, spirits, paper, leather, linen, and cast-iron are manufactured. *Limburg*, formerly a strongly fortified town and capital of the old duchy of Limburg. It is now little better than a heap of ruins: the French demolished its outworks in 1675, and various calamities of war and fire have since completed its destruction. The population of the town hardly exceeds 1500. Its suburb, *Dalshais*, or *Dalhem*, is now a much more important place; it has about 3000 inhabitants, is a station on the railway from Liège to Aix-la-Chapelle, 6 miles E. from Verviers, 16 miles N.E. from Liège, and has manufactures of fine linen and woollen-cloth. *Seraing*, S. of Liège, on the Maas, has coal-mines, important iron-foundries, and glass-works: population 3460. A suspension-bridge over the Maas connects the town with Jemeppe. The iron-works established here by the late Mr. John Cockerill form a vast mass of buildings, comprising 4 blast- and 15 puddling-furnaces, rolling-mills, and forges, where iron is worked into articles of all sorts, from penknives to steam-engines. Iron and coal are got from mines within the walls. The buildings are surmounted by about 50 tall chimneys. The establishment is now worked by a Belgian company, and employs between 3000 and 4000 men in addition to several steam-engines. *Spa*, a well-built little town, famous for its mineral-springs and baths, is situated in a pretty valley among the Ardennes Mountains, in the south-east of the province. The heights around it are covered with plantations, and laid out in delightful walks, which present at several points prospects of great beauty. The principal spring, called *Pouhon*, is situated in the town; six others are in the environs. The ordinary population of the town is about 4000, who live chiefly by the profits derived from visitors to the waters. The bath-buildings, the several pump-rooms, and the *Redoute* (a handsome building, which includes a café, theatre, gambling-rooms, &c.) are the most interesting structures in Spa. The Spa springs are chalybeate; they are chiefly recommended in cases of relaxation of the bowels and obstruction of the liver. About 150,000 bottles are annually exported from the *Pouhon* spring, which is the strongest. Spa is famous also for the manufacture of elegant wooden toys, work-boxes, writing-desks, &c. The mountains near the town contain many beautiful and extensive grottoes. *Theux*, S.E. of Liège, on the left bank of the Hoëgne, a feeder of the Vesdre, which rises to the south of Spa in the Ardennes, has black marble-quarries, woollen-yarn factories, iron-works, and 4370 inhabitants. Near *Theux* is the old castle of Franchimont, celebrated by Sir Walter Scott. *Verviers*, a flourishing manufacturing town of 27,000 inhabitants, is situated on the Vesdre, about 20 miles by railway E. from Liège. It is irregularly built, but some of the suburbs are pretty. The town-house, theatre, the new church, the railway station, and the college are the most remarkable public structures of the town. Verviers is famous for the manufacture of fine and ordinary woollen-cloths and cassimirs, giving employment to 40,000 hands in the town and neighbourhood; the Belgian army is clothed principally from the looms of Verviers, the total produce of which is estimated at 1,000,000*l.* sterling annually. Flannels, serges, tickings, coverlets, mouselines-de-laine, merino, &c. are also manufactured. The dyes of Verviers are said not to be surpassed in Europe. There are also establishments for the manufacture of steam-machinery, ironmongery, soap, beer, &c.

LIÈGE (*Lutich*, *Luit*), the capital of the Belgian province of Liège, is situated in a valley below the junction of the Ourthe with the Maas, in 50° 39' N. lat., 5° 31' E. long., at a distance by railway of 58½ miles S.E. from Malines, 35 miles N.E. from Namur, and has

76,500 inhabitants. The city is the seat of a bishop, and of the supreme court of justice for the provinces of Liège, Limburg, Namur, and Luxembourg. The Maas, on entering the city, divides into several branches which form islands, bordered by handsome quays and connected by 17 bridges. Liège is divided into the old and the new town, and has besides 10 suburbs. Most of the streets are very narrow, dark, in consequence of the height of the houses, and not clean. There are however a few broad streets, some good squares, and promenades. The city was formerly fortified, but at present it is defended only by a citadel, erected on St. Walburg's Mount on the north side of the town, and by a great outwork on the west side. The most remarkable buildings are—the cathedral, built in the 8th century, the court-house, the town-hall, the theatre, the university, which was founded in 1817, and the church of St. Jacques, the finest ecclesiastical edifice in the city, lately repaired and magnificently decorated at the public expense. There are a gymnasium, a bank, and numerous learned, charitable, and useful institutions. The extensive coal-mines near the town; its numerous iron-works, royal cannon-foundry, and establishments for the manufacture of fire-arms, hardware, broadcloth, glass, and leather; its engine-factories, zinc rolling-mills, and naileries; its linen and cotton factories, steel-works, and breweries; together with a flourishing commerce in colonial produce and manufactured goods, render it one of the most important towns in Belgium, and one of the most industrial centres in Europe. The staple manufacture is that of fire-arms. The town owes its prosperity to the valuable coal-mines near and under the town.

LIEGNITZ, one of the three governments into which Silesia is divided, comprises the most north-westerly part of that province, and that part of Upper Lausitz which is now part of Prussia. It is bounded N. by the governments of Frankfurt and Posen, E. by those of Posen and Breslau, S. by Bohemia, from which it is separated by the crest of the Riesen-gebirge, and W. by the kingdom of Saxony. Its area is 5800 square miles, and the population at the end of 1849 was 921,002. The surface, high, rugged, and mountainous, in the south, slopes down northward into the great plain of the Oder, which river traverses the government from south-east to north-west, and forms part of the northern boundary. The principal feeders of the Oder in the government are the Katsbach, the Bober (which receives the Zack, the Queiss, and many other streams), the Neisse, which drains the west of the province, consisting of part of Upper Lausitz, and the Bartsch, which rises in Posen and joins the Oder on the right bank above Glogau. A small portion of the province to the west of Görlitz belongs to the basin of the Spree, which river forms part of the western boundary. There are many small lakes in the south and west of the province.

The climate is tolerably mild. The soil is generally sandy and in the valleys very fertile, but there are few districts which produce corn enough for the consumption. The vine is cultivated in the valleys. Forests everywhere abound and timber forms an important article of export. The pastures are extensive, and large numbers of horned cattle and sheep are reared. Linen and woollen stuffs are the chief industrial products. [SILESIA.]

Liegnitz, the capital of the government, situated in 51° 12' 30" N. lat., 16° 12' 15" E. long., at the conflux of the Schwarzwasser and the Katsbach, 180 miles by railway S.E. from Berlin, has a population of about 12,000. The inner town is surrounded with a moat and earthen rampart, which is laid out in public gardens with fine avenues of trees; it is entered by four gates. The old palace of the princes of Liegnitz is in the town, and is surrounded by a separate moat and high wall. There are 4 churches, of which that of St. Peter and St. Paul has a large library, and that of St. John contains the magnificent chapel where the old princes of Liegnitz and Brieg were interred. Among the public institutions are a gymnasium, with 13 professors, and 270 pupils in 1850, the Ritter Academy, a magnificent building, founded in 1708 by the emperor Joseph I. for the sons of Silesian gentlemen, and remodelled in 1810 for the education of children of the upper classes of society. It has a good library, mathematical and other instruments, collections of natural history, &c., and considerable revenues. Liegnitz has manufactures of woollen cloth, linen, cotton, silk-stockings, tobacco, starch, beer, &c. In the suburbs and environs great quantities of fruit and vegetables are grown. Liegnitz has a theatre, an orphan asylum, and two hospitals. Frederick II. defeated the Austrians under Marshal Laudon between this town and Parohwitz (a few miles to the north-east) in 1760. In the vicinity is Wahlstatt, where the celebrated battle with the Mongol Tartars was fought in 1241, in which Frederick, duke of Liegnitz, lost his life; and between this place and Eichholz on the Katsbach, Blücher, together with the Russians, defeated the French under Macdonald and Ney in 1813, whence he obtained the title of Prince Blücher of Wahlstatt.

Görlitz, a well-built fortified town, is situated on the left bank of the Neisse, 60 miles by railway E. from Dresden, and has a population of 13,670, who are engaged in the manufacture of woollen-cloth, linen, hosiery, leather, sheeting, linen-yarn, hardware, and musical instruments. The town has also a considerable transit-trade. It contains 8 churches, a citadel, a town-hall, a gymnasium, 3 libraries, an orphan asylum, 4 hospitals, and a house of correction.

Glogau, a strong fortress, on the left bank of the Oder, is situated

in 51° 38' N. lat., 16° 7' E. long., 50 miles by railway E. from the Hansdorf station on the Berlin-Breslau line, and has 12,000 inhabitants. An island in the Oder is strongly fortified and connected with the town by a wooden bridge. The town has 11 churches, a synagogue, 2 hospitals, a Catholic gymnasium with 13 professors and 268 pupils (in 1850); a Protestant gymnasium with 11 professors and 117 pupils; and manufactures of woollens, printed calicoes, hosiery, tobacco, &c.

Bunzlau is the subject of a separate article. [BUNZLAU.]

Among the other towns we can only briefly notice the following:—

Goldberg, situated on an eminence on the banks of the Katsbach, has double walls and four gates; a population of 7500; manufactures of broadcloth, hosiery, and gloves; and a high school, in which the celebrated Wallenstein was educated. Grünberg, a walled town with three gates, about 10,000 inhabitants, flourishing manufactures of woollen cloths, printed cottons, and leather, is situated near the northern boundary of the government. Hirschberg, S.W. of Goldberg, is the centre of a great linen manufacture, and has about 8000 inhabitants. The town stands on the left bank of the Bober; it is walled, and has five churches, a gymnasium, cotton-printing factories, paper-mills, sugar-refineries, and potteries. Jauer, or Jauerbach, stands S. of Liegnitz, on the mountain river Neisse, a feeder of the Katsbach. It is a well-built town, surrounded by a double wall and a ditch, and has about 7000 inhabitants, who manufacture broadcloth, linen, hosiery, and leather. Laudan, on the Queiss, a walled town, with four gates, has a Protestant gymnasium with 9 professors and 94 pupils (in 1850), and 6000 inhabitants, who manufacture calico and linen. Sagan, on the Bober, is a strongly-fortified town, with three gates, a very fine ducal palace with a beautiful park, one Lutheran and five Roman Catholic churches, and manufactures of woollen-cloth, linen, stockings, lace, and looking-glasses. There is a Catholic gymnasium, with 11 professors and 223 pupils (in 1850). The population is nearly 7000.

The government of Liegnitz is traversed by the Saxo-Silesian railway from Dresden, through Görlitz, to the Kohlfurt junction on the Berlin-Breslau line, which passes through Liegnitz and Bunzlau, and sends out a branch eastward through Sagan to Glogau. [SILESIA.]

LIEOU-KIEOU or LOO-CHOO ISLANDS, a group of islands situated at considerable distances from one another, between the Japanese island of Kioosio and the Chinese island of Formosa. They lie between 24° 10' and 28° 40' N. lat., 127° and 129° E. long., and are said to consist of 36 islands, of different but rather small dimensions. The largest of them, called Great Loo-Choo, and sometimes Doo-Choo by the natives, is very nearly 60 miles long in a north-east direction, and preserves a tolerably uniform breadth of about 10 or 12 miles. The surface of these islands is mostly uneven and rugged. The highest of the hills, Onnodake Mount, measured by Captain Beechy, does not attain 1100 feet above the sea. They seem to be of volcanic origin, but no active volcano has been observed in them. The lower tracts are of great fertility, but the most elevated are generally bare and rarely covered with wood. The fertile tracts are in high cultivation, yielding sweet potatoes, millet, wheat, Indian corn, rice, potatoes, cabbages, barley, the sugar-cane, cotton, peas, tea-shrubs, tobacco, capsicums, cucumbers, coconuts, carrots, lettuces, onions, plantains, pomegranates, and oranges. Their agriculture resembles that of the Chinese, particularly as to manuring and irrigating the ground. Along the sides of the hills and around the villages the bamboo, rattan, pine, and banyan trees flourish. Cattle are employed only for agricultural purposes. Milk is never used; hogs, goats, and poultry, with rice and other vegetables, form the food of the inhabitants. They have no sheep nor asses; their horses are of a small slight make, and used for riding and carrying loads. The climate is very mild, these islands being situated within the range of the trade-winds. The inhabitants are rather low in stature, but well formed, of a deep copper colour, with uniformly black hair, and dark gray eyes. Gentleness and simplicity characterise them all. Their language is similar to the Japanese. Sugar, salt, and sulphur are exported to China and Japan. The principal commercial town of Great Loo-Choo is Napakiang, or Nepa Ching, which has a good and safe harbour, and is generally considered the capital of the islands; but Captain Beechy thinks that the town of Shui or Shoodi is the capital and residence of the king. It is situated farther inland, on a hill, and surrounded by a wall, but has never been visited by Europeans. The islands are said to be nominally subject to Japan.

LIERRE, or LIER. [ANTWERP, Province of.]

LIFFORD. [DONEGAL.]

LIFFRÉ. [ILLE-ET-VILAINE.]

LIFY, RIVER. [DUBLIN; IRELAND.]

LIGUEIL. [INDRE-ET-LOIRE.]

LIGURIA (called by the Greeks Ligystica, and the inhabitants Ligyes and Ligustini), a division of ancient Italy, was separated in the time of Augustus from Etruria by the river Macra (*Magra*), and was bounded N.E. by Gallia Cisalpina, and W. by the province of Gallia. The most important places in Liguria were Albium Intemelium (*Vintimiglia*), a place of some importance and a municipium, the capital of the Intemelii; Albium Ingaunum (*Abruzzi*), the capital of the Ingauni; Genua or Genoa; Dertona (*Tortona*), in the interior,

a Roman colony, surnamed Julia; Alba Pompeia (*Alba*); Asta (*Asti*); and Pollentia (*Polenza*).

The Ligures in more ancient times extended as far as the Rhone in France; and they also appear to have inhabited part of Spain and Corsica. The Ligurians of Italy were finally subdued by the Romans B.C. 166.

LIGURIAN APENNINES. [APENNINES.]

LILLE, the capital formerly of French Flanders, now of the department of Nord, is situated in 50° 38' 44" N. lat., 3° 3' 37" E. long., at a distance by railway of 170 miles E.N.E. from Paris, 51 miles S.E. from Dunkirk, and in 1851 had 68,463 inhabitants in the commune, which does not include all the suburbs. It stands in a fertile and level country, at the junction of the Haute-Deule and the Basse-Deule, as the two cuts of the canal that unites the Scarpe and the Lys are called. These two cuts are united by a third, called Moyenne-Deule, which passing west of the town conveys barges too heavily laden or too large to pass through any of the numerous channels that traverse the city for purposes of commerce or to drive the machinery of the numerous factories. The town is well built; the streets are regular, wide, and provided with foot-pavements; the houses are in general three or four stories high, and built of brick or limestone. It contains 34 squares and market-places, 30 bridges of all sizes, about 200 streets, a great number of lanes and courts, and about 10,000 houses, besides many factories and mills, which, together with a far greater number in the environs, announce to the traveller by their lofty chimneys that he is approaching one of the great hives of industrial activity. Lille, which is entered by 7 gates, is surrounded by very strong fortifications and wet ditches, and defended by a citadel said to be the masterpiece of Vauban. Its shape is nearly oval, its length within the walls being 2560 yards, and its breadth 1278 yards. The citadel is a regular pentagon of 426 yards diameter; it is situated south-west of the town, and separated from it by a wide esplanade, which crossed by the Moyenne-Deule, and planted next the town with several avenues of trees, forms a fine promenade.

The public structures of Lille are few. The most remarkable are—the churches of La-Madeleine, St-Maurice, and St-Paul; the town-hall, which, built by Jean-sans-Feur in 1430, was for a long time the palace of the dukes of Bourgogne; the Mont-de-Piété, founded in 1610; the Paris gate, which is a triumphal arch in honour of Louis XIV.; the general hospital; the large corn-stores at the end of the Rue Royale; the theatre; the concert-room, one of the finest in France; the museum, established in a fine old abbey, and containing the public library of above 20,000 volumes, a gallery of paintings, and the archives of the town; and the Napoléon bridge across the Moyenne-Deule, which unites the part of the esplanade that serves for a walking-place to the part next the citadel where the troops are drilled.

The manufactures of Lille are very important; they consist of all kinds of cotton goods; linen and linen thread, lace, blankets, and other woollen-stuffs; paper, leather, beet-root sugar; steam machinery and iron-mongery; gin, beer, and great quantities of oil, which is expressed in 300 wind-mills near the town; glass, soap, tape, hats, carpets, chemical products, &c. There are also iron- and copper-foundries, dye-houses, bleaching establishments, and sugar-refineries. The trade in these various products, and in colonial produce, wool, hides, hops, coal, tobacco, chicory, &c., is extensive. The town is lighted with gas, and has communications by railway and by canal with all parts of France and Belgium.

Lille is the seat of tribunals of first instance and of commerce, and the head-quarters of the 3rd Military Division; it has a bank, a council of prud'hommes, a college, a medical school, an academy of music, a school of painting, various establishments for the gratuitous instruction of working manufacturers, and a great number of charitable institutions.

Lille (*l'Isle*) owes its origin and its name to a castle built on a spot surrounded by marshes at an early period. It is first mentioned in the time of Baudouin I., count of Flanders, who had several of his enemies hanged from the walls of the castle in 863. Baudouin IV. however may be said to be the founder of the city; he enlarged the place and surrounded it with walls in 1030. The emperor Henry III. in his invasion of Flanders in 1054 took Lille; but it was soon recovered and restored by Baudouin V., who founded the collegiate church of St-Pierre in 1066. In 1213 the city was taken after a siege of three days by Philippe Auguste of France; in the same year it revolted, whereupon Philippe retook it, and burnt it to the ground. Rebuilt upon a larger scale it was besieged by Philip the Fair in 1297, to whom it capitulated after 11 weeks siege. After the defeat of the French at the battle of Courtrai in 1302 the city opened its gates to Jean de Namur, count of Flanders; but Philip the Fair after another long siege recovered it in the following year, and the city remained in the hands of the French till the time of Philippe-le-Hardi, who restored it to Flanders. In 1476 it passed to the house of Austria, and twenty years afterwards it was united, together with the whole of the Low Countries, to the crown of Spain. The Spaniards held Lille till 1676 when it was wrested from them by Louis XIV., by whose directions Vauban constructed the fortifications and one of the finest citadels in Europe. In the wars of the Spanish succession the city was taken by the allies in 1708. It was finally ceded to France in 1713. Lille was considerably enlarged in 1780, when the handsome

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quarter extending between the gates of La-Barre and La-Madeleine was laid out and built. The most memorable siege that Lille has ever sustained was that of 1792, when an Austrian army rained shell, shot, and red-hot balls upon it for six days, but owing to the resistance of the garrison and the townsfolk, and still more to the successes of the republicans in Champagne, they were obliged to withdraw before making themselves masters of the city.

LILLEBONNE. [SEINE-INFÉRIEURE.]

LILLO. [ANTWERP.]

LILYBŒUM. [SICILY.]

LIMA, the capital of the republic of Peru in South America, is situated in 12° 2' S. lat., 77° 4' W. long., about six miles from its port CALLAO, which is on the shores of the Pacific. It contains with its suburbs about 60,000 inhabitants, of whom more than a third are mulattos, and nearly 10,000 Indians and mestizos. Lima stands on high ground; the road rises gradually from Callao, and the great square of the capital is 560 feet above the level of the sea. Lima is built in a spacious and fertile valley traversed by a small river called the Rimac, which washes the northern walls of the city. Over it there is a handsome stone bridge leading to the suburbs of St. Lazaro and to the alameda, or public walk. The city is surrounded with low walls. It is about two miles in length, and from its numerous domes and spires has an imposing and picturesque appearance at a little distance. The city is regularly laid out in square blocks of houses (quadras), about 400 feet each way. The houses are low, and have rarely more than one floor: they are lightly built on account of the frequent earthquakes, which have repeatedly reduced the city to ruins. The roofs are made of coarse linen-cloth, or cane, the total want of rain rendering more substantial roofs unnecessary. The streets are regular and tolerably wide, but the pavement is extremely bad, consisting of large round stones, laid without the least regularity. There are no flags for foot-passengers; and the chief or only scavengers are the lurking buzzards which swarm about them: a broad channel of running water passes through the middle of almost every street. The city occupies a nearly triangular space, the base or longest side extending along the banks of the river. A fine street leads from the bridge to the Plaza Mayor, or great square, in the midst of which is a large fountain with a bronze statue of Fame in its centre, and at its angles four small basins. On the north side of the square is the government palace, a large but gloomy-looking edifice, formerly occupied by the viceroys, but now the court-house. On the east side of the square are the cathedral, a handsome building of considerable extent, and the archiepiscopal palace, now in part used as a senate-house. On the west side, which faces the cathedral, is the town-hall and the city prison; the south side is occupied by private houses generally built in a good style.

Lima has 56 churches, and before the revolutionary war there were 46 convents of monks and nuns; but most of them have since been abolished. It has a university, three colleges, a medical college, a botanic garden, a national museum, and a public library with a considerable collection of valuable books. Primary schools are pretty numerous. There are several charitable institutions, including sixteen hospitals for sick persons and two foundling hospitals. The places of amusement are—a theatre, a large bull-ring, a cock-pit, &c. There are also public baths and an extensive cemetery, called the Patheon, outside the city.

The manufactures are not numerous nor extensive. The principal manufactured articles are—utensils and vessels of silver, gold-lace, gilded leather, glass, and cotton-cloth. There is a mint in the city. Gold and silver, copper-ore, chinchilla and viougnas skins and wool, bark, nitre, sugar, &c., constitute the principal articles of export.

LIMBURG, a former province of the kingdom of the Netherlands as constituted after the overthrow of Napoleon I., was situated between 50° 44' and 51° 45' N. lat., 4° 57' and 6° 15' E. long., and was bounded N. by North Brabant and Gelderland, E. by Rhenish Prussia, S. by the province of Liège, and W. by those of South Brabant and Antwerp. The surface of the country is generally level, being diversified only in the south-east by some slight elevations. In the adjoining province of Liège the banks of the Maas are lofty and precipitous; but in the province of Limburg there are elevations only at a distance from the stream as far as Maestricht, from which place the banks are low.

In consequence of the revolution of 1830 the province of Limburg was divided between Holland and Belgium, the Maas forming the line of separation between the two portions, with the exception of a small circuit about the city of Maestricht on the left bank of the river, which is included in the Dutch portion. We here notice the portions separately.

Belgian Limburg lies between 50° 44' and 51° 18' N. lat., 4° 57' and 5° 40' E. long., and is bounded N. by North Brabant, E. by the duchy of Limburg, from which it is separated by the Maas, S. by Liège, and W. by Antwerp and South Brabant. The area is 928 square miles, and the population in 1849 was 185,621. The surface is flat, except in the south, where there are a few hills. The east of the province along the left bank of the Maas is fertile in corn, hemp, flax, tobacco, madder, fruits, &c. The district also between the Jaar and the Demer possesses a fertile soil. The rest of the province consists of a sandy soil, presenting towards the north extensive barren heaths and many marshes. The pasture-lands are extensive, and cattle-feeding is more

attended to than tillage; there is a good breed of horses, and bees are carefully tended. The principal rivers are—the Maas, which receives the Jaar on its left bank at Maastricht; the Demer, which rising west of Maastricht runs westward past Hasselt, and having received several small feeders from both banks enters South Brabant on its way to join the Dyle, a feeder of the Schelde; and the Dommel, which rises in the north of this province and flows through North Brabant, where it enters the Maas at Crèvecoeur.

Hasselt, the capital of the province, is a well-built town of 7600 inhabitants, on the Demer. It has some manufactures of linen, leather, tobacco, beer, spirits, point-lace, &c. A branch railroad leads from Hasselt through St.-Trond to the Liège-Malines line, which it joins at Landen.

St.-Trond, 10 miles from Hasselt, stands on the Meselbeck, a feeder of the Demer, and has 9500 inhabitants. It is joined by a branch railroad to the Liège-Malines line. The chief manufactures are fire-arms and lace; there are iron-forges in the neighbourhood.

Bilsen, a small place of 2900 inhabitants on the left bank of the Demer, has iron mineral springs and potteries. *Tongres*, or *Tongern*, on the Jaar, is a well-built town with 6000 inhabitants, who manufacture chicory, leather, and hats. In a valley near this town there is an iron mineral spring which has been described by Pliny. The town is named from the *Tungri*, the first German tribe which settled on the left bank of the Rhine. *Maaseyk*, or *Mazeik*, a town of 4000 inhabitants, stands in the north-east of the province on the left bank of the Maas, and has manufactures of leather, paper, hats, tobacco, pottery, beer, spirits, and ropes.

The Dutch province of *Limburg* has the title of duchy, extends between 50° 45' and 51° 47' N. lat., 5° 35' and 6° 13' E. long., and is bounded N. by Gelderland, E. by Rhenish Prussia, S. by the Belgian province of Liège, and W. by those of North Brabant and Limburg. The area is 848 square miles, and the population in 1852 was 210,275. It extends 71 miles from north to south, with an average breadth of 14 miles, but at some points the width does not exceed 3 miles. In the southern part extending along the right bank of the Maas the soil is fertile, but in the north bogs, moors, and marshes cover a great part of the surface. Cattle-breeding and agriculture are the chief occupations of the inhabitants; the products are similar to those of the Belgian province of Limburg. The principal rivers besides the Maas are its feeders from the right, the Roer and the Neisse.

Maastricht, or *Maestricht*, the capital of the province, stands on the left bank of the Maas, here crossed by a handsome stone bridge, in 50° 48' N. lat., 5° 43' E. long., and has 22,000 inhabitants. The part of the town that stands on the right bank of the Maas is properly a suburb, and called *Wyck*. The town is regularly and well built, and contains several spacious squares, one of which, the Parade, is inclosed by an avenue of trees. The town-hall in the great market-place, and the church of St.-Gervais, are the most remarkable buildings. There are 6 Roman Catholic and 3 Calvinist churches, 2 hospitals, 2 orphan asylums, and a lyceum. The manufactures consist of woollen-cloth, flannel, leather, fire-arms, soap, beer, and spirits. The town is very strongly fortified, and has an arsenal and military magazine: the citadel is erected on a hill called *Petersberg*, on the west bank of the Maas. Underneath this hill is a stone quarry of great extent, abounding in many curious and interesting fossils; it is said to be intersected by above 20,000 passages, forming a most intricate labyrinth. Steamers ply on the Maas to Liège and Rotterdam. Maastricht has suffered often from siege. It was taken after a four-months' siege by the Spaniards in 1579, when the garrison and many of the townspeople were massacred by the victors; it was taken also by Louis XIV.; but William III., king of England, attacked it in vain. Its brave garrison defended it successfully against the Belgians in 1830, and thus preserved it to the Dutch. A branch railway connects the town with Aix-la-Chapelle, whence it has communication with the Belgian and Rhine railways.

The other towns are:—*Sittard*, N. by E. from Maastricht, population 3325; *Rodmond*, or *Ruremonde*, a strongly-fortified place at the entrance of the Roer into the Maas, with 6000 inhabitants, who manufacture woollen-cloth, leather, and beer; *Vaels*, a frontier town, a little W. of Aix-la-Chapelle, with 3000 inhabitants; *Venloo*, a fortified town on the right bank of the Maas, and near the Prussian frontier, has 7500 inhabitants, several breweries, distilleries, tobacco-factories, vinegar-works, tin- and lead-foundries, tan-yards, and spinning-mills; the fort St.-Michael, which forms part of the defences, stands on the left bank of the Maas, and is joined to the rest of the town by a bridge of boats; and *Veerd*, which is situated in a marshy district, near the borders of North Brabant, on the Bree, and has 6500 inhabitants, who manufacture hats, cloth, tobacco, chocolate, candles, leather, and stockings.

LIMBURG, referred to from Galicia, is a misprint for LEMBERG.

LIMBURG. [LIEGE.]

LIMBURG, a town in the duchy of Nassau, situated near the point 50° 20' N. lat., 8° 0' E. long., 20 miles N.N.W. from Wiesbaden, gives title to a Roman Catholic bishop, and has about 3300 inhabitants. It is built on the left bank of the river Lahn, a feeder of the Rhine, over which there is a stone bridge. It has a mint and four churches, of which St. George's church is deserving of notice. The inhabitants manufacture earthenware, and carry on a considerable trade in the

productions of the country. There is a Roman Catholic clerical college and an hospital in the town. The Bishop of Limburg is suffragan of the Archbishop of Freiburg.

LIMERICK, an inland county of the province of Munster, in Ireland, is bounded N. by the Shannon, which separates it from Clare, E. by Tipperary, S. by Cork, and W. by Kerry. It lies between 52° 17' and 52° 47' N. lat., 8° 8' and 9° 25' W. long., and is 35 miles long from north to south, 54 miles from east to west. The area comprises 1064 square miles, or 680,842 acres, of which 526,876 are arable, 121,101 uncultivated, 11,575 in plantations, 2759 in towns, and 18,531 under water. In 1841 the population, exclusive of the city of Limerick, was 281,638; in 1851 it was 208,688.

Surface, Hydrography, Communications.—The surface is an undulating plain, sloping with a gentle declivity towards the Shannon on the north, and surrounded on its southern and western borders by a well-defined margin of mountain groups and hilly uplands. A mountainous tract, called *Slieve-Phelim*, covers the north-east of the county, being a continuation of the *Keuper Mountains* in Tipperary. The general direction of the *Slieve-Phelim* range is from north-east to south-west, and this is also the course pursued by the streams that descend from them into the *Bilboa*, a feeder of the *Mulkern River*. The *Mulkern* carries a considerable body of water to the Shannon, which it enters a little above the city of Limerick. The district between the *Slieve-Phelim* range and the Shannon is, towards the extremity of the county, flat and boggy, but has a pleasingly diversified surface along the banks of the *Mulkern*. The Shannon which, flowing between well-timbered banks, bounds this district on the west, forms a series of rapids of uncommon grandeur, the principal of which, near *Castle Connell*, is known as the 'Leap of Doonass.' The valley of the Shannon is here contracted by the *Slieve-Barnagh Mountains* on one side, and the *Keuper range* on the other, and presents features of a grand and striking character throughout a distance of several miles.

The principal features of the great plain of Limerick, extending from the *Mulkern* westward and southward to the mountains on the borders of Kerry and Cork, are the rivers *Maigue* and *Deel*, which traverse it from south to north in nearly parallel courses. The basin of the *Maigue* embraces the east and south-east of the county. This river has its source in the high land stretching south of *Charleville*, in the county of Cork, from whence it runs north by west to the Shannon, and nearly bisects the central plain of Limerick. Its chief feeders, the *Looba*, the *Mornin*, and the *Camogue*, fall in on the right bank, and have their sources among the continuation of the *Galtees* and a detached group called the *Castle Oliver Mountains*, which occupy the south-east of the county. The *Maigue* is navigable from *Adare* to the Shannon, a distance of 12 miles. *Lough Gur*, a picturesque sheet of water, about 5 miles in circumference and embosomed among romantic knolls, some of which have a considerable elevation, is about midway between the *Camogue* and the *Mornin*. A cave and the ruins of a strong fortress on an island in the lake, and a vast number of Druidical structures on its shores, add to the interest of the scenery. From the summit of *Knockfennel*, one of the hills forming the basin of the lake, a magnificent view is obtained of the surrounding plain, comprising the greatest extent of arable land unincumbered with bog in Ireland, bounded by an imposing amphitheatre of distant mountains. The country between the *Camogue*, the *Mulkern*, and the Shannon has a more varied surface than that above described: several conical hills rise within a short distance on the Tipperary border about midway between the more marked mountain boundaries which limit the plain on the north and south.

The country west of the *Maigue* for about two-thirds of its extent has much the same character of surface as the district last described, the remainder being included in the mountainous region stretching westward into Kerry. It is drained by the *Deel*, which is navigable for three miles from its junction with the Shannon below *Askeaton*. The lower portions of the courses of the *Deel* and *Maigue* are through so flat a country that their respective valleys are scarcely observable, but in the district intervening between their sources there is a good deal of high ground, particularly about the small town of *Ballingarry*, in the neighbourhood of which are the steep hills of *Knockfeernha* and *Kilmeedy*. *Knockfeernha* has an elevation of 907 feet. The valley of the Upper *Deel* lies between these heights on the east, and the high country towards Kerry on the west. The high lands rise round the Kerry margin of the level district in a continuous sweep of above 20 miles from *Drumcollogher*, at the head of the river, to *Shanagolden* and the Shannon. At the northern extremity of the mountain range the detached hill of *Knockpatrick* rises boldly between the town of *Shanagolden* and the Shannon. From *Shanagolden* westward the surface is rough and hilly, rising at the distance of 2 or 3 miles from the Shannon into sterile tracts of bog and mountain, which spread southward and westward into the counties of Cork and Kerry. The county extends considerably beyond the watershed of this mountainous region, the principal rivers of which, the *Faale* and the *Gale*, flow westward and south-westward into Kerry, where they unite with the *Brick* to form the *Cashen* river or estuary.

The Lower Shannon runs along the northern boundary for a distance of about 35 miles. It is navigable at high water for vessels of heavy burden up to Limerick. Some improvements have been lately effected in the navigation of the Lower Shannon, and several

landing piers erected on each shore of the estuary; one of these piers has been built at Kiltewy on the Limerick shore, between Glin and the island of Foynes. Between Foynes Island and the mainland is a safe natural harbour, completely sheltered from all winds; and with ample depth of water at all times of the tide.

The leading lines of road diverging from Limerick to Clonmel, Cork, and Tralee are carried nearly in straight lines over the open country. A new road by Croom to Charleville has been completed, and several good roads traverse the mountainous district surrounding Abbeyfeale. The Great Southern and Western railway from Dublin to Cork approaches close to the most eastern angle of the county, whence a branch line, 22 miles in length, runs to the city of Limerick, and another 55 miles long runs in a south-south-east direction to Waterford, near the south-eastern corner of the island.

Geology.—The level part of the county consists of the carboniferous limestone of the central plain of Ireland. The mountain groups and detached eminences of its eastern and southern margins are formed by the protrusion of older rocks, and the high lands on the west consist of more recent series superimposed. The Slieve-Phelim group consists of clay-slate supporting flanks of yellow sandstone and conglomerate. Old red-sandstone forms the nucleus of the Slieve-na-muck chain, an offset of the Galtees, the western declivities of which spread into Limerick above Galbally. The clay-slate reappears in the central summits of the Galtees and Castle Oliver Mountains, flanked by old conglomerate with red, purple, and green clay-slate, sustaining a margin of yellow sandstone. Old red- and green-sandstone compose the various protrusions which rise between and in the valleys of the Upper Maigue and Deel rivers, except in Knockfeerna Hill, which consists chiefly of a mass of crystalline greenstone trap. Trap protrusions, interstratified with limestone, occur in 12 distinct localities in the eastern part of the county, between the embouchure of the Maigue and the border of Tipperary. Pallas Hill, one of these protrusions, is remarkable for the great fertility of its soil, and for the presence of columnar basalt, which overlies the amorphous trap of its northern brow. Felspar porphyry occurs in various forms throughout the hilly district. The mountainous district on the west of the county belongs to the great Munster coal-tract, which is one of the most extensive in the British Islands. The coal is usually of a slaty structure, and much softer than that of Tipperary or Kilkenny: it is chiefly used for burning lime. The only workings within Limerick have been at Newcastle and Loughill. About 7 miles from the city of Limerick, near the Askeaton road, is a quarry producing a fine maroon-coloured marble; and in the more immediate vicinity of the city, an inferior black marble is got in abundance, and generally used as building-stone. Iron-, copper-, and lead-ores are found in the trap districts, but no veins are at present worked.

Climate, Soil, and Produce.—The climate of Limerick is remarkably equable, and favourable to health. The soil is generally fertile. A tract of extraordinary fertility, called the Golden Vale, stretching westward out of the county of Tipperary, extends from the sources of the Maigue to the Mulhern, and has an area of about 160,000 acres. The soil is a rich, mellow, crumbling loam, and is equally suited to grazing or tillage. A still richer soil is that of the 'Corcasses,' or rich bottoms, which extend for 15 miles along the left bank of the Shannon, from a little below Limerick to the embouchure of the Deel. They are similar in character to those on the opposite side of the river [CLARE], having a subsoil of yellow or blue clay, covered with a deep rich black mould. They yield the heaviest wheat crops in Ireland; and their produce of potatoes sometimes amounts to 100 barrels of 22 stones each to the acre. The soil of the remainder of the limestone plain is light and sweet, very good for tillage, and yielding excellent pasture for cattle and sheep.

The number of acres under crops in Limerick county in 1858 was 197,572, of which 10,324 acres grew wheat; 53,138 oats; 17,792 barley, bere, rye, beans, and peas; 27,830 potatoes; 15,015 turnips; 3969 mangels, carrots, parsnips, cabbage, vetches, and other green crops; 349 flax; and 69,160 meadow and clover. On 15,291 holdings in 1852 there were 15,917 horses, 5929 mules and asses, 145,286 cattle, 61,761 sheep, 53,614 pigs, 14,088 goats, and 274,355 head of poultry. The total value of the live stock here enumerated was estimated at 1,231,460*l.* The chief occupations are agricultural; pasturage and dairy farming are most attended to. Large quantities of butter and other farm produce are exported. The only manufactures of importance are coarse woollens, paper, flour, and meal. Limerick is the chief point of exportation. Cider is made in the districts about Rathkeale, Adare, and Croom.

Limerick county is divided into 14 baronies:—Owneybeg, north-east; Clanwilliam, west of Owneybeg; Coonagh, east; Small County, south of the preceding; Coshma, central; Coshlea, south-east; Pubblebrien, north; Kenry, west of Pubblebrien; Lower Connello, west of Kenry; Upper Connello, south; Kilmallock Liberties, between Coshlea and Upper Connello; Shanid, west; Glenquin, south of Shanid; and North Liberty, north.

The principal towns besides the city of LIMERICK are NEWCASTLE and RATHKEALE. These are noticed under their titles. Of the other towns and villages the following are the most important; the populations are those of 1851:—

Abbeyfeale, a village of 717 inhabitants, in the centre of a moun-

tainous district, is situated on the river Feale, which here separates Limerick from Kerry. The village takes its name from the Cistercian abbey founded in 1188 on the right bank of the Feale. The ruins of the abbey still exist, and near it are the ruins of Purt Castle, a seat of the Geraldines. Abbeyfeale contains a church, a Roman Catholic chapel, and a dispensary. Fairs are held on June 29th and October 18th. *Adare*, or *Adair*, a market-town 12 miles S.S.W. from Limerick, population 967, is situated on the Maigue, which is navigable at high water for small vessels up to the town. Adare stands in a fertile, richly-wooded, and very beautiful country: it is an ancient place, and was distinguished for its castle and its church even before the Norman invasion. It afterwards became the property of the Fitzgeralds, earls of Kildare. The splendid ecclesiastical structures whose remains form the great attraction of the place were erected by members of the Fitzgerald family. Among these structures are the Black Abbey, the Augustinian Monastery, and the Franciscan Abbey. The Black Abbey, founded in 1279, is situated in the town; the tower, nave, and part of the choir of the church remain, and are fitted up as a Roman Catholic chapel. The nave, choir, and south transept of the Augustinian Monastery are tolerably entire, and stand close to the bank of the river, in the demesne of Adare Manor, the seat of the Earl of Dunraven, which adjoins the town. The Franciscan Abbey stood close to the bridge over the Maigue; the tower, nave, and choir of the church, the cloisters, and the refectory remain. The nave and choir are fitted up as a parish church; the refectory is formed into a school-room, and the cloisters have been restored. The Earl of Dunraven has erected a family mausoleum near the cloisters. A large ruined castle of the Desmond branch of the Fitzgeralds rises from the bank of the river near the town. The town has a petty-sessions court, a fever hospital, and a dispensary. *Askeaton*, 17 miles W. by S. from Limerick, on the road to Tarbert, population 1957, besides 808 in an auxiliary work-house, was a parliamentary borough till the Union. It is situated on the Deel, about 3 miles above its confluence with the Shannon, and contains a church, a Roman Catholic chapel, several schools, a dispensary, and a petty-sessions court. A market is held weekly on Tuesday. The river is navigable for vessels of 60 tons up to the bridge. The town was in former times much larger than at present, and was surrounded by walls, and defended by a strong castle, built by the seventh earl of Desmond. The massive ruin of this castle, which had a high rock encompassed by the Deel for its site, is still an object of great interest; the keep and banqueting-room remain. Close to the river are the remains of a Franciscan abbey founded in 1420, the cloisters of which are in good preservation. The parish church was formerly part of the church of a commandery of Knights Templars, founded in 1298. *Ballingarry*, 14 miles S. by W. from Limerick, has remains of several religious houses founded at an early period, a parish church, a Roman Catholic chapel, a dispensary, several schools, and 1502 inhabitants, besides 957 in the auxiliary workhouse and the fever hospital. Markets are held twice a week, on Tuesday and Friday. *Bruff* is a poor town of 1224 inhabitants, 14 miles S. by E. from Limerick, and a little south of the beautiful Lough Gur, on the Dawn, a feeder of the Maigue. It contains a neat church, a Roman Catholic chapel, a court-house in which quarter and petty sessions are held, a dispensary, a bridewell, and the ruins of an old castle. The market is held weekly, on Friday. *Bruree*, 4 miles W. by N. from Kilmallock, population 780, stands in a fertile country watered by the Maigue, and has a petty-sessions court and a dispensary. The Irish bards used to meet half-yearly in this place: the last meeting took place in 1746. *Cahirconlish*, 11 miles E. by S. from Limerick, and a little south of the Limerick Junction railway: population, 485. It contains a church and a Roman Catholic chapel. Cahirconlish was formerly a walled town, and was defended by four castles, every vestige of which has disappeared. *Cappamore*, a town of 579 inhabitants, is situated at the foot of the Slieve-Phelim Mountains, 14 miles E. from Limerick, at a short distance north of the Limerick Junction railway. *Castle-Connell*, 7 miles N. from Limerick, population 555, is situated on the left bank of the Shannon, close to the fall called the Leap of Doonas. The town takes its name from its castle, which was built by Conal, a local chieftain, and long inhabited by the O'Briens of Munster; it was finally blown up by General Ginkel during the siege of Limerick. The ruins cover the summit of an isolated rock in the town, and form a very picturesque object. The town of Castle-Connell is very irregularly built, and consists of an assemblage of cottages, villas, lodging-houses, cabins, and inns, to suit the circumstances of the parties who frequent it for its scenery and its chalybeate spring, both of which are celebrated. Castle-Connell has a petty-sessions court and a dispensary. In the angle between the Shannon and the Mulhern are the elegant mansion and extensive demesne of Mount Shannon, the residence of the Earl of Clara. *Croom*. *Drumcollogher*, a village of 757 inhabitants, is situated at the base of the Mullaghaneirk Mountains, close upon the boundary of Cork; it contains a large Roman Catholic chapel. Two miles from the village is Springfield Castle, the seat of Lord Muskerry. *Galbally*, population 301, is situated at the head of the beautiful glen or vale of Aherlow, which is screened by the Galtees on the south, and the Slieve-na-muck Hills on the north. The village contains remains of several ancient ecclesiastical structures. Petty sessions are held in this place. *Glin*. *Hospital*, population 684, a small town 5 miles E. from Bruff, is famous for its horse- and cattle-

fairs. Petty sessions are held in the town. *Kilfinane*, situated 5 miles S. by E. from Kilmallock, population 1413, contains a church and a Roman Catholic chapel. In the vicinity are the dilapidated round tower and ruined abbey of Ardpatrick, and the remains of Castle Oliver, an old seat of the Oliver family, which gave name to the high hills among which it stands. Kilfinane has a petty-sessions court, a bridewell, and a fever hospital; the town is head-quarters of the district police. *Montpellier*, a village of 441 inhabitants, stands 3 miles N. from Castle-Connell, on the left bank of the Shannon, opposite the village of O'Brien's Bridge. *Pallas-Kerry*, a small market-town of 613 inhabitants, is situated about 7 miles W. from Limerick. Petty sessions are held here. At a short distance on the road to Limerick are Elm Park, the seat of Lord Clarina, and Tervoe, the fine mansion of W. T. Monsell, Esq., M.P., in the demesne surrounding which are the extensive ruins of Carrickagonnell Castle, an old seat of the O'Briens, kings of Munster. *Shanagolden*, 23 miles W. from Limerick, population 770, has a small church, a Roman Catholic chapel, and a petty-sessions court. About a mile east of Shanagolden are the fine ruins of Manistir-na-Gillagh Abbey; and a little south of it are the remains of Shanid Castle, one of the ancient strongholds of the Desmond branch of the Fitzgeralds, whose motto, 'Shanid-a-boo' (Shanid for ever), originated with this old warlike residence. This castle dates from the 12th century.

The county of Limerick lies chiefly in the sees of Limerick and Emly; but small portions of it belong to the dioceses of Cashel and Killaloe. It returns four members to the Imperial Parliament, two for the county and two for the city of Limerick. Assizes are held in the city of Limerick, where are the county prison, the county infirmary, and the district lunatic asylum for the counties of Clare, Limerick, and Kerry. Quarter sessions are held in Limerick, Bruff, Newcastle, and Rathkeale, in which towns, and in Croom, Glin, and Kilfinane, there are bridewells. Petty sessions are held in 22 places. The medical charities of the county include, besides those already mentioned, fever hospitals in Limerick, Adare, Kilfinane, Newcastle, and Rathkeale; and 32 dispensaries.

There was one savings bank in the county in 1852, at Limerick: the total amount due to depositors on November 20th 1852 was 93,037*l.* 8*s.* 5*d.* The Union workhouses are at Limerick, Kilmallock, Newcastle, Rathkeale, Croom, and Glin. The county is the head-quarters of the Limerick Military Division, which includes also Clare and Galway counties, and parts of Kerry, King's County, and Tipperary. A barrack station is at Newcastle, and the staff of the county militia is stationed in Limerick city. The county constabulary numbers 667 men and officers, and is distributed into 10 districts, comprising 95 stations, of which Limerick is the head-quarters. In September 1852 there were 124 National schools in operation, attended by 9382 male and 11,565 female scholars.

History and Antiquities.—Prior to the arrival of the English in Ireland Limerick constituted part of Thomond. Donald O'Brien was prince of this territory at the time of the English invasion, and, notwithstanding grants of his lands made by Henry II, first to the family of the Earl of Cornwall, and next to Philip de Braosa, neither of whom could get possession, Donald held his principedom till his death in 1194. In 1199 King John renewed his father's grants to the De Braosa family, and bestowed the city of Limerick and the cantred adjoining on William de Burgho, to whom he committed the custody of the city. William de Braosa was afterwards attainted, and his lands reverted to the crown. A portion of the forfeited lands, comprising the barony of Owneybeg, was then conferred on Theobald Fitz-Walter, the ancestor of the Ormonde family, and other portions on Hamo de Valois, William Fitz-Adelm de Burgho, and Thomas, son of Maurice Fitzgerald, the ancestor of the great family of Desmond, which subsequently became possessed of the greater part of the counties of Limerick, Kerry, Cork, and Waterford. The estates of Gerald, the 16th earl, who finally forfeited the family property, in the county of Limerick alone consisted of 96,165 acres, which were granted among twelve individuals, most of whose names are now extinct in the county. The forfeitures which ensued after the rebellion of 1641, in which this county took a very prominent part, embraced almost the entire county, and introduced a numerous new proprietary. The war of the Revolution terminated in further forfeitures comprising 14,188 acres. The families of Fitzgerald, Rice, Trant, and Brown were the principal sufferers. A spirit of insubordination among the peasantry, arising, it is said, from the severe exaction of rack-rents, broke out into insurrectionary acts in 1762, 1786, and 1793. These at the time were suppressed, and many of the ringleaders executed. In 1815, 1817, and finally in 1821-22, the peasantry, from a similar cause, rose in arms, and after several severe conflicts with the king's troops they were put down. Great numbers of the peasantry who were taken were executed or transported, and the famine of 1823, added to the rigour of summary justice, completely broke the spirit of the insurgents.

Limerick is among the richest of the Irish counties in antiquities, several of which have been already mentioned. The cyclopean remains, stone circles, pillar stones, and altars, on the banks of the beautiful Lough Gur, are so numerous and gigantic as to form one of the most magnificent collections of primeval remains in existence. Military earthen works are numerous in all parts of the county. The argest raths are those at Bruree, Kilpeacon, Pallasgreen, Shanid, and

Kilfinane. At Carrigeen, near Croom, are the remains of a round tower still 50 feet in height. The ruins of religious houses are very numerous. The river Cmaigue alone has the ruins of seven religious houses on its banks. Manister-Nenagh, the most considerable of these, is the most extensive pile of monastic ruins in Munster. It was founded by O'Brien, king of Limerick, in 1148. The entire number of such foundations in the county was about 36, chiefly erected by members of the house of Desmond. Of the castles of the early proprietors nearly 100 still remain. Of these the most remarkable are—Croom Castle and Shanid Castle, which have been already mentioned. Cappagh Castle, near the hamlet of Croagh, 4 miles from Adare, on the high road from Limerick to Rathkeale, was another seat of the Fitzgeralds. Part of the keep, 100 feet high, is still standing. It is remarkable for the superior style in which it is built, the quoins-stones being polished. At Castle-Connell are the ruins of a noble castle, a seat of the O'Briens. Carrickagonnell Castle, another stronghold of the O'Briens, is boldly situated on a basaltic rock rising suddenly from the plain to a height of several hundred feet above the left bank of the Shannon. It was blown up in the war of the Revolution; but, although 84 barrels of gunpowder were exploded under it, two of the towers are still tolerably perfect.

LIMERICK, Ireland, the capital of the county of Limerick, a city, a municipal and parliamentary borough, a sea-port, and the seat of a Poor-Law Union, is situated on the Shannon, in 52° 40' N. lat., 8° 35' W. long., distant 119½ miles W.S.W. from Dublin by road; 129 miles by the Great Southern and Western, and the Limerick and Waterford railways. In 1851 the population of the city was 53,448. The borough is governed by 10 aldermen and 30 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. Limerick Poor-Law Union comprises 34 electoral divisions, with an area of 177,951 acres, and a population in 1851 of 110,628.

The town is built on both sides of the Shannon, and on King's Island, a tract about a mile long and from a quarter to half a mile broad, lying nearly north and south, with the main stream on its west side. Englishtown, the oldest part of the city, occupies the southern end of the island. On the west it is connected by Thomond-bridge with Thomond-gate, a suburb of considerable extent on the county Clare side of the Shannon. Irishtown, which is next in antiquity to Englishtown, lies to the south of it on the left bank of the smaller branch of the Shannon, which is called the Abbey, or Salmon Weir River. Newtown Pery, which has sprung up within the last sixty years, extends to the south-west of Irishtown, on a gentle elevation along the left bank of the reunited river.

The ancient city of Limerick is by some supposed to be the Regia of Ptolemaeus. It was a place of some note in the 5th century when visited by Patrick. The Danes made their first attempt on Limerick in 812; and, although repeatedly baffled, succeeded about the middle of the century in getting possession of the place. Towards the close of the 10th century they were reduced by the celebrated Brian Boroinmhe, and rendered tributary to the kings of Munster. The effectual introduction of English government did not take place till the time of Henry II. [LIMERICK, County of.] King John in 1210 visited Limerick, and caused Thomond-bridge to be erected over the Shannon, the castle of Limerick to be built, and established a mint in the city. Great numbers of English settlers now arrived, and the city continued to prosper until the invasion of Ireland by Edward Bruce, who burned the suburbs in 1314, and during the winter of 1316 made Limerick the rendezvous for his Irish allies. On the termination of this war the fortifications of the town were increased. In the wars succeeding the rebellion of 1641 the city was seized by the Roman Catholics, became the head-quarters of their supreme council, and was for several years the scene of great commotion and outrage. In 1651 it surrendered to the army of the Parliament under General Ireton. At the Revolution Limerick declared for King James. After the battle of the Boyne and the flight of James it was unsuccessfully besieged by King William. In the following year the town was invested by the army of William, under General Ginkel. The besieged having been closely pressed for some weeks proposed an armistice, when negotiations were opened, which terminated, on the 3rd of October, in the signature of the celebrated treaty of Limerick.

The city now began slowly to recover from the effects of these repeated disasters. In 1697 the castle in the Irishtown was thrown down, and a market-house erected on its site; and in 1717 the Abbey River was partly quayed in. About 1760, besides several new roads, a canal was commenced, by which the Shannon was rendered navigable to Killaloe. In 1761 a commodious bridge was erected between Englishtown and the southern bank of the main river. In 1796 the buildings of the Irishtown began to extend along the southern bank of the main river, on an open elevated plot of ground called South Prior's Land, or Newtown Pery. This division now constitutes the best part of Limerick, and is justly considered one of the most elegant towns in Ireland. Englishtown is closely built, with confused lines of narrow and irregular streets. It has been deserted by the wealthier classes, and although it still contains several important buildings, it presents a general appearance of wretchedness and decay. The older part of Irishtown is similar in character, but on the whole it is better built and inhabited, and contains several straight and well-formed streets, especially in the line of the Dublin road, and at the south-east side of

the town, where it has been much improved by a considerable extension. The streets of Newtown Pery, which intersect each other at right angles, are spacious and airy, well lighted and paved, and contain many handsome shops and dwelling-houses. The principal street, running from the New-bridge, which connects it with Englishtown, and terminating in a double crescent, presents a fine line of buildings, upwards of a mile in length. Towards the south-west end of Newtown is a handsome square with a lofty column in the centre, surmounted by a statue of Lord Monteaigle. The city is lighted with gas; the streets are generally well paved; the supply of water is from elevated tanks, to which the water is raised by steam power.

Of the public buildings in Limerick, the most remarkable are the following: St. Mary's cathedral, founded in 1180, and rebuilt in 1490, occupies an open space in the centre of Englishtown. It is a venerable cruciform structure, measuring 156 feet by 114 feet, and has a square embattled tower 120 feet high. St. Munchin's church, supposed to have been the former cathedral, is situated on an elevated open plot in the north of Englishtown, overlooking the Shannon. There are besides 4 Episcopal chapels, one of which is attached to the Blind Asylum; 4 parochial and 3 conventual Roman Catholic chapels; also chapels for Wesleyan and Primitive Methodists, Presbyterians, Independents, and Quakers. The Limerick Institution, founded in 1829, has an extensive library attached to it. There are several National and Free schools; a district Diocesan school, and schools supported by the Nuns of the Presentation Convent, and by the Monastic Society of Christian Brothers.

The exchange was built in 1778, and has a commodious hall and handsome portico. The city court-house stands near the Abbey River; the county court-house, which stands towards the main stream of the Shannon on the west, is a very handsome building, erected in 1808 at a cost of 12,000*l.* It is quadrangular, built of hewn stone, and has a fine portico of four Roman Doric columns. The chief public buildings of Irishtown are the corn- and butter-markets, the linen-hall and the fever-hospital. At the southern extremity of the new bridge which leads from Englishtown into Newtown-Pery, facing the main river, is the new custom-house, a handsome structure, built in 1769. The Chamber of Commerce was erected in 1805. On Charlotte quay, is the assembly-house, built in 1770, now converted into a theatre. In the southern suburbs is the new county jail, erected in 1821 at a cost of 25,000*l.* It consists of a central polygonal tower, 60 feet high, surrounded by 5 diverging ranges of prison buildings, and having a fine Doric entrance in front. Near it is the County Lunatic Asylum, erected at a cost of nearly 30,000*l.*, and opened in 1821 for 150 patients.

The charitable institutions are the County Limerick infirmary; Barrington's hospital and City of Limerick infirmary, erected by Sir Joseph Brrington in 1829, and chiefly supported by the Limerick Monte de Pietà, opened in March, 1837; the City of Limerick dispensary; the Limerick asylum for blind females; the house of industry, founded in 1774; the fever and lock hospital, founded by Lady Hartstonge in 1781; the lying-in hospital, opened in 1812; Hall's almshouses, founded by Dr. Jeremy Hall in the early part of the last century; the corporation almshouse, for reduced widows; the St. George's Widows' asylum; Mrs. Villiers's almshouses, also for widows, erected in 1826; and several minor charities. A savings bank has been in operation since 1820.

About a mile above the city, the river is crossed by Athlunkard-bridge, a fine structure of five large elliptic arches. Wellesley-bridge, with the same form and number of arches, each 70 feet in span, connects the east end of Newtown Pery with the county Clare side of the river. It was completed in 1827 at a cost of 60,000*l.* Thomond-bridge has been lately rebuilt by the corporation at an expense of 12,000*l.* At the end of this bridge is Treaty Stone, noted as the spot on which the Treaty of Limerick was signed. On the Abbey River, New-bridge, and Ball's-bridge, the latter a beautiful single arch, erected in 1831, connect Englishtown with Newtown Pery and Irishtown. Higher up on the same stream is Park-bridge, an old and lofty structure of five irregular arches.

Limerick possesses various important branches of productive industry. The manufacture of lace, introduced in 1829, has gradually increased, and gives employment to a considerable number of females. Fish-hooks of a superior quality are made in great number, and largely exported to America. There are several iron-foundries, tanneries, flour-mills, breweries, and distilleries; three ship-building slips, and a patent slip for vessels of 500 tons. The interests of manufactures and trade are attended to by the Chamber of Commerce, the Agricultural Association, and the Trustees for the promotion of Industry.

The trade of Limerick has increased with the growth of the city. Being the natural outlet for the produce of a great part of the counties of Limerick, Clare, Tipperary, Cork, and Kerry, it has since the termination of the civil wars been, next to Cork, the chief seaport of Munster. It has also an extensive export trade through the Shannon and Grand Canal by way of Dublin. The mayor is admiral of the port, with jurisdiction from 3 miles above the city to the open sea. The port is under the control of 72 commissioners, 42 for life, and 15 elected each year to serve for two years, by whom are appointed a resident engineer, harbour master, &c., and 50 pilots.

The harbour extends about 1600 yards in length, by 150 yards in breadth. It has from 2 feet to 9 feet at low-water, and 19 feet at spring tide, when vessels of 600 tons can moor at the quays. There are about 1600 yards of quays and wharfrage running irregularly along the Abbey River and the main stream of the Shannon, to a weir thrown across the river towards the lower end of Newtown Pery. Between Wellesley-bridge and the custom-house is a large floating dock, and near the lower end of the island is one 300 yards in length, called the Long Dock. A lateral cut with a swing bridge, at the south end of Wellesley-bridge, admits vessels to the upper quays, and to the works in Abbey River, which connect the harbour with the canals of the Limerick navigation.

On 31st December, 1853, the number of vessels registered as belonging to the port of Limerick was 59 under 50 tons, amounting to 1761 tons, and 40 above 50 tons, amounting to 10,315 tons; and one steam-vessel of 300 tons. The number and tonnage of vessels entered and cleared at the port during 1853 were as follows, namely:—Inwards 564 sailing-vessels of 89,530 tons, and 81 steam-vessels of 21,228 tons; outwards, 529 sailing-vessels of 76,763 tons, and 80 steam-vessels of 21,168 tons. The amount of customs duties received at the port in 1851 was 159,781*l.* 8*s.* 2*d.*

Limerick is the head-quarters of the South-western Military District, and contains several barracks. One, consisting of three sides of a square, and affording accommodation for 400 men, stands within the remains of King John's Castle. There are a fine new barrack near Newtown Pery, one for artillery in Irishtown, and another for infantry in St. John's Square.

The assizes for the county are held in Limerick, also quarter and petty sessions. The mayor holds a court of conscience for pleas under 40*s.*, and the assistant barrister holds a civil bill court for the county. Fairs are held on Easter Tuesday, July 4th, August 4th, and December 4th. The market-days are Wednesday and Saturday.

The see of Limerick is in the archiepiscopal province of Dublin; it comprises a large part of Limerick, and a small portion of Clare. It contains 56 benefices. The chapter consists of a dean, precentor, chancellor, treasurer, archdeacon, and 11 prebendaries. The diocese in 1663 was united to that of Ardferd and Aghadoe. The annual revenue of the united diocese is 4973*l.* The bishop's palace is situated in the New Town of Limerick, overlooking the Shannon.

LIMISSO. [CYPRUS.]

LIMOGES, a city in France, capital of the department of Haute-Vienne, is situated on the summit and slope of a hill on the right bank of the Vienne, which is here crossed by three bridges, 236 miles S. by W. from Paris, in 45° 49' 52" N. lat., 1° 15' 35" E. long., and had 37,010 inhabitants in the commune according to the census of 1851. It was the chief town of the Celtic tribe *Lemovices*, to whom both the town and the province of Limousin owe their names. It was called Augustoritum by the Romans, under whom it was a place of considerable importance, and became in the 3rd century the seat of a bishop. It was at the convergence of several Roman roads. There was an amphitheatre, said to have been built by the emperor Trajan, of which there were sufficient remains in 1713 to admit of a plan being drawn; it was about 1500 feet in circumference. It was entirely destroyed in 1714, in order to form the Place d'Orsay. There are now no Roman remains at Limoges in good preservation, except a subterranean aqueduct, which conveys the water of a fountain in the upper part of the town. In the 5th century Limoges came into the power of the Visigoths; and was successively pillaged or destroyed by the Franks and by the Northmen. It was ceded to the English by the treaty of Bretigny, and formed part of the great principality of Aquitaine under Edward the Black Prince. The people of Limoges were persuaded by their bishop to revolt from Edward, one of whose last exploits (A.D. 1370) was the capture of the town. Irritated by treachery, the prince put three thousand of the inhabitants, men, women, and children, to the sword.

Limoges is built on a hill which commands a prospect of the delightful valley of the Vienne. The older part of the town consists of narrow and steep streets, with timber-framed houses: the more modern part contains broad and straight streets, two handsome squares, several excellent houses, new boulevards, and a number of public fountains. Of the public edifices the principal are the town-hall, the cathedral of St. Etienne, a fine gothic edifice of the 13th century; the churches of St. Michel-des-Lions, and St. Pierre-du-Queyroix; the episcopal palace, and the beautiful fountain of Aigoulène. The public library of 12,000 volumes, the cavalry barracks, the prefect's residence, the theatre, and the hospitals also deserve notice. There is a great monthly cattle market, and nine yearly fairs are held.

Limoges is the seat of a bishop, whose diocese includes the departments of Creuse and Haute-Vienne; and of a High Court, the jurisdiction of which comprehends the departments of Haute-Vienne, Corrèze, and Creuse. It has tribunals of first instance and of commerce, a college, a mint, an ecclesiastical college, and several charitable institutions. A great number of books are printed at Limoges; and the manufacture of fine and coarse woollen-cloth, paper, porcelain, and crucibles is important. Flannel, cotton handkerchiefs, glue, nails, woollen-yarn, room-paper, articles in papier-mâché, &c., are also made. There is besides a considerable commerce in corn, chestnuts, wine, brandy, liqueurs, iron, copper, tin, kaolin, &c.

LIMONE. [CONC.]

LIMOUSIN, or LIMOSIN, an old province of France, now forms the departments of Corrèze and Haute-Vienne. It was watered by the Vienne, one of the great tributaries of the Loire, and by the Dordogne, and its tributaries the Isle and the Vézère, all belonging to the system of the Garonne. The province was divided into two parts by the Vézère—Upper Limousin, which was to the north-west of that river, and had Limoges for its capital; and Lower Limousin, of which the chief towns were Brives and Tulle. Limoges was also the capital of the whole province.

This district was anciently inhabited by the Lemovices, a Celtic people. In the division of Gaul into provinces, Limousin was included in Aquitania. It formed part of the dominions of the Visigoths till the overthrow of Alaric II. by Clovis at the battle of Vouillé. It was subsequently under the government of the dukes of Aquitaine, from whom it was taken by Pepin-le-Bref. It was afterwards included in the great duchy of Guienne, under which Limoges, its capital, became the head of a vice-county. It was in a quarrel with Ademar V., viscount of Limoges, that Richard I. (Cœur-de-Lion), king of England and duke of Guienne, lost his life, being shot with an arrow as he was besieging the castle of Chalus in Limousin. The possession of Limousin was subsequently disputed by the kings of England, as dukes of Guienne, and the kings of France. It afterwards came by marriage into the hands of the dukes of Bretagne, and later still into those of the counts of Albret. It was inherited by Henri IV. from his mother Jeanne d'Albret, and was by him united to the French crown.

LIMOUX. [AUDE.]

LINARES. [JAEN.]

LINCOLN, the county town of Lincolnshire, a city, a county of itself, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Witham, in 53° 14' N. lat., 0° 32' W. long., distant 132 miles N. by W. from London by road, and 140 miles by the Great Northern railway via Boston. The population of the borough in 1851 was 17,536. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor, and returns 2 members to the Imperial Parliament. There are 13 parishes; the livings are in the archdeaconry and diocese of Lincoln. Lincoln Poor-Law Union contains 86 parishes and townships, with an area of 149,218 acres, and a population in 1851 of 42,003.

Lincoln was a place of considerable importance under the Romans; the existing vestiges of their residence here are noticed under the county. In the time of the Saxons and of the Danes it was also a place of consequence. At the time of the Conquest it was one of the most important places in the kingdom, and the emporium of a considerable trade. William the Conqueror ordered the erection of a strong castle here in 1066. The prosperity of the place appears to have been further promoted in the time of Henry I. by clearing out the Fosse Dyke, and making it again available for navigation. This inland communication, with the navigation of the river Witham, rendered the situation of Lincoln peculiarly favourable for commerce. The town was incorporated by charter of Henry II. In the reign of Stephen the empress Maud was besieged here by the king, who took the city, but the empress escaped. In 1141 Stephen besieged Lincoln, but was defeated in an action near the town, and was taken prisoner by the Earl of Gloucester, natural brother of the empress. In the civil wars of the reign of John the town was taken by Gilbert de Gaunt, one of the barons in the interest of Louis, dauphin of France, who had created him Earl of Lincoln. The castle however held out for the king. After the death of John, a battle was fought here between the royalists and the adherents of the dauphin, in which the latter were entirely defeated. The battle was fought June 4, 1218. Lincoln sent members to Parliament in the reign of Henry III. John of Gaunt, son of Edward III., in whose hands the castle was for some time, effected on it considerable improvements. In the civil war of Charles I. the city, the cathedral, and the castle having been occupied by the Royalists, were stormed by the Parliamentarians under the Earl of Manchester in May 1644. Of the castle little more than the gateway is now standing.

The city is built on the southern slope and at the foot of a hill, on the summit of which is the cathedral. The town is irregularly laid out. The streets are well paved, lighted with gas, and supplied with water from public conduits. The lighting, watching, sewerage, &c., are provided for by a local act of a somewhat stringent character.

The most important of the public buildings is the Cathedral, which is one of the finest of the English cathedrals, and is advantageously situated on the summit of the hill; it may be seen for many miles across the flat country to the south-east or south-west; the three towers have at a distance a very fine effect. It has been erected at different periods, and combines various styles, the predominant is early English, of a remarkably rich and beautiful character. The nave is very fine, and the piers in this part are peculiarly rich; and though the side aisles are unusually narrow, the effect of the whole is excellent. The western front, which embraces the width of the nave and aisles with the side chapels or western transepts, is partly Norman, partly early English: it has two towers whose height from the ground is 180 feet. There were formerly spires upon these, of the height of 101 feet, but these were taken down more than 40 years ago; there are still pinnacles at the corners of the towers. At each angle of the

west front are octagonal staircase turrets crowned with pinnacles. Over the central doorway of the west front are several statues of the kings of England, from the Conquest to Edward III., under decorated canopies. The central or great transepts are chiefly in the early English style. At the ends of the transepts are circular windows; that at the end of the south transept is one of the finest circles in the early English style remaining. The Galilee court, or porch attached to the west side of the south transept, and the chapels on the east aisle of the same, have intricate and beautiful mouldings, and their general composition is excellent. At the intersection of these transepts with the nave and choir is the central tower, 53 feet square, and 300 feet high, with pinnacles at the corners. The choir is of rich and elaborate composition; it is separated from the nave by a rich stone screen. The eastern end of the choir, with the Lady Chapel, is of a transition style between the early English and decorated, of peculiar beauty and interest. It has a fine east window, of eight lights. There are two transepts to the east of the principal transepts, and there are several chapels in different parts. The dimensions of the cathedral are as follows:—Exterior length within the buttresses 524 feet; interior length 482 feet; width of the cathedral 80 feet; height of the vaulting of the nave 80 feet; width of the western front 174 feet. Exterior length of the principal transept 250 feet, interior 222 feet; width 66 feet. Smaller or eastern transept—length 170 feet; width, including the side chapels, 44 feet. The old bell, called Tom of Lincoln, which was cast in 1610, and hung in the northernmost of the west towers, became cracked in 1827, and being broken up in 1831, with six other bells, was recast into the present large bell and two quarter bells by Mr. Mears of London, and placed in the Rood (or central) tower in 1835. The new bell is 6 feet 10½ inches in diameter at the mouth, and weighs 5 tons 8 cwt.

On the north side of the cathedral are the cloisters with the chapter-house. The cloisters inclose a quadrangle of 118 feet by 91 feet; three sides remain in their original state, and are of good decorated work; over the fourth (the north) side is a library built by Dean Honeywood in the latter part of the 17th century. The library contains a collection of books, and some curious specimens of Roman antiquities. In the inclosure of the cloisters, some feet below the surface, is a handsome tessellated pavement. From the eastern side of the cloisters is the entrance to the chapter-house, a lofty and elegant decagon, with a groined roof supported by a central pillar. Its interior diameter is 60 feet 6 inches. The cathedral contains numerous monuments; many others which formerly existed have been removed or totally destroyed at and since the time of the Reformation. The dean, precentor, chancellor, and sub-dean have residences. The bishop's palace was demolished during the civil wars; the ruins are on the south side of the cathedral. A modern house has been built on part of the site, in which the bishop resides when at Lincoln. The deanery is an ancient building; and near it is another ancient building, called the Works Chantry, formerly the residence of the chancellor of the diocese. The vicars' college once formed a quadrangle, of which at present there remain only four houses inhabited by the vicars. There is an ancient gateway yet standing.

The see of Lincoln was removed from Dorchester on the bank of the Thames, and the seat of the bishopric was placed at Lincoln. The diocese of Lincoln includes the counties of Lincoln and Nottingham, and is divided into the archdeaconries of Lincoln, Nottingham and Stow. The chapter consists of three archdeacons, a dean, precentor, chancellor, sub-dean, 4 minor canons, and 41 canons non-resident. The number of benefices is 793. The income of the bishop is 4000*l*.

Besides the cathedral there are in the city 13 churches of the Establishment, about one fourth of the number said to have been standing at the time of the Reformation. The old churches are mostly small and much mutilated, being generally the remains of larger edifices. Three of the churches have Norman towers. Six of the churches were rebuilt in a very mean manner during the last century. St. Peter's church, a large structure, erected in 1723, is a spacious classic pile. A church, dedicated to St. Nicholas, has been recently erected at the northern end of the town: it is in the early English style, with a tower and spire at the south-west angle of the nave. The Wesleyan Methodists and Independents have each two chapels; and the Primitive Methodists, General and Particular Baptists, Countess of Huntingdon's Connexion, Roman Catholics, Unitarians, and Quakers have each a place of worship. The Free Grammar school was remodelled in 1851; it is under the care of a head master and three under masters, and had 86 scholars in 1853. The Diocesan Public school is held in a handsome Tudor building, erected in 1835. There are National, British, Wesleyan, Roman Catholic, and Infant schools, and a girls school. The Permanent Stock library, established about 40 years back, has a valuable collection of books, numbering about 11,000 volumes, and had 278 members in 1851. There are in the city a young mens mutual improvement society, a mechanics institute, which had 349 members in 1851, a museum, in which are many Roman remains, and a savings bank. The principal benevolent institutions are the county hospital, open to the whole county; the dispensary limited to the town; the county lunatic asylum, an extensive structure; and the lying-in institution. The principal public buildings besides those mentioned above, are the county jail, erected on part of the site of the castle; the city prison; the county courts,

an imposing pile erected from a design by Sir R. Smirke; the assembly rooms; and the theatre, a plain edifice. The Midland railway station has a good portico; the Great Northern station is a handsome Tudor structure. There are a large meat market, a spacious covered market for butter, poultry, and eggs, another for vegetables, &c. The corn exchange, erected within the last eight years, has a Grecian portico on a rusticated basement. The principal trade of the town is in flour: there are several large steam flour-mills. A considerable trade is carried on in corn and wool, chiefly with Yorkshire. An extensive manufactory of steam-engines employs a large number of hands. There are several breweries. The railways and the canal uniting the Witham with the Trent, afford considerable facilities for trade. Friday is the market-day. A fair is held on four days of the last whole week in April, for horses, sheep, and cattle—this is one of the great horse fairs of the kingdom, and is attended by dealers from all parts of England and many foreigners; mixed fairs are held on Midsummer-day, October 6th, and November 28th. Cattle markets are held fortnightly during a part of the year. The county assizes, quarter sessions, and a county court are held in the city.

Lincoln abounds in monastic and other remains of ancient architecture. The most ancient and in many respects most remarkable antiquity is the Roman gate, of which the principal arch and a postern remain. There are several gateways of English architecture, as the Chequer or Exchequer Gate in the Cathedral Close, and the Stonebow in the High-street: the remains of a fort called Lucy Tower; a tower of three stories, incorporated in a modern house called the Priory, and several other buildings. The Gray Friars is a large oblong building, the lower story of which lies some feet below the surface of the ground; part of the upper story, formerly the chapel, is now used for a Free school, and the remaining part as a library. The remains of John of Gaunt's Palace and of a building called John of Gaunt's Stables present some interesting Norman and early English features. In the gable of the palace is a beautiful oriel window. A small chapel in the richest decorated style is now used as the reservoir of a public conduit. The town-hall is an ancient chamber over a castellated gateway of the time of Henry VIII., which crosses High-street.

LINCOLN, PORT. [AUSTRALIA.]

LINCOLNSHIRE, an English county, bounded N. by the estuary of the Humber, which separates it from Yorkshire; N.W. by Yorkshire; W. by Nottinghamshire, from which it is partly separated by the Trent; S.W. by the counties of Leicester and Rutland; S. by Northamptonshire; S.E. by the counties of Cambridge and Norfolk, from the last of which it is separated by the Cross Keys Wash; and E. by the North Sea, or German Ocean. Its form is irregular, having its greatest length from north to south, 75 miles, from the Humber near the town of Barton to the Welland, near Market Deeping; and its greatest breadth, 50 miles, from the junction of the three counties of York, Nottingham, and Lincoln, to the sea at Saltfleet. The area is estimated at 2776 square miles, or 1,776,738 acres. The population in 1841 was 362,602; in 1851 it was 407,222. In size Lincolnshire is the second English county, Yorkshire only exceeding it. It is comprehended between 52° 39' and 53° 43' N. lat., 0° 22' E. and 0° 56' W. long.

Coast-line.—The coast from the Welland to the Humber forms a tolerably regular curve convex to the sea, and is low and marshy, except about Clea Ness, near Grimsby, where the coast rises into cliffs. A belt of sand of varying breadth skirts the land, and the forest, which once occupied the fen country, where the trunks of trees are found under the soil, extended over a considerable space now covered by the sea. From the mouth of the Welland to that of the Nene the coast is so low as to require the protection of a sea-wall or bank. The present bank is more advanced towards the ocean than what is termed the old or Roman bank, and a considerable extent of land is thus gained. The estuary of the Wash is occupied for the most part by sand-banks, dry at low water. Between these banks the streams which flow into the estuary have their channels. Two wide spaces, or pools of deeper water, between the banks afford anchorage to vessels. The opening near the Norfolk coast is termed Lynn Well or Lynn Deep, though in some maps the name of Lynn Deep is given to the eastern channel of the Ouse. The opening near the Lincolnshire coast is called Boston Deep; it forms a long narrow anchorage, sheltered to seaward by Long Sand, Dog's Head, and Outer Knock, a range of sand-banks which run parallel to the coast to Skegness, north of Wainfleet. The water in Boston Deep is from 3 to 8 fathoms deep. The coast between Boston and Wainfleet is occupied by a line of salt-marshes. There are other salt-marshes along the estuary of the Humber.

Surface and Geological Character.—A considerable part of Lincolnshire consists of alluvium, constituting a vast extent of flat or marsh land, from the border of which the subjacent strata rise and form comparatively elevated tracts. The alluvial soil occupies nearly the whole of the coast. It skirts the bank of the Humber, and that of the Trent, as far up as Gainsborough. West of the Trent it spreads over Thorne Waste, or Thorne Level, from the midst of which rises the Isle of Axholme. This level was anciently occupied by a vast forest. [AXHOLME, Isle of.] West of the Wash the alluvium extends inland from Wainfleet to the river Witham. It spreads in

breadth 3 or 4 miles from each bank nearly up to Lincoln, where it

is contracted to a narrow strip. Southward from the Witham the alluvium occupies half the breadth of the county. From Barton-upon-Humber to Burgh, near Wainfleet, extends a line of chalk downs, called the Wolds of Lincolnshire. These downs form part of the great chalk formation which extends through England, from Flamborough Head in Yorkshire to the coast of Dorsetshire. The length of the Lincolnshire Wolds is about 47 miles, their average breadth 6 miles, their greatest breadth 13 miles. The chalk is found extending under the alluvium in the marshes round the Wolds. Along the coast by Saltfleet are natural outlets of water called provincially 'blow wells,' deep circular pits, which furnish a continual flow of water, and are vulgarly reputed to be unfathomable; they are presumed to communicate with the chalk. The Wolds have their steepest escarpment towards the west, on which side the greensand crops out and forms a narrow belt, skirting the chalk from Barton to Burgh. The iron-sand occupies a narrow belt of land west of the greensand. These two formations constitute a range of hills extending from north-west, near Market Rasen, to south-east, near Spilaby, running nearly parallel to the Wolds.

Westward of the iron-sand extends a wide flat, watered towards the north by the Ancholme, and towards the south by the Witham, occupied chiefly by the Oxford or clunch clay. The breadth of this district near the Humber is about 3 miles, east of Lincoln 15 miles, and between Sleaford and Spilaby 25 miles; but in this part it is partially covered by the marshes of the Witham. The elevation of this stratum scarcely exceeds that of the adjacent fens. It has been penetrated to the depth of nearly 500 feet. The low district of the Oxford clay forms a large central valley separating the Wolds, with the adjacent hills, from the higher grounds formed of the oolitic strata, which extend southward through the county from the marshes which line the Humber: they are bounded on the east by a line drawn by Lincoln (where the oolites subside, forming a narrow gap of a mile or two wide, occupied by the Witham and the adjacent marshes), Sleaford, and Bourne to Uffington. This range of high land has its steepest escarpment, called Cliffe Row, on the western side, south of Lincoln. The eastern side of this range of hills consists, from Barton to Lincoln, chiefly of the great oolite; and south of Lincoln of the cornbrash and great oolite, separated by a thick bed of clay. The west side is occupied by the inferior division of the Oolitic formations. Several stone-quarries are opened between Sleaford and Grantham.

The Lias formation occupies nearly all the rest of the county. Commencing at the Humber, it proceeds due south to Lincoln, southward of which it pervades almost all the western side of the county. It is continuous on its eastern side with the oolitic formations, from beneath which it crops out. The north-western corner of the county is occupied by the new red-sandstone or red marl. It is covered all round the Isle of Axholme (which is composed of red marl) by the alluvium of the Thorne Level, Hatfield Chase, and the contiguous marsh-lands. Gypsum occurs plentifully in this formation in the Isle of Axholme and on the border of the Trent; and there are saline mineral springs in the neighbourhood of Gainsborough.

Hydrography and Communications.—The Trent touches the border of the county nearly midway between Newark and Gainsborough, and for about 16 miles separates the counties of Lincoln and Nottingham; from below Gainsborough to its junction with the Yorkshire Ouse its course of 19 miles is almost entirely within the border of Lincolnshire. This river is navigable throughout the part which belongs to this county; and vessels of 150 tons can ascend to Gainsborough, where the river is crossed by a bridge. The Idle, which comes from Nottinghamshire, or rather the Bykerdike or Vicardye, a cut from the Idle, skirts the southern boundary of the Isle of Axholme, and falls into the Trent a little below Gainsborough on the left bank. The Bykerdike and the Idle are navigable from East Retford. The old river Thorne, another affluent of the Trent, skirts the Isle of Axholme on the north-west, and cuts (not navigable), distinguished as the New River Idle, and the New Thorne, pass from the rivers after which they are named through Axholme Isle into the Trent.

The Ancholme rises near the village of Spridlington, between Lincoln and Market Rasen, and flows north-east 6 miles to Bishop Briggs, when it is joined by the little river Rase from near Market Rasen. Here the navigation commences, and the stream is carried in an almost direct line by an artificial cut, about 20 miles long, into the Humber; a short distance west of Barton. This river serves to drain the marshes through which it flows. The Ancholme carries off the drainage of the valley between the Wolds and the oolite or stonebrash hills. The Tetney rises from the south-western escarpment of the Wolds, between Binbrook and Market Rasen, and flows by Binbrook and Tetney into the German Ocean near Grimsby and Saltfleet, about 22 miles. The mouth has been made navigable, the Louth Navigation entering the sea there. The Ludd rises near the south-west escarpment of the chalk range. It is formed by the junction of two or three brooks which unite above Louth and flow north-east into the German Ocean by several arms, one of which enters the sea by Grainthorpe sluice between Tetney and Saltfleet, another near North Somerootes, and a third at Saltfleet. The length of the Ludd is about 18 miles. The Louth Navigation consists partly of this river and partly of an artificial cut from the village of Alvingham to the mouth of the Tetney river: the navigation is about 14 miles long. The Withern, or Withern Eau,

rises near Ashby Puerorum, and flows north-east into the sea at Saltfleet, where its estuary receives one of the arms of the Ludd: its length is about 24 miles. In the upper part of its course it is called the Calceby Beck. The *Steeping* rises near Ashby Puerorum, and flows south-east, not far from Spilsby, 20 miles into the sea.

South of Wainfleet the Fen district commences: and from the extensive system of draining that has been carried on, the hydrography of the county becomes very complicated. We must therefore comprehend the natural and artificial hydrography in one view, from the impossibility of drawing exactly the line of demarcation between them. The *Witham*, the most important river in the county, rises near the village of Thistleton, just within the border of Rutlandshire, but almost immediately enters Lincolnshire, flowing northward to the town of Grantham, and receiving by the way several brooks. Below Grantham the river flows generally northward to Lincoln; two or three miles of its course in this part are on the border of the county, which it separates from Nottinghamshire; the rest is within the county. A few miles above Lincoln it receives on the right bank the little river Brant, nearly 15 miles long, from Brandon, north of Grantham. At Lincoln the river turns eastward, and flows to the neighbourhood of Bardney Abbey, where it receives the united stream of the Langworth River and the South Beck. The principal source of this stream (the Langworth) is in the chalk hills between Market Rasen and Louth, and its whole course is about 18 miles. From the junction of the Langworth the Witham flows south-east to the neighbourhood of Tattershall, where it receives, on the left bank, the river Bain; and on the right bank the Sleaford River, or Kyme Eau. The Bain rises in the chalk hills at Ludford, between Market Rasen and Louth, and flows southward by Horncastle and Tattershall, about 26 miles: it receives the Waring, Scrivelaby, and Enderby Becks. There is a navigation 11 miles long, partly artificial, partly natural, from the Witham up to Horncastle. The Sleaford rises near Ancaster, and flows north-east by Sleaford and South Kyme into the Witham, about 22 miles: there is a navigable channel 13½ miles long, partly natural, partly artificial, from the Witham up to Sleaford. From the junction of these streams the Witham flows by an artificial cut to Boston, below which town it flows in its natural bed into the Wash. The whole length of the Witham is nearly 80 miles, for about half of which it is navigable. At Lincoln it communicates with the Fosse Dyke, and below that with the Horncastle and Sleaford Navigation; there are also numerous cuts connected with it for the purpose of draining the fens.

The *Welland* rises in Northamptonshire, and flows along the border of that county, which it divides successively from Leicestershire, Rutlandshire, and Lincolnshire. It first touches the border of Lincolnshire just above Stamford, whence it flows to Deeping and Crowland, where what is termed the Old Welland runs northward to Spalding, while another arm called the Shire Drain proceeds along the border of the county into the Wash at the mouth of the Nene. From Spalding the Old Welland is conveyed in a direct line by an artificial channel into the Wash. There is a navigation up to Stamford. Between that town and Deeping there is a canal by the side of the natural stream: below Deeping the natural channel is employed for about 2 miles; and then there is a navigable cut to Spalding. The navigation is about 28 miles long from Stamford to the Wash. The Glen rises between Grantham and Folkingham, and flows south by Corby to Barholm, not far from Stamford; in this part of its course it crosses a projecting corner of the county of Rutland. From the junction of a small stream at Wilthorpe the Glen flows north-east into the Wash at the mouth of the Welland. Its whole length is about 36 miles. A small rivulet which joins the Glen has been made navigable for 3½ miles up to the town of Bourne; and below the junction of this rivulet the Glen is navigable for about 12 miles.

A general account of the great Fen district of England, and of the changes which it has undergone, is given under BEDFORD LEVEL. Of the cuts and drains in the Lincolnshire Fens the Car Dyke, which skirts the western border of the fens, commences in the Welland between Stamford and Deeping, and runs northward nearly 35 miles into the fens of the Witham, with the drainage of which it is connected. This canal is supposed to be of Roman origin: it is 60 feet wide, and has on each side a wide flat bank. The South Forty-Foot is cut from the Glen by a circuitous course to the Witham at Boston; its length is about 22 miles: it receives a number of small streams flowing from the hills which form the western boundary of the Fen country. The North Forty-Foot runs 10 miles from the Kyme, or Sleaford River, near its junction with the Witham, parallel to the Witham, into the South Forty-Foot, near Boston. The West Fen Catchwater Drain, 10 miles, and the East Fen Catchwater Drain, 7 miles, bound the Fen district on the north side. The Old and New Hammond Beck runs by a circuitous course of about 20 miles from the Welland near Spalding to the South Forty-Foot near Boston. The other cuts, provincially termed 'Leams,' 'Droves,' 'Drains,' 'Becks,' 'Eaus,' and 'Dykes,' are too numerous to admit of distinct notice. In the fens between the Glen and the Shire Drain they are particularly numerous. The drainage of the northern fens is noticed under AXHOLME, Isle of.

Of navigable canals, beside the Ancholme, Louth, Horncastle, Sleaford, Bourne, and other navigations already noticed, there are only

two. One of them, the Fosse-Dyke, from the Trent at Torksey to the Witham at Lincoln, 11 miles, is probably a Roman work, and appears to have been used for navigation previous to the Conquest. Henry I. had it cleaned out and the navigation improved. It is level throughout, but its waters are 4 feet above those of the Trent. The other canal is the Stainforth and Keadby Canal, which opens a communication between the Don, or Dun, Navigation at Stainforth near Thorne in Yorkshire, and the Trent at Keady in Lincolnshire.

The principal coach-road is the Hull, Barton, and Lincoln road. This enters the county at Market Deeping, 90 miles from London, and runs north by west by Bourne, Folkingham, and Sleaford to Lincoln (134 miles). From Lincoln the road runs due north in a direct line along an old Roman road for many miles; and then turning north by east runs by Glanford Brigg to Barton, on the right bank of the Humber, opposite Hull. The Louth and Boston road branches off from the above just before it enters Lincolnshire, and passing through the opposite extremity of the town of Deeping, runs by Spalding, Boston, and Spilsby to Louth; from whence a road runs onward to Great Grimsby on the Sea. The Great North road enters the county at Stamford, and runs north-north-west by Grantham into Nottinghamshire. There are numerous roads of minor importance.

The Boston branch of the Great Northern railway enters the county at St. James Deeping, east of Market Deeping, and runs north by east past Spalding to Boston, where it turns north-west past Tattershall to Lincoln and Gainsborough, joining at that place the Manchester and Sheffield railway: a short branch diverges at Saxeby west to the Manchester line. From Boston the line is continued in a generally northern direction, mainly by the East Lincolnshire line, at a short distance from the coast, past Alford and Louth to Great Grimsby. The main line of the Great Northern railway enters the county west of Market Deeping, and traverses the south-eastern part of the county in a north-western direction, quitting it at Claypole, south-east of Newark. The Nottingham and Lincoln line enters the county a few miles south-west of Lincoln. From Lincoln it is continued in a north-eastern direction by the Sheffield and Lincolnshire railway to Market Rasen, where it turns north-west, and near Glanford Brigg joins the Manchester, Sheffield, and Lincolnshire railway. This last-named line enters the county at Gainsborough, and proceeds in a generally east-north-east direction past Kirton and Glanford to Grimsby. A short branch runs from it to New Holland opposite Hull, and to Barton-upon-Humber.

Climate, Soil, Agriculture.—The temperature of Lincolnshire is nearly the same as that of the centre of England. The flatness of the surface allows the winds to blow uninterruptedly over it, and of these the western are the most violent. Near the coast the sea tempers the cold easterly winds in winter, and the snow seldom lies long. The climate in the lower parts, where in spite of extensive drainings much marshy ground still remains, is not very healthy, and intermittent fevers are prevalent. The water in the lower parts is bad and brackish, being procured only from wells and ponds; there is no such thing as a spring of pure water in the fens. The soil varies greatly in different districts. The grazing land in this county cannot be surpassed in its capabilities for fattening cattle, and some of the drained fens and warp lands along the rivers possess a high degree of fertility when cultivated. Upon the whole the produce of the county, both in grain and cattle, is very considerable. The lands which have been reclaimed from the sea by banking and draining are mostly laid out in large farms, which require a considerable capital. In other parts of the county there are many small properties cultivated by the owners and kept with great neatness.

The crops usually raised on the arable land are mostly the same as in other counties on similar soils. Some wood is cultivated in the neighbourhood of Boston on rich warp land; sainfoin is grown on the chalky soils, and lucern on the richer. Cabbages and carrots are cultivated to a considerable extent, the former on the heavy clays and the latter on the light and deep sands. Some of the finest pastures are fed off by horses which are fattened for the markets.

One of the most effectual improvements practised on land, by the side of some rivers in which the tide flows rapidly, is that of warping; or, in other words, retaining the water on the land so long as to let it deposit a layer of sand and mud. Thus a new soil is created over an old one, and this deposited soil is always very fertile. By this process extensive tracts of poor land have been covered in a short time with a new soil of the finest quality, as the crops raised upon it clearly show. Besides creating a soil the warping fills up all inequalities, and a perfectly level surface is produced. Warp land possesses a natural power of production, which cultivation and manuring cannot imitate. The basis of the new soil is fine clay and sand, the sand minutely divided and intimately mixed with the clay, with a considerable portion of fine calcareous earth. The richest crops of beans, wheat, oats, and rape are raised without manure on the warp lands. But they are not so well adapted for barley or turnips on account of their slimy nature. It has added much to the produce of Lincolnshire, that the crops raised on the warp lands have enabled the farmer to employ all the manure made by the abundance of straw which these lands produce to improve the lands that lie above the reach of the waters.

In a county which contains such rich pastures it is of great import-

ance that the breed of cattle and sheep be of the most profitable kind; and it is found that no county possesses finer breeds of horses, oxen, and sheep. The Lincolnshire horses are celebrated for their size and power. Horncastle fair is the great resort of all the London dealers, who purchase hunters and carriage-horses at very high prices. The best hunters are bred on the higher and drier lands, but they are generally turned out for a time in the richer pastures to give them flesh before they are sold. The oxen which are preferred for grazing are the short-horns and some crosses of long-horns.

There are not many dairies in Lincolnshire: breeding and fattening are considered more profitable and less troublesome. There is however some excellent cheese made of the Stilton kind. The sheep which are bred in this county are principally of the long-woolled, commonly called Leicesters; but the counties of Lincoln and Leicester differ only in the great proportion of fen lands to be found in Lincolnshire. The rich upland pastures are similar in both counties. The old Lincoln sheep are larger than the improved Leicester, carry a heavier fleece, and are hardier; the Leicesters however are generally preferred, from their greater propensity to fatten. A cross which partakes of the qualities of both breeds has been produced, and is preferred by some for the fens. The breed of pigs has been much improved of late years by judicious crossing.

Divisions, Towns, &c.—Lincolnshire has long been divided into three 'parts,' as they are termed—Lindsey, Kesteven, and Holland. Lindsey is by far the largest, including the north and north-eastern parts of the county. The name Lindsey, like that of the county, is derived from Lindum, the Roman name of Lincoln. From Lindum, with the subjoined epithet Colonia, came Lincoln, and thence Lincolnshire; and from the name without the epithet, Lind-sey. The latter part of this name appears to be the Saxon 'ey,' an island; 'the Isle of Lindum,' a name sufficiently descriptive of the district, which is insulated by the sea, the Humber, and the Trent, the Fosse Dyke and the Witham, with their connected marshes. Kesteven comprehends the south-western part of the county. Holland comprehends the rest of the county, including the greater part of the fens. These divisions are of great antiquity; they are also characterised by distinct natural features. The insular character of Lindsey has been noticed: the Wolds, or chalk hills, form the nucleus of it. Kesteven is distinguished by the steep slope of the Cliffe Row, which overlooks the valley of the Witham; and Holland, like its continental namesake, is distinguished by its fens.

Lincolnshire is further divided into wapentakes, hundreds, and sokes. These, with their situation in the county, are as follows:—

I. Parts of Lindsey.—Aslaoce, wapentake, central; Bolingbroke, soke, central; Bradley Haverstoe, wapentake, north-east; Calceworth, hundred, east; Candleshoe, wapentake, east; Corringham, wapentake, north-west; Gartree, wapentake, central; Hill, hundred, central; Horncastle, soke, central; Lawress, wapentake, east; Louth Eske, hundred, north-east; Ludborough, wapentake, north-east; Manley, wapentake, north; Walshoroff, wapentake, central; Well, wapentake, east; Wraggoc, wapentake, central; Yarborough, wapentake, north; Lincoln, city and liberty, central.

II. Parts of Kesteven.—Aswardhurn, wapentake, central; Aveland, wapentake, south; Beltialoe, wapentake, south; Boothby Graffo, wapentake, west; Flaxwell, wapentake, central; Langoe, wapentake, central; Loveden, wapentake, west; Ness, wapentake, south; Winnibriggs and Threo, wapentake, south-west; Grantham, borough and soke, south-west.

III. Parts of Holland.—Elloe, wapentake, south; Kirton, wapentake, south-east; Skirbeck, wapentake, south-east.

The county contains the city of LINCOLN; the boroughs and market-towns of BOSTON, GRANTHAM, GRIMSBY, and STAMFORD; and the market-towns of ALFORD, BARTON-UPON-HUMBER, BOLINGBROKE, BOURN, CAISTOR, Corby, Crowle, Deeping, Donington, Epworth, Falkingham, GAINSBOROUGH, GLANFORD BRIGG, HOLBEACH, HORNCASTLE, Kirton, LOUTH, Market Rasen, SLEAFORD, SPALDING, SPILSBY, Swinehead, Tattershall, Wainfleet, and Wragby. To these may be added the now disused market-towns of Binbrook, Burton-upon-Stather, Crowland or Croyland, Navenby, and Saltfleet. Of those printed in small capitals an account is given under their respective titles; the others we notice here.

Alford, population 2262, distant 34 miles E. by N. from Lincoln, consists chiefly of two streets, which are paved; the shops are lighted with gas. The church, a stone building of the 13th century, has been repaired with brick. The Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship. The Free Grammar school, founded in 1576, has an income of about 200*l.* a year; the number of scholars is about 30. There are National and British schools. Brewing, tanning, and rope-making are carried on. The market is on Tuesday: fairs for cattle and sheep are held on Whit-Tuesday and on November 8th. Near the town is a medicinal spring called Holy Well.

Bolingbroke, population 980, is 29 miles E. by S. from Lincoln. A castle was built here by William de Romars, earl of Lincoln, which subsequently came into the hands of John of Gaunt, whose son, Henry IV., was born in this castle, and took from it his surname of Bolingbroke. The remains consist of the castle mount and the moat. During the wars of Charles I. and the Parliament the castle was

stormed and demolished. The church was at the same time partly destroyed: it has a tower at the west end. In the town are a Wesleyan chapel and National schools. Rope-making, brewing, and malting are carried on. Tuesday is the market-day.

Binbrook, population 1285, formerly a market-town, 20 miles N.N.E. from Lincoln, is a well-built place. Agricultural implements are made here. Extensive rabbit-warrens are in the neighbourhood, and the dressing of skins for furriers employs some of the inhabitants. The church is a plain building with a tower. There are chapels for Wesleyan and Primitive Methodists, a National school, and a temperance hall. A fair is held on Easter Tuesday.

Burton, distinguished from other places of the same name as *Burton-upon-Stather*, population 899, is situated on a hill near the right bank of the river Trent, 32 miles N. by W. from Lincoln. The town was formerly more extensive, and had a market, which has been given up. The church is a handsome structure, with a tower. There are chapels for Wesleyan and Primitive Methodists, and a National school. Fairs are held twice a year, and a feast at Whitsuntide. Ship-building and malting are carried on.

Corby, population 958, is 33 miles S. by E. from Lincoln; the Roman Ermine-street passed through the parish. A market formerly held here has fallen into disuse. The church is a large ancient building, with a pinnacled square tower. In the town is a Wesleyan chapel. Read's Endowed school had 42 scholars in 1851; its income from endowment is about 49*l.* a year. There are stone-quarries in the vicinity.

Crowland, or *Croyland*, population 2466, is about 48 miles S.S.E. from Lincoln. Roman antiquities have been discovered in the neighbourhood. A monastery was founded here by Ethelbald, king of Mercia, about the beginning of the 8th century. About 870, in the reign of Ethelred I., this monastery, with several others, was destroyed by the Danes. In the latter part of the 11th century, the monastery, which had been restored, was again destroyed by fire, but was rebuilt a few years afterwards. The abbey, thus restored, increased rapidly in wealth and reputation. At the dissolution, its yearly revenues were estimated at 1217*l.* 5*s.* 11*d.* gross, or 1033*l.* 15*s.* 10*d.* clear. The buildings of the abbey were much injured during the siege of Crowland by the parliamentary forces under Cromwell: there are yet standing however considerable remains of the church. The architecture is chiefly of the transition style from Norman to early English, but part is of the perpendicular style. On the west side of the church, at the confluence of two streams, is a triangular bridge, probably erected in the 14th century. It is used for foot-passengers. The Wesleyan and Primitive Methodists have places of worship in Crowland. Brewing, malting, and brick-making are carried on. A market formerly held here has been removed to Thorney.

Crowle, in the Isle of Axholme, population 3008, is 32 miles N.N.W. from Lincoln, on the right bank of the old Don River. A market is held on alternate Mondays during March, April, and May: fairs for cattle, flax, &c., are held on the last Monday of May, and on November 23rd. The church is a fine old Norman structure. The Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship, and there is a Free school. Malting and flax-dressing are carried on.

Deeping, called also *Market Deeping*, population 1294, is 43 miles S.S.E. from Lincoln. The town is close to the Northamptonshire border, the navigable river Welland here forming the boundary. Boat-building, brewing, malting, and rope-making are carried on. The market is on Wednesday, and is chiefly for pigs. The church contains traces of Norman, and portions of early English architecture; the tower and other parts are of perpendicular character. The Wesleyan Methodists, Independents, and Baptists, have places of worship. There is a Free school. A neat town-hall was built in 1839. A priory was formerly established in the town. *Deeping St. James*, population 1849, is a village so near to Market Deeping as almost to constitute one town with it. The church, originally a chapel built by the monks of Croyland, is large and curious, chiefly in the Norman and early English styles: it has a very high tower, with an octangular spire; in the interior is a curious Norman font. An ancient stone cross in the village was rebuilt in 1819, and is now a police station.

Donington, population 1867, about 31 miles S.S.E. from Lincoln. The parish church is of perpendicular date, with a fine tower and spire, which stands outside the south aisle, and forms the principal entrance. The Wesleyan and Primitive Methodists and Baptists have places of worship. Cowley's Endowed schools, founded in 1719, had upwards of 300 scholars in 1853: some of the scholars receive clothing from this charity. The schools are free to all children of inhabitants of the parish. In the upper school there is a head master with 3 assistants, one of whom teaches the classics. The junior boys school and the upper and junior girls schools are conducted by female teachers. The revenue of the charity is about 1300*l.* a year, out of which pensions are given to poor old men and women, apprentice fees paid, the school supported, and other charitable purposes effected. Saturday is the market-day: fairs for horses, cattle, &c., are held on May 26th, September 4th, and October 17th. Rope-making, brick-making, and malting are carried on. Hemp is grown to a great extent; and much hemp-seed is sold.

Epworth, population 1944, about 30 miles N.N.W. from Lincoln,

consists chiefly of one street upwards of 2 miles long. The church is in the perpendicular style. The Wesleyan, New Connexion, and Primitive Methodists and Baptists have places of worship. The Free school was founded by Samuel Wesley, rector of Epworth, the father of John Wesley, the founder of Methodism, who was born here. There is a National school. Tuesday is the market-day: two fairs are held in the year. The dressing of hemp and flax, rope-making, and malting, are the chief employments.

Falkingham, or Folkingham, population 768, is 27 miles S. by E. from Lincoln. Here was anciently a castle, but only the moats and mounds remain. The streets are clean and well paved. The church is large and handsome, chiefly of perpendicular character; the chancel was rebuilt in 1825; the tower has eight pinnacles and a rich battlement. There are a chapel for Wesleyan Methodists, an Endowed school, and a savings bank. There is here a small jail for the southern division of the Parts of Kesteven. The market is on Thursday; there are 5 yearly fairs. Near the town are several springs, one of them chalybeate.

Kirton, or Kirton in Lindsey, population 1948, is situated on the slope of the range of hills which traverses the eastern side of the county, about 18 miles N. by W. from Lincoln. Kirton belongs to the Duchy of Cornwall. The Duchy Court-house on Kirton Green is a neat brick edifice. The church is large, and has a considerable portion of good early English work. The Wesleyan and Primitive Methodists and Baptists have places of worship. The Free school, founded in the 19th year of Elizabeth, has been since 1820 a National school. It has an income from endowment of about 90*l.* a year, and two exhibitions, which however do not appear to have ever been claimed. In 1863 it had about 100 scholars. There is an Infant school. The quarter-sessions for the Parts of Lindsey are held here by adjournment; and there is a house of correction. A market is held on Friday for corn; a cattle market every alternate Saturday for 8 weeks in spring and autumn; and two great cattle fairs are held on July 18th, and December 11th. Brewing and malting are carried on.

Long Sutton, or Sutton St. Mary, population of the hamlet 4416, about 8 miles from the sea coast; occupies a site to which some centuries ago the tide flowed. The market is on Friday: fairs are held twice a year. The church is an ancient structure, with a square tower surmounted by a wooden spire, which is a useful land-mark for sailors. The Wesleyan and Primitive Methodists, General Baptists and Independents, have places of worship. The Free school, founded in 1492, was re-founded by Queen Elizabeth; the school-room has been recently rebuilt. In the parish are National schools and a parish school. Brewing, malting, tanning, and machine-making employ some of the inhabitants. Sutton-bridge, or Washway, affords a passage across the outfall of the river Nene, on the road between Sutton St. Mary and King's Lynn, Norfolk.

Market Rasen, population 2110, is situated on a little brook, the Rase or Rasen, which joins the Ancholme, 16 miles N.N.E. from Lincoln. The town consists chiefly of one long street, which is crossed by the Sheffield and Lincolnshire railway. The parish church is commodious. The Roman Catholics and Wesleyan and Primitive Methodists have chapels; there are a National school, and some almshouses. The market on Tuesday is well frequented; a fair is held on September 25th.

Novenby, population 1057, is situated on the South Cliffe range of hills, 9 miles S. from Lincoln. The market has been long discontinued. An ancient market cross, covered with a spiral roof, is still standing. The church, which is partly early English and partly decorated, has a large and handsome tower. The Wesleyan Methodists have a neat chapel. There is a Free school. A fair is held on October 17th, chiefly for swine.

Saltfleet, or Saltfleet Haven, population 404, is 38 miles E.N.E. from Lincoln. The Wesleyan Methodists have a chapel here. Saltfleet had formerly a market which has long been disused. A fair is held on October 3rd. Some good springs are near the town. Saltfleet is resorted to in summer for sea-bathing. Oysters are found in abundance off the shore.

Swineshead, or Swinhead, population 2044, is 29 miles S.E. from Lincoln. A Cistercian abbey was founded here in 1134, by Robert de Greslei; in this monastery King John appears to have rested after his escape in crossing the Wash, a few days previous to his death at Newark. Swineshead, although now about 6 miles from the sea, was formerly a port, and the sea flowed up to the market-place, where there was a harbour. The market held on Thursday is now nearly obsolete. A fair is held on October 2nd. The church is a handsome building, partly decorated and partly perpendicular in style, with a lofty spire. The Wesleyan Methodists and Baptists have places of worship. There is an Endowed Free school, founded in 1720. Near the abbey is a circular Danish encampment, 200 feet in diameter, surrounded by a double moat.

Tattershall, population 987, on the little river Bain, about 19 miles S.E. from Lincoln, had formerly a strong castle. A massive square brick tower, 100 feet high, built by Cromwell, treasurer of the exchequer to King Henry VI., is in tolerable preservation. The town is much decayed. The church, which was formerly collegiate, is a spacious perpendicular edifice, in the form of a cross. There are chapels for Wesleyan Methodists and Baptists, a National school, and

an Endowed almshouse for 10 poor widows. The Horncastle navigation passes through the town. Boat-building, malting, and brewing are carried on. The market is held on Thursday, and fairs are held in May and September.

Wainfleet, about 38 miles E.S.E. from Lincoln, population of the parishes of Wainfleet All Saints, St. Mary, and St. Thomas or Northolme, 2257 in 1841; in 1851 it was 2255. Wainfleet is supposed to have been a Roman station, the *Vainouas* of the geographer Ravennas. The haven was anciently frequented by ships, but is now only used for small craft. The town is supposed to have stood formerly higher up the creek, where the old church of All Saints stands. Wainfleet consists chiefly of one street, with a market-place in the centre. A new church in the Italian style, the cost of which was partly defrayed by the commissioners for building churches, stands on a site given by Colonel Sibthorp. St. Mary's church is much decayed. The Wesleyan and Primitive Methodists and Quakers have places of worship. The Free Grammar school, founded by William of Waynflete, bishop of Winchester, in the 15th century, has an income from endowment of 70*l.* a year, and is free to 30 boys; the number of scholars in 1853 was 45. There are also an Endowed Free school, supported by the governors of Bethlehem Hospital, a British school, and a savings bank. The market is held on Saturday, but is almost disused; fairs are held in May and October.

Wragby, population 610, is 11 miles E.N.E. from Lincoln. The town is pleasantly situated, and contains some good houses. The church, a handsome edifice, was built in 1837 by Mr. Turner, the proprietor of the town. The Wesleyan Methodists have a chapel. Hansard's Free school for boys, founded in 1636, had 56 scholars in 1852. There is also a Free school for girls. In the town are almshouses for six widows of clergymen and six widows of laymen. Thursday is the market-day; fairs for cattle are held on Holy Thursday and September 29th.

The following are some of the more important villages, with the population of the parishes in 1851:—

Alkborough, or Aukborough, population 468, on the right bank of the river Trent, near its confluence with the Ouse, where the combined river takes the name of the Humber, about 18 miles N.W. by N. from Grantham; has an ancient church with a tower, chapels for Wesleyan and Primitive Methodists, a girls' school, and some almshouses. On a hill near the village a Roman camp and labyrinth have been traced. *Ancaster*, the Roman station *Causanna*, population 589, is situated on the Ermine-street, about 7 miles N.N.E. from Grantham. The church is a handsome building of the early English and decorated styles. Roman coins have been found here in such quantities as to make the sale of them a source of profit to some of the inhabitants. *Bardney*, population 1329, on the left bank of the Witham, 10 miles E. by S. from Lincoln, has a church, a chapel for Wesleyan Methodists, and a Free school. An abbey founded here about the close of the 7th century, was destroyed by the Danes, but was re-founded by Gilbert, earl of Lincoln, in the reign of William I. *Barrow-upon-Humber*, population 2283, about 8 miles S. by E. from Barton, has an ancient church, which has been recently repaired, and a new roof placed on it. The tower is of later date than the body of the church. A convent was founded here by St. Chad. A mound, called the Castle, is about a mile north-west from the village; there are also several tumuli. *Basingham*, population 892, 9 miles S.S.W. from Lincoln, has an ancient church, the tower of which was rebuilt in 1782, and a large chancel added. Some old pictures which were found on the walls have been restored. There are chapels for Wesleyan and Primitive Methodists. Malting and brewing are carried on. *Beckingham*, population 450, distant 14 miles S.S.W. from Lincoln. The church is a handsome building of the early English style, and has a fine tower with eight pinnacles. It has of late years received extensive repairs; a beautiful Norman doorway on the north side is now closed up. There are a chapel for Wesleyan Methodists, and schools supported by the Established Church and by the Wesleyans. *Belton*, population 1738, in the Isle of Axholme, 14 miles N. by W. from Gainsborough, has a handsome and commodious gothic church, and chapels for Wesleyan and Primitive Methodists. A fair is held in October, chiefly for flax. There are some parochial charities. About a mile from the village is Belton Hall, the seat of Earl Brownlow. *Long Bennington*, 8 miles N.W. from Grantham, close to the Nottinghamshire border, population 1100, consists chiefly of one street on the road from Grantham to Newark. The church, a fine gothic structure, has a tower at the west end. There are national schools. Quarries of freestone and lime, lime-kilns, and corn-mills afford employment. A priory of Cistercian monks was formerly at this place. *Billingham*, population 1048, about 3 miles E. from Falkingham, has an elegant stone church in the decorated style, with a tower and spire 150 feet high. There are chapels for Wesleyan Methodists and Baptists, and an Endowed Free school for 25 boys. *Boothby, or Boothby Graffo*, population 208, on the Cliffe range of hills and on the Ermine-street, 8 miles S. from Lincoln. The parish church, a neat gothic structure, erected in 1842, consists of a nave, chancel, and a tower. In 1305 the Bishop of Lincoln erected here a large castellated mansion, which he afterwards presented to Edward I., and which served as a place of confinement for the King of France, when he was a prisoner in 1359. Of the remains, which are extensive, a portion is incorporated with

the modern mansion. The south-east tower is nearly entire, it is surmounted with three pinnacles and a conical roof. The tower at the north-east angle has a groined roof resting upon a central pillar. In the walls of the tower are 12 painted windows. *Bottesford*, population of the township 144, about 6 miles W. from Granford Brigg, has a handsome and commodious cruciform church, which has undergone extensive repairs and alterations. There are National schools for boys and girls. *Burgh-in-the-Marsh*, population 1215, occupying a pleasant situation commanding a view of the sea, 8 miles E. from Spilsby, had formerly a market. The marsh-land around is extensively used for grazing cattle and sheep. The parish church is a handsome edifice in the early English style, with clerestory and a tower; in the interior is a fine gothic screen. The Wesleyan Methodists and Baptists have places of worship; and there are Palmer's Endowed Free school for boys, which had 60 scholars in 1853, and Holden's Charity school for boys and girls. Two annual fairs are held. Brick-making, brewing, and malting are carried on. Some earth-works have been traced, and coins and other antiquities have been found here. *Caythorpe*, population 889, about 10 miles N. from Grantham. The church, which is chiefly in the decorated style, has some peculiar features; the nave is divided longitudinally by arches rising from between two windows at the west end; the tower is quadrangular; on it are four pinnacles attached by flying buttresses to the spire, which reaches the height of 162 feet. There is a chapel for Wesleyan Methodists. Schools for boys and girls are supported partly by subscription. Caythorpe Hall, a modern mansion, is in the Grecian style. *Colsterworth*, population 1174, on the right bank of the Witham, 8 miles S. from Grantham, has a church which is chiefly of early English style. There are a chapel for Wesleyan Methodists, and National and Infant schools. Sir Isaac Newton was born at Woolsthorpe, a hamlet of Colsterworth. His father was lord of the manor of Woolsthorpe. The house in which Sir Isaac was born is now a farm-house. *Denton*, population 650, on the Leicestershire border, 4 miles S.W. from Grantham. The church is a handsome gothic structure. Denton Hall, finely situated in a well-wooded park, was almost entirely rebuilt in 1817. Roman tessellated pavements have been found here. A reservoir for Grantham Canal covers 28 acres. There are stone quarries in the vicinity. *Edenhams*, population 670, about 3 miles W. by N. from Bourne, has a handsome church, partly early English and partly perpendicular. The interior contains some fine monuments of the Willoughby de Eresby family. There is a school for girls. Grimsthorpe Castle, the seat of Lord Willoughby de Eresby, an elegant mansion, stands in a spacious park, which is about 16 miles in circumference. *Fleet*, population 1162, about 2 miles S.E. from Holbeach, has an ancient gothic church, the tower of which stands apart at the west end, and is surmounted with a spire 114 feet high. A chapel for General Baptists, built in 1690, and one for Unitarians, are in the village. Some flour-mills are in the vicinity. *Frieston*, population 1240, in the fen country on the sea-shore, about 3 miles E. from Boston, has a commodious church, partly of Norman date. A chapel for Wesleyan Methodists and a Free school are in the village. Here was a priory of Benedictine monks. Frieston Mere is resorted to for bathing. *Fulbeck*, population 743, about 11 miles N. by E. from Grantham, has a handsome church of decorated character, with a spacious chancel; a new window has been recently placed in the east end. The font is Norman, and there is an ancient carved wooden screen. There are in Fulbeck a chapel for Primitive Methodists and a National school. *Gedney*, 3 miles E. by S. from Holbeach: population 2519. The church is a large perpendicular structure. There are chapels for Wesleyan and Primitive Methodists, General Baptists, and Quakers, and a Free school. The population is dependent on agriculture. *Great Gonerby*, population 1433, about 2 miles N. by W. from Grantham, has a considerable number of well-built houses. The church, a handsome edifice, has a square embattled tower with a crocketed spire. There are chapels for Wesleyan and Primitive Methodists and Independents. The National school, in the Tudor style, was erected in 1841. *Gosberton*, population 2091, on the Risegate Eau, 6 miles N. from Spalding, has a large and handsome church with a central tower, surmounting which is a richly crocketed spire. The Wesleyan Methodists and Baptists have places of worship. The population is agricultural. Brewing is carried on. *Goxhill*, 5 miles E. by S. from Barton-on-Humber, population 1138, has a church with a lofty tower, chapels for Wesleyan and Primitive Methodists, Calvinists, and Baptists, and some parochial charities. At Goxhill Ferry, about 2 miles from the village, there is communication by ferry-boat with Hull, on the opposite side of the Humber. The Manchester, Sheffield, and Lincolnshire railway has a station at Goxhill. *Halton Holgate*, 1 mile S.E. from Spilsby, population 539, has a church partly of early Norman character; the windows are perpendicular. The church has been recently repaired at a cost of about 2000*l.* The Wesleyan Methodists have a chapel, and there is a National school. *Harlaxton*, population 494, near the Leicestershire border, 3 miles S.W. from Grantham. The parish church, which is an ancient structure, has a square embattled tower with a stone spire. In the interior is a finely-carved screen. Near the village is Harlaxton Hall, a fine mansion of the Elizabethan style, recently built. The former hall, situated near the church, is an ancient edifice. Roman coins and other antiquities have been found near the village. *Ingoldby*, population 407, about

8 miles S.E. from Grantham. In the neighbourhood is an ancient encampment of circular form. The parish church, a structure partly Norman and partly perpendicular, with a square tower and spire, occupies an elevated site in the centre of the village. *North Kelsey*, population 918, about 6 miles S.E. from Granford Brigg, has an ancient church with a low square tower, chapels for Wesleyan and Primitive Methodists, and a National school. The Manchester, Sheffield, and Lincolnshire railway has a station here. *South Kelsey*, 8 miles S.S.E. from Granford Brigg, population 623, is situated near the Caistor Canal and the right bank of the river Ancholme, which afford facilities for conveying corn, coal, and general merchandize. There are a neat modern church, Wesleyan and Primitive Methodist chapels, and a National school. *Kirton-in-Holland*, 4 miles S. by W. from Boston, population 2299, has a fine cruciform church of decorated character, with a square embattled tower rising from the intersection. The church was partly rebuilt in 1809. A Free school was founded here in 1624. A market formerly held in Kirton has been disused. *Ladenham*, or *Long Ladenham*, 10 miles E.N.E. from Sleaford: population, 735. The church, a handsome decorated building, with a tower surmounted with a crocketed spire, underwent extensive repairs about the year 1830; it has some good stained-glass windows. The Wesleyan Methodists have a chapel. Fairs are held in May and in July. From the adjacent cliff very excellent prospects are obtained. *Messingham*, 7 miles W. by S. from Granford Brigg: population of the township, 1117. Much of the land here has been reclaimed from the overflowings of the river Trent. The tower of the church was rebuilt about the year 1820 at a cost of nearly 2000*l.* The Wesleyan and Primitive Methodists have places of worship. A pleasure fair is held annually on Trinity Monday. Malting is carried on to a small extent. Some corn-mills are in the vicinity. *Metheringham*, 9 miles S.E. from Lincoln, population 1522, has a commodious church, a Wesleyan Methodist chapel, and a National school. By Metheringham drain there is communication with the river Witham. An ancient cross in the village has been rebuilt, and a market is held beside it on Saturday evenings. Rope-making affords some employment, and there are corn-mills. *Moulton*, 4 miles W. from Holbeach, population 2053, is situated about 5 miles inland from Fossedyke Wash, with which there is a navigable communication from the western side of the parish. The church, a handsome structure of the 13th century, has a square embattled tower surmounted with an elegant spire. There are chapels for Wesleyan and Primitive Methodists, and a Free Grammar school, founded in 1660. Large numbers of bees are kept in the neighbourhood. *New Holland*, 4 miles E. from Barton, on the right bank of the Humber, opposite Hull. The Manchester Sheffield and Lincolnshire railway has its northern terminus here, communicating with Hull by a steam-ferry. The Humber is here about 3 miles broad. *Nocton*, 7 miles S.E. from Lincoln, population 510, is situated on a small stream, by which, and by artificial drains, communication is maintained with the river Witham. The church is a small Grecian building. A Charity school is supported by the Earl of Ripon. Nocton Park, the earl's seat, is a well-wooded inclosure, containing the mansion, erected in the Elizabethan style, to replace the former building, which was burnt down in 1884. A priory for Black canons of the Augustinian order formerly occupied the site of the mansion. *Owston*, on the left bank of the Trent, 8 miles N. from Gainsborough, population of the township 1693, has a gothic church, Wesleyan and Primitive Methodist chapels, and a Diocesan school. Seed-crushing affords some employment, and there are corn-mills near the village. The navigation of the Trent affords facilities for commerce. *Partney*, 7 miles S.S.W. from Alford, population 489, formerly had a market, which was removed to Spilsby. The church is a fine early English structure, apparently of the date of Edward I. The Wesleyan Methodists and Baptists have places of worship, and there is a Free school. Fairs for cattle are held in August and September, and for cheese in October. Brick-making, malting, and brewing are carried on. *Pinchbeck*, 2 miles N. from Spalding, population 3062, near the navigable river Welland, on the line of the Great Northern railway. Beside the church, a commodious building which has received extensive repairs, there are Wesleyan Methodist, Independent, and Baptist chapels, and well-attended National schools. *Great Ponton*, or *Paumton*, about a mile from the ancient Ermine-street, 4 miles S. from Grantham, population 680, has a church of perpendicular character, built about 1519, which consists of nave, chancel, and square tower with pinnacles; also a chapel for Wesleyan Methodists, and a Free school. Roman coins, arms, and other antiquities have been found. *Redbourne*, 6 miles S. by W. from Granford Brigg, population 354, has a handsome church with a lofty tower. There is a National school supported by the Duke of St. Albans, at whose coat a school-house in the gothic style has been erected. Redbourne Hall, the residence of the Duke of St. Albans, stands in a well-wooded park adjoining the public road. *Saxelby*, 6½ miles N.W. from Lincoln, near the Nottinghamshire border, population 1137, has a neat church with a handsome tower, and a chapel for Wesleyan Methodists. There is a station here of the Lincoln and Gainsborough branch of the Great Northern railway. Wharfs for the corn and coal trade are on the Fosse-Dyke navigation. Brick-making, brewing, and malting are carried on. *Scotter*, on the small river Eau, near its confluence with the Trent, about 10 miles N.N.E. from Gainsborough: population, 1158. The parish church is

a commodious structure; there are chapels for Wesleyan and Primitive Methodists and National schools. A fair for horses and cattle is held on July 6th, and a pleasure fair on July 10th. *North Somercotes*, 2 miles N.W. from the small sea-side town of Saltfleet, population 1089, has a spacious gothic church. In the village are chapels for Wesleyan and Primitive Methodists, National schools, and a school supported by Wesleyan Methodists. In the parish are extensive rabbit-warrens. *Surfleet*, 4 miles N. from Spalding, and about 6 miles S.W. from Fosse-Dyke Wash, with which there is navigation by the Welland, population 945, has a good church of ancient date with a spire. There is a Free school endowed by the late Lady Frazer. By the Grand Sluice drainage Surfleet has inland navigable communication with Boston. At Surfleet is a station of the Great Northern railway. *Sutterton*, 6 miles S.S.W. from Boston, and 3 miles from Fosse-Dyke Wash, population 1445, is situated in a district where there is a considerable extent of fen-land. There are a handsome church with a spire, chapels for Wesleyan Methodists and Baptists, and a National school. *Tetford*, 9 miles S. from Louth, population 799, has an ancient gothic church with a tower, a chapel for Wesleyan Methodists, and National and Wesleyan schools. Limestone is extensively quarried and burned for manure. Traces of an extensive encampment exist in the neighbourhood. *Uffington*, on the southern border of the county, 2 miles E. from Stamford; population, 573. The church is a handsome edifice, with a square tower and crocketed spire supported by buttresses. In the village are National schools. A priory of Augustinian canons was formerly at Newstead in the parish; the site is now occupied by an extensive mill. *Whaplode*, about 2½ miles W. from Holbeach, population 2564, has a church of Norman date, with a square tower at the south-east angle of the church. There are chapels for Wesleyan and Primitive Methodists, National schools, and almshouses for six poor widows. *Winterringham*, on the right bank of the Humber, 7 miles W. from Barton, population 824, had once a market. The church is of the early English period. There are chapels for Wesleyan and Primitive Methodists and National schools. On the river-side are convenient wharfs. Near the village is a chalybeate spring. *Winterton*, 8 miles W.S.W. from Barton: population, 1665. The church is early English, except the lower part of the tower, which is Norman. There are chapels for Wesleyan and Primitive Methodists and Independents, and National schools. Cattle fairs are held on the Tuesday before Palm Sunday and on September 23rd, and a general fair on July 6th. A small market for corn is held on Wednesday. Malting, rope-making, and machine-making employ a portion of the population. Tessellated pavements have been found in the neighbourhood.

Divisions for Ecclesiastical and Legal Purposes.—This county, as noticed above, is in the diocese of Lincoln, and province of Canterbury, and constitutes the two archdeaconries of Lincoln and Stow. Lincolnshire is in the midland circuit. The assizes are held at Lincoln, where is the county jail. The quarter-sessions are held as follows: for the county of the city of Lincoln at Lincoln; for the parts of Kesteven and Holland at Bourne, Boston, Sleaford, and Spalding; for the parts of Lindsey, at Kirton, Louth, and Spilsby. County courts are held at Barton-on-Humber, Boston, Brigg, Caistor, Gainsborough, Grantham, Great Grimsby, Holbeach, Horncastle, Lincoln, Louth, Market Rasen, Sleaford, Spalding, Spilsby, and Stamford.

Before the passing of the Reform Act the county returned two members to Parliament; and two members each were returned for the city of Lincoln, and for the boroughs of Boston, Grantham, Grimsby, and Stamford. By the Reform Act the county was divided into two parts, each to return two members. The northern division comprehends the parts of Lindsey; the southern division comprehends the parts of Kesteven and Holland. The only alteration for the borough members was the loss of one for Grimsby. By the Poor-Law Commissioners the county is divided into the Unions of Boston, Bourne, Caistor, Gainsborough, Grantham, Brigg, Grantham, Holbeach, Horncastle, Lincoln, Louth, Sleaford, Spalding, Spilsby, and Stamford. These Unions comprise 723 parishes and townships, with an area of 1,584,020 acres, and a population in 1851 of 397,411.

History and Antiquities.—At the time of the Roman conquest Lincolnshire constituted part of the territory of the Coritani, who occupied several of the midland counties, and whose dominion stretched through Lincolnshire to the German Ocean and the Humber. In the division which the Romans made of Britain Lincolnshire was included in the province of Flavia Caesariensis.

The principal British roads or trackways which passed through Lincolnshire were Ermine-street (which had two branches), the Fosseway, and what has been termed the Upper Saltway. Ermine-street after passing over an angle of the county near Stamford, re-entered it in the neighbourhood of South Witham, between Stamford and Grantham. It immediately divided into two branches, of which the most easterly ran north by Ancaster and Lincoln to Winterringham on the Humber. The other main branch ran north-north-west into Nottinghamshire. The Fosseway commenced on the coast at or near Grimsby, and ran south-west by Lincoln through Nottinghamshire to Leicester. The Upper Saltway appears to have been the communication between the coast of Lincolnshire and the salt-works of Worcester-shire.

Lindum, the modern Lincoln, was a British town before it was

made a Roman station: it is at the intersection of the two great roads, the eastern branch of Ermine-street and the Fosseway. Ptolemaeus mentions it as one of the two chief towns of the Coritani. It was made a Roman station, and according to Richard a Roman colony. The station was on the hill now occupied by the cathedral and the castle: its form was that of a parallelogram, the sides nearly facing the four cardinal points: on each side was a gate. The inclosed area was 1200 feet by 1800 feet. The walls have been almost entirely levelled with the ground, and the gates, with one exception, have been long since demolished. The remaining gate, now called 'Newport Gate,' is one of the most remarkable Roman remains in the kingdom. It consists of a central arch nearly 16 feet wide, and formed with large stones put together apparently without mortar; and two lateral arches or posterns, now nearly closed up by the elevation of the soil. Adjacent to this gate is a mass of the Roman wall; a Roman arch and part of the wall are incorporated with the Norman castle; and another portion of wall parallel to that of the station, and now called the Mint Wall, is supposed to have been part of a granary or of some other Roman building. A fortified wall with towers at the corners appears to have run down to the bank of the Witham, and then along the bank. Coins of the emperors Nero, Vespasian, and Julian have been found here, and especially of Carausius, who as some have supposed, resided for a time at Lincoln. A tessellated pavement and a hypocaust beneath it were discovered in 1739: the pavement was 13 feet below the present surface. Another hypocaust and several antiquities have been also discovered, especially a sarcophagus and some stone coffins, earthen and glass urns, and other funereal utensils. Part of a set of glazed earthen conduit-pipes and other specimens of pottery have been also found.

The only other Roman station in the county mentioned in the Antonine Itinerary was Causennæ. Ad Abum, mentioned by Richard of Cirencester, was on Ermine-street, at Winterringham or Winterton, near the south bank of the Humber. The Bannoallum and the Vainonas of Ravennas have been fixed at Horncastle and Wainfleet. Causennæ was probably Ancaster on Ermine-street, 15 miles south of Lincoln. Roman coins have been found here. The remains of the station at Winterton, supposed to be Ad Abum, were ploughed up not more than six years before Stukeley wrote the account of it, and 'great pavements, chimney stones,' and other antiquities were found but not preserved. Three curious tessellated pavements were found here in 1747. At Roxby, Hibbaldstow, Appleby, Sandton, and Broughton, all in the same part of the county, various Roman antiquities have been discovered. At Horkstow also, near Winterton, several Roman remains, chiefly tessellated pavements and the foundations of buildings, have been found. At Torkesey, at the junction of the Fosse Dyke with the Trent, between Lincoln and Gainsborough, there was probably a Roman settlement. The foundations of the ancient Norman castle appear to have been Roman. At Scampton, about 6 miles north of Lincoln, were discovered in 1795 the foundations of a Roman villa, occupying a site 200 feet square, and having upwards of 40 apartments on the ground plan, with painted and stuccoed walls, and no less than 13 Roman pavements, only one of which was perfect. Some of the walls were of great thickness. Various Roman antiquities were found scattered over the spot. Upon the banks of the Trent, 3 miles west of Stow, in the same part of the county, two Roman altars and other antiquities have been discovered. Stow is supposed to have been the Sidnaceaster of the Saxons, the seat of a bishopric afterwards transferred to Lincoln. Near Gainsborough and at Aukborough, both on the Trent, are Roman camps: the latter was, in Stukeley's time, very perfect, and formed a square of 800 feet; near it was one of those labyrinths, formed of banks, called here and elsewhere Julian's Bower. Camps, probably Roman, have been found at Gedney Hill, near Holbeach, and at Honnington, not far from Grantham; a mosaic pavement at Denton, in the same neighbourhood; and Roman coins and pipes of baked earthenware in other places.

Under the Saxons, Lindsey, a name which perhaps extended nearly or quite over the modern county of Lincoln, appears to have been a subordinate state dependent upon the kingdom of Mercia. It was included among the conquests of Edwin of Northumbria, under whose influence Christianity was introduced by the missionary Paulinus. Bede states that Blesca, the governor of Lincoln, was with his household among the first converts, in the year 628.

When the Danes, or Northmen, were carrying on their ravages in England, in the time of Ethelred I., Lincolnshire, which then had several monastic establishments, suffered greatly. Lincolnshire passed permanently into Danish hands about 877; it constituted part of the territory of the Danish burghs of Lincoln and Stamford; and was included within the boundary of the Danelagh, or Danelag (the 'Danish law,' or 'Danish jurisdiction'), as settled by the treaty between Alfred and Guthrun the Dane. In time the Danish and Anglo-Saxon population became amalgamated, and the whole district came under the supremacy of the Anglo-Saxon crown.

In the civil war between Stephen and the empress Maud, Lincolnshire was the scene of contest. The siege and battle of LINCOLN, 1141, are noticed elsewhere. In the civil war of the barons with John and his son Henry III., Lincoln was signalled by a second battle, which seated Henry III., yet a boy, securely on his throne.

At the latter part of his reign, when troubles had again broken out, Axholme became once more the refuge of the disaffected. In the civil war of the Roses Lincolnshire appears not to have suffered much. Sir Robert Wells, out of revenge for his father's death, whom Edward IV. had beheaded, raised a rebellion against that prince, and gathered an army of 30,000 Lincolnshire men. He was defeated with dreadful loss near Stamford, and put to death by the king's command. At the time of the Reformation the Lincolnshire men broke out into open rebellion upon the suppression of the monasteries, in 1536. The earls of Shrewsbury, Rutland, and Huntingdon, and the Duke of Suffolk, were sent into Lincolnshire with all the force that could be collected; and the rebels dispersed without an engagement, delivering up their leaders to the king's officers.

Of the ecclesiastical and baronial edifices which were erected between the Conquest and the Reformation, Lincolnshire contains many admirable specimens, especially churches. The cathedral of Lincoln and the churches of Boston, Louth, Sleaford, Spalding, and other places are elsewhere noticed. On the hill which runs from Lincoln towards Grantham is a line of churches, presenting a number of interesting features. Beokingham, Normanton, and Ancaster have considerable portions of Norman character. Caythorpe church is chiefly of decorated English character, and presents several singularities in its arrangement. Leadenham has a tower and spire of early perpendicular date, and of good design; the rest of the church is an excellent example of the decorated style. The churches on and near the road from London to Lincoln exhibit as much, if not more variety and excellence of composition than is to be met with in any part of the kingdom in the same distance: among them are Sleaford, Folkingham, Bourne, and Market Deeping churches. Kelby, Threackingham, Kirby Laythorpe, Howel, Horbling, Sempringham, and Morton, have portions of Norman character. Sempringham church appears to be the remains of a much larger building; it has a tower of plain perpendicular character. Silk Willoughby church is of fine decorated English character, with a tower and spire of good composition. Walcot has a tower and fine crocketed spire, which are of decorated English character, as well as the rest of the church: the east window is very fine. Heckington church is one of the most beautiful models of a church in the kingdom, having almost every feature of a fine church. It is a large cruciform structure, having a nave and aisles, spacious transepts, a large chancel with a vestry attached to the north side, and at the west end a tower crowned with four pentagonal pinnacles and a lofty spire. The finest churches in the Fens are for the most part of perpendicular character, with lofty spires. The churches already noticed are chiefly in Kesteven and Holland; those of Lindsey are of inferior architecture, except in the flat marshy tract between the Wolds and the Ocean or the Humber, where there are some fine ones. The churches in this district vary but little in their form and character; they have a nave with north and south aisles, a chancel, south porch, and western tower. The churches amid the Wolds have little claim to architectural excellence. In the western parts of Lindsey are some churches of great antiquity and of considerable beauty. Stow church, in this part, is a large Norman edifice.

Of monastic edifices there are several remains. Barling's Abbey shows part of a wall and some fragments of columns. Thornton Abbey, not far from Barton-upon-Humber, presents some important and interesting fragments. It was founded by William Le Gros, earl of Albemarle, in 1139, as a priory for Black Canons, and was afterwards made an abbey. The buildings were originally extensive, forming a quadrangle surrounded with a moat, and having lofty ramparts for occasional defence. The gate-house which formed the western entrance is yet tolerably entire. A spacious room, probably the refectory, and an adjoining room with recesses in both ends, the abbey church, and a portion of the octagonal chapter-house, are also standing. The abbot's lodge, which stood to the south, is occupied as a farm-house. Of Bardney Abbey there are some remains, also of Kirkstead Abbey; both these are on the left bank of the Witham, between Lincoln and Boston. Of Temple Bruer, a receptory first of Knights Templars, afterwards of Hospitallers, a few vaults and the tower of the church are left; the latter is a massy, quadrangular, stone building, accessible to the top by a winding staircase. The remains of Haverholme Priory, near Sleaford, have been incorporated into a modern mansion.

In the civil war of Charles I. this county was the scene of several important events. In March, 1642, Colonel Cavendish, on the part of the king, took possession of Grantham, and captured 360 prisoners, with a quantity of arms and ammunition, and demolished the works which had been erected. Oliver Cromwell shortly afterwards gained a victory near Grantham with his own regiment of horse over 24 troops of royalist cavalry. In the same year Colonel Cavendish defeated the parliamentary forces at Ancaster; and Gainsborough was taken by the Parliamentarians under Lord Willoughby of Parham. In 1643 Cromwell gained a victory near Gainsborough over the Royalists under General Cavendish, who lost his life in the engagement. In autumn the same year the Royalists were again defeated at Horncastle; and in 1644 Lincoln castle and minster were stormed by the Earl of Manchester.

Religious Worship and Education.—According to the Returns of

the Census of 1851, it appears that there were in Lincolnshire 1501 places of worship, of which 703 belonged to four sections of Methodists, 657 to the Established Church, 62 to Baptists, 38 to Independents, 13 to Roman Catholics, 9 to Quakers, 5 to Unitarians, and 5 to Latter-Day Saints. The total number of sittings provided was 281,266. The number of Sunday schools in the county was 830, with 57,120 scholars. Of these schools 432 belonged to the Church of England, 318 to four sections of Methodists, 36 to Baptists, 27 to Independents, and 5 to Roman Catholics. The number of day schools was 1420, of which 457 were public schools with 32,267 scholars, and 963 were private schools with 19,896 scholars. There were 18 evening schools for adults, with 224 scholars, and 23 literary and scientific institutions with 2818 members, and libraries containing 22,654 volumes.

Savings Banks.—In 1852 there were 14 savings banks in the county, at Alford, Boston, Bourne, Brigg, Caistor, Folkingham, Gainsborough, Grantham, Horncastle, Lincoln, Louth, Sleaford, Spalding, and Stamford. The total amount owing to depositors on 20th November 1852 was 553,566l. 8s.

LINDFIELD. [SUSSEX.]

LINGFIELD. [SURREY.]

LINLITHGOW, Linlithgowshire, Scotland, a royal and parliamentary burgh, market-town, and the chief town of the county, is situated in 55° 55' N. lat., 3° 55' W. long., 18 miles W. by N. from Edinburgh by road, and by the Edinburgh and Glasgow railway. The population of the parliamentary burgh in 1851 was 4213. The town is governed by a provost, 4 bailies, a dean of guild, and treasurer, who are elected from 27 councillors. It unites with Airdrie, Falkirk, Hamilton, and Lanark, in returning one member to the Imperial Parliament.

The town consists of a main street and several cross streets. It is paved, lighted with gas, well supplied with water, and tolerably clean. The parish church, founded by David I., is a fine specimen of gothic architecture. In the town are a Free Church, two chapels for United Presbyterians, one each for Independents and Roman Catholics, a burgh school, and several other schools. The town-hall was built in 1668. In front of it is a curiously sculptured well, called the Cross Well, which sends out a copious supply of water through the mouths of numerous grotesque figures. The jail is a modern building. The principal trade of the town is the currying and tanning of leather. There are a distillery and a brewery. The Union Canal passes close to the town on the south side.

The burgh is said to have been erected by Robert II. in 1389. It was in the main street of Linlithgow that the Regent Murray was assassinated. The chief antiquity is the palace of Linlithgow, which, after being a royal residence for several centuries, was accidentally set on fire in the year 1746. It is a massive quadrangular structure, standing on an eminence on the side of a beautiful sheet of water. The oldest part of the palace is on the west side, in which is the room in which Mary queen of Scots was born. The palace is now a magnificent ruin.

LINLITHGOWSHIRE, or WEST LOTHIAN, a county in the east of Scotland, bounded N. by the Frith of Forth, W. by Stirlingshire, from which it is separated by the river Avon and the Polnessburn, S.W. by Lanarkshire, and S. and S.E. by Edinburghshire, from which it is separated by the rivers Breich and Almond. Its length, from the mouth of the Almond to the borders of Stirlingshire and Lanarkshire, is nearly 21 miles: its breadth, from the north-west extremity of the county to the village of Livingston on the south-east boundary, somewhat exceeds 10 miles. It is comprised between 55° 49' and 56° 1' N. lat., 3° 17' and 3° 5' W. long. The area of the county is 101 square miles, or 64,375 acres. The population in 1841 was 26,872; in 1851 it was 30,135. The county returns one member to the Imperial Parliament.

Coast-line.—At the mouth of the river Almond the land is generally flat and sandy, the shore broad, the water shallow. Inland there are some hills of moderate elevation. West of the Almond the coast rises somewhat higher, attaining on an average an elevation of between 50 and 60 feet, and so it continues as far as Black Ness, where it gets lower, until, west of Borrowstownness, it sinks so low that more than 2000 acres are covered by the tide. There are harbours at New-halls and Port Edgar, which are respectively half a mile east and west of South Queensferry. There is also a harbour at Borrowstownness.

Surface, Hydrography, and Communications.—In the southern part of the county are extensive tracts covered with mosses and heath. This surface extends in plains, though occasionally there are hills of moderate elevation, some of which rise to 900 or 1000 feet. The rivers do not run in narrow glens, as in a hilly country, and the arable ground along their banks is consequently extensive and fertile; but the greater portion of the tract is unfit for agricultural purposes. A line drawn through Livingstone to Bathgate may be considered as the northern boundary of this tract. The country north of this line presents in general an undulating surface with few hills. The greatest portion of this district does not slope towards the sea, but towards the river Almond on the one side, and towards the Avon on the other. The basin of the Almond is bordered by high ground, which in some places rises into hills. These hills begin east of Bathgate and run northward under the names of Dumcross Hills, Knock Hills, and Kipp Hills; east of Torpichen is their highest summit, the Cairnnaple, which is said to be 1493 feet high. They terminate south of Linlithgow

county of Lippe, which are surrounded by Hanover, the Hessian part of Schaumburg, Lippe-Detmold, and Westphalia. It is 210 square miles in extent. The population at the end of 1852 was 30,226. The country, which is in general mountainous, has no rivers except small affluents of the Weser: the Stein-hude Lake is about 5 miles long, 2½ miles broad, and at most 6 feet deep. The country produces corn, pulse, potatoes, turnips, rape-seed, flax, fruit, timber, horned cattle, sheep, swine, goats, horses, poultry, game, and fish. Its mineral products are coals and lime. The revenue amounts to 180,000 thalers. The country has an assembly of estates, which consists of 13 members, and meets annually. The chief town and residence of the prince is *Bückeburg*, on the Aa, which has a population of 2500. It is a walled town entered by five gates, and has a castle, a gymnasium, a normal school, a public library, an orphan-house, &c., but no remarkable buildings. Schaumburg-Lippe, as a member of the German Confederation, has one vote in the general council and part of the sixteenth vote with Lippe-Detmold, &c., as above stated. Its contingent to the federal army is 210 men.

LIRI, OR LIRIS RIVER. [LAVORO, TERRA DL.]

LISBELLAW. [FERMANAGH.]

LISBON (*Lisboa* in Portuguese), a city, capital of the kingdom of Portugal and of the province of Estremadura, is situated on the northern bank of the Tagus (Tejo) about 12 miles from the mouth of the river, in 38° 42' N. lat., 9° 8' W. long. The population is about 280,000.

The broad estuary of the Tagus gives to Lisbon an extensive and safe harbour, in which the largest ships of war can anchor close to the city. From the suburb of Belem up to the western end of Lisbon the Tagus is little more than a mile in width, but opposite the centre of Lisbon it widens considerably, the left or southern bank turning suddenly to the south near the town of Almada, and forming a wide bay or reach about 5 or 6 miles in breadth, and extending far to the north-east. In this deep lake-like expansion of the river all the fleets of Europe might be anchored beyond the range of cannon from either shore. The southern bank of the river, which is hilly about Almada, becomes low higher up, and is swampy at low water; it is however studded with small towns and villages, which keep up a constant traffic with Lisbon, supplying it with fruits, vegetables, wine, &c., besides being the medium of intercourse between the capital and the southern provinces of the kingdom, and also with Spain by the post-road of Badajos. The entrance of the river is defended by Fort St. Julian (Forte São Julião) on the north bank, and by Fort Bugio on a low point of rock near the south bank; higher up it is protected by the Tower of Belem (Torre de Belem) and by several batteries on both banks. To the north the city is protected by mountains, which, rising in successive ranges, end abruptly near Torres Vedras, in a line extending from the sea-coast to Alhandra on the Tagus. On three of these ridges were constructed the series of entrenchments and fortified positions called the Lines of Torres Vedras.

The city rises from the bank of the river in the form of an amphitheatre, being built on a succession of hills, the highest of which are the hill of Bons Ares, or Estrella, to the west, and the Castle-Hill to the east. Most of the streets are steep, irregular, and tortuous, besides being ill paved and dirty. One part of the city however, which has been entirely rebuilt since the great earthquake of 1755, is regular and handsome; it lies on even ground in a valley which runs in a direction at right angles to the river, between the Castle Hill to the east, and the hills of San Francisco and Do Carmo on the west. This space contains about eight or nine well-built parallel streets, some of them, such as the Rua Augusta, tolerably wide, and nearly half a mile in length, containing the best shops in Lisbon, especially those of the goldsmiths, silversmiths, and jewellers. These streets are crossed at right angles by other streets, and they terminate on the river side in a handsome square called Praça de Commercio, one side of which is formed by the Tagus, and the other sides by the Arsenal, the Custom-House, the Exchange, Royal Library, and other public buildings. This square is adorned with a bronze statue of king Joseph I. At the opposite or north end of the above-mentioned streets are two squares, the Praça da Figueira, or market-place, and the Praça do Rocio, the latter of which is bounded on one side by the convent of San Domingo and the massive buildings formerly occupied by the Inquisition. Farther north, going towards the country, is the Passeio Publico, or promenade, which however is small, and very inferior to the public gardens of other large capitals.

The eastern part of Lisbon, which lies at the foot of and beyond the castle, consists of narrow irregular ill-paved streets, with a neat house here and there. This is the oldest part of Lisbon, and the houses are high and old-fashioned. It is remarkable, that while the earthquake destroyed all the buildings in the valley, it spared the houses built on the steep declivity of the hill.

To the westward of the new streets the town rises on the steep declivity of a succession of hills, with a few good streets and open places here and there, especially along the river side, the rest of the streets being narrow, crooked, and filthy. Here and there are massive buildings, chiefly convents and churches, which crown the summits of the hills and tower above all the rest.

Lisbon being an open town, and its suburbs very long and straggling in various directions, it is not easy to define its limits. Its

western boundary however is generally fixed at the stream of Alcantara, which falls into the Tagus; and thence to the eastern extremity of the town the length in a straight line is between 3 and 4 miles, not reckoning the sinuosities of the ground: the width of the town from the Tagus inland varies from a mile to a mile and a half, not including the long straggling lines of houses which extend along the approaches to the town.

The whole of the area thus described is however far from being thickly covered with buildings; many parts are occupied by gardens, plantations, the naked steep declivities of the hills, and by ruins and rubbish. In fact almost every house of any pretension has its little garden, or rather grape-terrace; and many portions of the city are occupied by ruins, which have been allowed to remain in the same state of desolation as that to which they were reduced by the earthquake. The district of Bons Ares, along the slope of the western hill, is the least densely built, and contains many pleasant and healthy residences with gardens, which are mostly occupied by foreigners. West of the bridge of Alcantara a line of streets parallel to the Tagus connects Lisbon with Belem, or Bethlehem, which is resorted to as a bathing-place. In its square stands a fine old church, with extensive conventual buildings adjoining, and here there is a royal residence. A new palace called the Ajuda has recently been constructed on an elevation north of Belem.

The most striking buildings of Lisbon are its vast and massive convents, which crown the hills, and look like palaces and fortresses. Before the suppression of the monasteries in 1835 they gave to Lisbon a monkish appearance. Most of the churches belonging to them have since been converted into parish churches, and the conventual buildings applied to other purposes.

The principal public buildings are:—The castle and citadel of St. George, occupying the highest summit in the city; the old cathedral, near the castle; several churches; the Custom-House; the Exchange; the Royal Library; several prisons; five theatres; an English church, with a handsome cemetery adjoining; schools of various kinds; a museum of natural history; and a botanic garden. The Arsenal was formerly one of the finest establishments of the kind in Europe: it contained all kinds of naval and military stores in abundance. It is now on a reduced scale, but has a foundry for casting cannon and a manufactory of fire-arms; there is also a large dock-yard.

The Aqueduct (Os Arcos das Agoas Livres) which supplies Lisbon with water is not surpassed in boldness of design and grandeur of effect by any similar work of art. The water is brought from several springs situated near the village of Bellas, 9 miles N.W. from Lisbon. The aqueduct is in part conducted under ground; but on approaching Lisbon it passes across a deep valley, and the water is carried over a number of lofty arches for a length of about 2400 feet. The water enters the town on the north-west, at a place called Amoreira, where is the reservoir (Depositorio das Agoas Livres) from which the water is distributed to the several fountains of the city. The Gallegos draw water in small barrels from the fountains and sell it from house to house or cry it about the streets.

The population of Lisbon is much mixed, consisting of people from every province of Portugal, who come there in quest of employment, of a number of blacks and men of colour from the colonies, and of numerous Gallegos, or porters and water-carriers from Galicia, and other foreigners. The lower classes live poorly, and are dirty in their appearance. There are crowds of beggars and vagrants. The women of Lisbon wear on their heads a plain muslin kerchief folded in a three-cornered shape. Many of the ladies have adopted the Spanish mantilla.

The police is still very imperfect, and the streets are but partially and imperfectly lighted at night. Lisbon is not provided with conduits or sewers, and all the filth is thrown into the streets, from which it is washed off by the rain into the river.

The climate of Lisbon is healthy and genial; it is very hot and dry in the summer months, when the heat is often 96° of Fahrenheit, but is relieved by north-west winds; heavy rains fall in November and December; cold clear weather prevails in January, but in February the weather becomes mild again, and the spring begins. Snow is a very rare occurrence.

The commerce and trade of Lisbon, though much diminished since the loss of Brazil, are still considerable. It exports wine, fruits, and oil; and it imports corn, salt fish, salt butter, cheese, timber, iron, lead, tin, copper, coals, tar, and all sorts of foreign manufactures, with which it supplies the whole southern part of the kingdom. Lisbon has some manufactories of silks, paper, soap, and leather; its goldsmiths and jewellers are very expert; and there are also sugar-refineries and potteries. The laziness and want of industry of the Portuguese have been much exaggerated by travellers.

A great portion of Lisbon was destroyed by an earthquake in 1755. The number of persons killed amounted to 60,000.

(Kinsey, *Portugal Illustrated*; Miñano, *Diccionario Geographico*; Link, *Travels in Portugal*, a good work of the end of the last century; Alexander, *Sketches of Portugal*, 1834; *Portugal and Galicia*, 1836; Baxter, *The Tagus and the Tiber*, 1852. See also *Map of Lisbon*, by the Society for the Diffusion of Useful Knowledge.)

LISBURN, Ireland, a market- and post-town, a parliamentary borough, and the seat of a Poor-Law Union, is situated in the midst

of a beautiful and highly improved district, on the river Lagan, partly in the barony of Upper Massereene, county of Antrim, and partly in the barony of Upper Castlereagh, county of Down, in 54° 31' N. lat., 6° 4' W. long., distant 8½ miles S.S.W. from Belfast by the Ulster railway, and 97¼ miles N. by E. from Dublin by the Dublin and Belfast Junction railway. The town is governed by 13 commissioners. The population of the town in 1851 was 6569, besides 363 inmates of the workhouse. The borough returns one member to the Imperial Parliament. Lisburn Poor-Law Union comprises 28 electoral divisions, with an area of 119,790 acres, and a population in 1851 of 68,783.

The town took its rise from the erection of Lisburn Castle in 1610 by Sir Fulk Conway, to whom James I. had granted part of the manor. In 1641 it was attacked by the Irish insurgents, who were repulsed, but the town was set fire to and reduced to ashes. After the revocation of the edict of Nantes, a number of Huguenot families settled in the town, and introduced the linen and damask manufactures with the improved machinery of Holland. In 1707 the castle and chief part of the town were destroyed by fire. The castle remained a ruin, the gardens were given to the public as a place of recreation. The town was rebuilt in a substantial and handsome manner. Lisburn enjoyed great prosperity during the period between the time of the Irish volunteers and the rebellion of 1798. The linen manufacture subsequently fell off here, but it has revived, and the town is again in a flourishing condition.

Lisburn lies on the left bank of the Lagan, with a small suburb beyond the river. It consists mainly of a long irregular street, with several streets branching from it. Another leading street diverges from the main street on the line of the Belfast high road, having the castle terrace and gardens between it and the river. At the point of divergence is a large open area, in which is the market-house. Between the two streets, near their intersection, stands the parish church, fronting the castle gardens. The houses are well built and roofed with slate, and the town has generally a neat, clean, and handsome appearance. It is well paved, lighted with gas, and supplied with water. The parish church, which is the cathedral for the united diocese of Down and Connor, is a spacious and handsome building with a tower, to which an octagonal spire was added in 1807. It contains a monument to Jeremy Taylor, who died at Lisburn in 1667. Besides the parish church, there are a chapel of ease, places of worship for Roman Catholics, Presbyterians, Quakers, and Methodists, National, Free, and Infant schools, and a school endowed by John Hancock for the support and education of 40 Quaker children. The charitable institutions are the County of Antrim Infirmary, the Lisburn Fever Hospital, and six free houses for destitute widows. In the town is a savings bank. Lisburn possesses great facilities for trade, and large quantities of agricultural produce, provisions, and manufactured goods are disposed of in the weekly markets. On a river-island within the borough there is an extensive chemical work for the supply of the neighbouring bleaching-yards. Damasks, and the finer kinds of linen, linen-thread, muslins, and diapers are manufactured. There are factories for flax-spinning and bleaching, and for printing and dyeing muslins and other fabrics. Courts for Kilultagh Manor, courts leet, and petty sessions are held in the town. Fairs are held on July 21st, and October 5th. The market day is Tuesday.

LISCARD. [CHESHIRE.]

LISCARROL. [CORK.]

LISIEUX. [CALVADOS.]

LISKEARD, LESKEARD, or LESKERET, Cornwall, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Liskeard, is situated in 50° 27' N. lat., 4° 28' W. long., distant 14 miles W. by N. from Bodmin, and 221 miles W.S.W. from London. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. The population of the municipal borough in 1851 was 4386, that of the parliamentary borough 6204. The living is a vicarage in the archdeaconry of Cornwall and diocese of Exeter. Liskeard Poor-Law Union contains 26 parishes and townships, with an area of 92,157 acres, and a population in 1851 of 33,792.

The town, which is meanly built, stands partly in a hollow and partly upon rocky heights, so that the streets have an appearance of great irregularity. The chief public building is the town-hall, a handsome structure, supported on granite columns. The parish church, a fine edifice of the 15th century, consists of a nave, aisles, and chancel, with a tower at the west end. The Wesleyan and Association Methodists, Independents, and Quakers have places of worship, and the Bible Christians meet for worship in the Teetotal Hall. The Grammar school, founded in 1658, of which the corporation is patron, had lost its endowment, and had been discontinued, but has been lately re-opened. There are British and Infant schools, a mechanics institute, a mutual improvement society, and a savings bank. Liskeard is a place of considerable trade, and has an excellent market, which is held on Saturday; fairs are held six times in the year. Only a few persons are now engaged in wool-combing. Tanning was formerly carried on to a considerable extent, but there is only one tan-yard left. A considerable number of the inhabitants are

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employed at mines in the neighbouring parishes of St. Cleer, Menheniot, and St. Ive.

LISLE, or L'ISLE. [VAUCLUSE.]

LISMORE, county of Waterford, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated on the right bank of the Blackwater, in 52° 8' N. lat., 7° 50' W. long., distant 39 miles W.S.W. from Waterford by road, and 136 miles S.W. by S. from Dublin. The population in 1851 was 2340, besides 898 inmates of the workhouse. Lismore Poor-Law Union comprises 18 electoral divisions, with an area of 97,140 acres, and a population in 1851 of 27,077.

Lismore, at first called Dunsginne, from a fortification east of the town, now known as the Round Hill, is said to have had its rise in the beginning of the 7th century. It was named Lismore, or the Great House, from a monastery founded by St. Carthagh, who was interred in his own church. As a sacred city, and a seat of learning, it grew into importance and fame, and is said to have had no fewer than 20 churches erected in its vicinity. In the 9th century the place was five times plundered by the Danes. Henry II. held a council in it. Its castle was founded by King John. Several times attacked in the rebellion of 1641, and at length burned in 1645, it remained a comparative ruin, and the town sank into a poor and wretched village. It was visited by James II. in 1689. In 1753 it became the property of the fourth Duke of Devonshire. Since that time it has revived, and has been greatly enlarged.

Lismore occupies the summit of a steep bank of the Blackwater River. The church standing on the crest of the hill at its eastern extremity, and the castle, on the verge of a rocky precipice nearly 100 feet high, at the opposite end of the town, give it a very striking appearance. The church, which is the cathedral of the see of Lismore, is a handsome building, having a tower, surmounted by a light and elegant spire. It was in great part built by the Earl of Cork in 1663, and was about the year 1820 renewed under the direction of the dean. There are a spacious Roman Catholic chapel and a small Presbyterian meeting-house; a classical school, well-built and endowed; free schools, and a school erected and supported by the Duke of Devonshire. The castle, which is a massive pile, is a magnificent specimen of the ancient baronial residence. Three sides of the quadrangle are in complete repair. The bridge, which crosses the Blackwater a little above the point where it receives the Owenahad, a rapid stream from the mountains lying to the north, is a handsome structure, having a centre arch with a span of 100 feet. In the town are a fever hospital, a dispensary, and six almshouses, founded by the first earl of Cork for decayed Protestant soldiers. The navigable part of the Blackwater has been connected with the town by a canal, which allows a free traffic by lighters between Lismore and Youghal. There is a limited export of corn and flour, and the imports are timber, iron, coal, &c. Immediately below the castle is an extensive salmon fishery. Good roofing slate is quarried near the town. Fairs are held on February 14th, May 25th, and November 12th. The scenery of the neighbourhood is remarkable for its grandeur and beauty. In the vicinity are many villas and gentlemen's seats.

The diocese of Lismore is in the archdiocese of Dublin; it includes portions of the counties of Waterford and Tipperary, and comprises 42 benefices. The chapter consists of a dean, precentor, chancellor, treasurer, archdeacon, and 7 prebendaries. The income of the united dioceses of Cashel, Emly, Waterford, and Lismore is 5000*l.*

LISNASKKA, Fermanagh, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated at the junction of the roads from Dublin and Belfast to Enniskillen, in 54° 16' N. lat., 7° 27' W. long.; distant 11 miles S.E. from Enniskillen by road, and 89 miles N.N.W. from Dublin. The population in 1851 was 882. The Lisnaska Poor-Law Union comprises 14 electoral divisions, with an area of 98,738 acres, and a population in 1851 of 29,155. The town has been much improved by its proprietor the Earl of Erne, and contains some superior houses built in the old English style. Besides the parish church, a plain edifice, rebuilt in 1814, there are chapels for Roman Catholics and Primitive Methodists; and National, Infant, and Endowed schools. A handsome market-house, a fever hospital, a dispensary, and the Union workhouse are in the town. By the steamers on Lough Erne large quantities of corn, butter, linen, and yarn are brought from the islands and sold in Lisnaska market. The market is held on Saturday, and fairs are held on the Monday before Easter, October 10th, and the 1st Saturday of every month. Petty sessions are held in the town.

LISSA. [POSEN.]

LISTOWEL, Kerry, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated in the barony of Iraghtic Connor, on the right bank of the river Feale, in 52° 26' N. lat., 9° 28' W. long.; distant 18½ miles N.N.E. from Tralee, and 165 miles S.W. by W. from Dublin. The population in 1851 was 2126. Listowel Poor-Law Union comprises 32 electoral divisions, with an area of 151,208 acres, and a population in 1851 of 43,251.

Listowel Castle, which was a seat of the earls of Desmond, was the last castle which held out for Lord Kerry against Queen Elizabeth. It was taken in 1600 by Sir Charles Wilmot, who put all the garrison to the sword. The town has of late been much improved. It consists of an extensive square, in the centre of which is the church, and of

one principal street with several short branches. On the western side of the square is a part of the ancient castle. At the southern approach to the town is a fine bridge with five arches, each of 50 feet span. The parish church is a handsome structure, having a tower surmounted with a neat spire. The Roman Catholic chapel is a spacious cruciform structure. There are a Classical school and two National schools; a fever hospital, a dispensary, and a bridewell. A line of navigation by the river Cashen enables boats of 15 tons to come within 2½ miles of Listowel. Salmon are plentiful in the river. Behind the castle are extensive flour-mills. Quarter sessions are held in the town and petty sessions every Saturday. The market is held on Wednesday and Saturday, and a corn-market on Friday. Fairs are held on May 13th, July 25th, October 28th, and on the first Wednesday of alternate months. The soil around is remarkably fertile.

LITCHFIELD. [CONNECTICUT.]

LITHUANIA, a large tract of country which now forms part of the Russian empire, but which once constituted an independent and powerful state, until it was united to Poland by the accession of its reigning dynasty to the throne of that country. The early history of Lithuania is unknown. Some conjecture that the Heruli, who destroyed the western empire under Odoacer, were inhabitants of Lithuania, and that after their expulsion from Italy they returned to this country, and brought with them those words resembling the Latin which abound in the Lithuanian language. The first mention of Lithuania occurs in the chronicle of Quedlinburg, A.D. 1009. From that time the name of Lithuania begins to appear more frequently in Russian chronicles, which speak of the Lithuanians as a poor and savage nation, some tribes of which were compelled by the bordering Russian princes to pay a tribute, consisting of the bark of birch-trees for making oil, or ropes made of the bark of lime-trees, and of brooms.

Towards the year 1200, Albert, bishop of Riga, founded the order of the Knights Sword-Bearers (Knsiferi), in order to conquer the pagans who inhabited the shores of the Baltic from the Curische-Haff to the Gulf of Finland. The half-savage barbarians were soon subdued by the valour and military skill of those warrior-monks, and reduced to a state of the most oppressive bondage. Not long after, about 1220, Conrad, duke of Masovia, being unable to resist the predatory attacks of the Prussians, a branch of the Lithuanians, called to his assistance the Knights of St. John of Jerusalem, and granted them a large tract of land, with many castles. These knights did the same in Prussia that the Sword-Bearers had done elsewhere. The Lithuanians were almost destitute of defensive armour, and had for the most part no other weapons than spears, clubs, and arrows. In spite of these disadvantages they not only resisted the German invaders, but gained possession of some of those Russian principalities to which they had been obliged to pay tribute. The decline of the powerful Russian principality of Halicz by the death of Prince Roman, who was defeated and killed by the Poles in the battle of Zarichost, 1206, delivered the Lithuanians from a formidable enemy, and their predatory incursions began to be more dangerous to the Polish and Russian principalities.

Ryngold was the first Lithuanian ruler who, after having united under his dominion all the principalities of that nation, assumed the title of Grand Duke of Lithuania about 1235. His son Mindog embraced Christianity, and was crowned at Novogrodek in 1252, but soon relapsed into paganism. At the end of the 13th century Witenes established a new dynasty on the throne of Lithuania; but the most brilliant era of the history of the country began after the accession of the Grand Duke Ghedymin in 1315. He made most extensive conquests in the south-western principalities of Russia, and consolidated his power by insuring the most perfect protection to the religion, language, customs, and property of the inhabitants of the conquered lands, which were intrusted to the administration of such princes only of the Lithuanian dynasty as had embraced the Christian religion, whilst the sovereign still remained an idolater.

Two nations of a different origin and creed thus became soon blended together, and the Russian Christians were always the most loyal subjects of the pagan grand dukes of Lithuania. The Russian became the official language of Lithuania, and continued so till the middle of the 17th century, when it was superseded by the Polish language.

The government of Lithuania was in some degree feudal: each province was given in fief, generally to a prince of the reigning family. After its union with Poland, Lithuania was governed by the same forms as that country.

Ghedymin was killed in 1328 at the siege of the fortrees of the German knights. He divided his empire among his several sons; but after some contention one of them, called Olghard, assumed the sovereign power. He proved a worthy successor to his glorious father: he defeated the Tartars, and compelled those of the Crimea to become his vassals, having extended the limits of Lithuania to the banks of the Don and to the shores of the Black Sea. The republics of Novogorod and Pakow acknowledged his supremacy, and he presented himself in triumph before the gates of Moscow in the years 1368, 1370, and 1373. He died in 1381 in the faith of the Greek Church, which he embraced on his death-bed at the solicitations of his wife, who was a Russian princess of Twar. Olghard's son and successor, Yaguellon, married in 1385 Hedvige of Anjou, queen of Poland, and, having been baptised, ascended the throne of that country. From that time Lithuania was united with Poland.

Yaguellon, having become a Christian, exerted himself successfully for the conversion of his pagan subjects, who however long retained many rites and customs derived from their idolatrous forefathers.

By the accession of Yaguellon to the throne of Poland the two countries became united, but it often happened that the kings of Poland of the Yaguellonian family, who were hereditary sovereigns in Lithuania and elective in Poland, after their accession to the throne of the latter country, gave up the government of Lithuania to a prince of their family, but still retained the sovereignty. The most celebrated of those princes was Vitold (1430). A kind of union of the two countries was effected at the diet of Lublin in 1569. The throne of Lithuania became elective like that of Poland. The diets of the two countries were held in common, but the laws, finances, and armies remained separate.

Lithuania lost a great part of its dominions under the reign of Casimir III., king of Poland and grand-duke of Lithuania, and on several subsequent occasions. At the time of the first dismemberment of Poland in 1772, Lithuania was divided into the following palatinates or counties:—Vilna, Troki, Novogrodek, Bzesc, Vitepak, Polosk, Mohilew, and the duchy of Samogitia. Of this territory Russia got Mohilew and Polosk in 1792, and all the remainder in 1793, with the exception of the territory which forms the Prussian government of Gumbinnen. The territory of Lithuania was formed into the Russian governments of—1, Vilna; 2, Grodno; 3, Bialystock; 4, Minsk; 5, Mohilew; 6, Vitepak; and, 7, the palatinate of Augustovo. With the exception of Bialystock, incorporated with Grodno we believe in 1842, and Augustovo, now comprehended in the kingdom of Poland, these divisions still subsist. The area of the duchy exceeded 110,000 square miles, and its population in 1846 was above 5,000,000.

Lithuania is generally a flat and low country, although there are some hills in the environs of Vilna. The north-western part, comprehending the duchy of Samogitia, is very fertile, and celebrated particularly on account of its flax. The banks of the Niemen are also generally fertile, and in many parts very picturesque. But the greater part of this country is covered with sand, marshes, and fens. Ferruginous ochre is found in all the peat-mosses, but the quantity of iron is very limited; and many iron-works which formerly existed are now abandoned in consequence of the cheaper rate at which iron can be got from the mines in the north of Russia and Siberia. Blocks of granite and pudding-stone are scattered over many districts. The large forests abound in fine timber, and contain a great quantity of wild animals, such as elks, wild hogs, bears, wolves, foxes, &c. An animal peculiar to Lithuania is the urochs, or bison, which was formerly found in many forests of Poland and Germany, but is now confined to a single spot in Lithuania, called the forest of Biala Vieja. The climate is extremely cold in winter and very hot in summer. There are scarcely any manufactures in the country, and its exports consist chiefly of flax, hemp, corn, timber, honey, and wax.

The principal rivers which water Lithuania are the Niemen, the Dnieper, Beresina, Villia, &c. The chief towns are Vilna, its ancient capital; Grodno, Minsk, Mohilew, Vitepak, &c.

The Lithuanians remained idolaters till the end of the 14th century. Their chief deity was Perkunas, the god of thunder, besides some other divinities presiding over seasons, elements, and particular occupations. They possessed also sacred groves and fountains, and worshipped fire and consecrated snakes. The population is composed of Lithuanians, Lithuano-Russians, Poles, Jews, and Tartars. Adelung and Vater define the Lithuanians to be a Germano-Slavic nation, and say that two-thirds of their language are Slavonian; and Balbi adds that the remaining third may be traced to the Finnish, Gothic, and German. The recent researches of some distinguished German philologists, and particularly those of Bopp and Bohlen, have proved that the Lithuanian language is closely allied to the Sanscrit, that it has a common origin with the Latin, German, and Slavonic languages, but that it is not derived from them. Professor Bohlen of Königsberg thinks that it bears a stronger resemblance to the Sanscrit than to any other known language.

The Lithuanian language may be divided into two principal dialects, the Lithuanian proper and the Lettonian, or Livonian, both of which may be subdivided into smaller ones. The Lithuanian proper contains the following dialects:—1. The old Prussian, which had been spoken in Prussia previously to the arrival of the Knights of St. John of Jerusalem, who tried by all means to extirpate it. It was still in general use at the time of the Reformation, but is now entirely extinct as a living language. It differs from other Lithuanian dialects in having a greater admixture of German than Slavonian words. A catechism compiled about 1545, and an Enchiridion, or church service (Königsberg, 1561), are the only extant monuments of that old language. 2. The Prusso-Lithuanian dialect, which is now spoken about Insterburg and Memel, is the nearest to the old Prussian, but it has received a great admixture of Polish words. A Bible, translated into that language by Quandt, was published at Königsberg, 1755. The Polish-Lithuanian, or Samogitian language, which is spoken in the north-western part of Lithuania, and particularly in the province of Samogitia, differs from the Prussian dialect in being more free from the admixture of German words; and it is certainly the purest of all

the dialects, as the population by which it is spoken resisted the German invaders. There is in that dialect a Protestant Bible translated by Chilinaki, published at London in 1660, and many other religious works.

The second principal dialect of the Lithuanian is the Lettonian, or the Livonian, which is sometimes called the Curonian. It is spoken in the greatest part of Livonia, in Courland, and a part of the government of Vitepsk, which was formerly called Polish Livonia. It differs from the other Lithuanian dialects in having an admixture of Finnish words, which is peculiar to this dialect. It is subdivided into several minor dialects, of which that which is spoken about Mittau and Riga is considered the best; and it has been used for the translation of the Bible, and for the composition of several religious works. There is at the University of Dorpat a chair of this language.

LITRY. [CALVADOS.]

LITTLE BELT. [BELT.]

LITTLEHAMPTON. [SUSSEX.]

LITTLEPORT. [CAMBRIDGESHIRE.]

LIVADIA, or LEBADEA. [BOEOTIA.]

LIVERPOOL, Lancashire, a sea-port, market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the right bank of the river Mersey, in 53° 23' N. lat., 2° 54' W. long., distant 53 miles S. by W. from Lancaster, 81 miles W. by S. from Manchester, 206 miles N.W. from London by road, and 201 miles by the London and North-Western railway. The population of the parliamentary and municipal borough of Liverpool in 1851 was 375,955. The borough is governed by 16 aldermen and 48 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Liverpool and diocese of Chester. Liverpool Poor-Law Union consists of the parishes of Liverpool, which has an area of 1830 acres, with a population in 1841 of 223,054, in 1851 of 255,055.

The etymology of the name Liverpool is popularly derived from a bird called the liver, or lever, which is said to have frequented the marshy pool that existed on what is now the site of the lower portion of the town. In conformity with this tradition, the corporate seal bears the figure of a bird, which, as there represented, resembles the glossy ibis, a species now almost if not altogether extinct. The name has also been ascribed, with considerable probability, to the Welsh words *Llŷr pwll*, signifying 'place on the pool,' and it is certain that anciently the whole estuary of the Mersey was called *Lyrpul*, *Lyr-pool*, or *Litherpool*. It is believed that the first castle of Liverpool was built by Roger of Poitiers, and this was probably the origin of an English town and port, which have become next to London the greatest, in commercial importance, of any in the world. The castle, which had been enlarged and strengthened by king John, was destroyed in compliance with an Act passed in 1659; it occupied the site upon which now stands St. George's church. Liverpool received its first charter, in 1173, from Henry II.; a second charter was conferred by king John in 1207; and a third, constituting the town a free borough for ever, was granted by Henry III. in 1227. During the contest between Charles I. and his Parliament, Liverpool held out for 24 days against the army under Prince Rupert; but the town being then taken, many of the garrison and inhabitants were put to death; and the ravages of pestilence and famine closely followed those of the sword. In the year 1699, Liverpool was constituted a separate parish; up to that period, it had been a chapelry attached to the parish of Walton, and its population at the time was about 5000. Ten years afterwards, an act was passed for constructing the first dock ever formed in Liverpool: this old dock was filled up in 1826, and the present magnificent structure called Revenue Buildings, comprising the custom-house, stamp, dock, and post-offices, which cost 284,000*l.*, stands upon the site. For nearly half a century two wet docks and a graving dock sufficed for the trade of Liverpool; a third was formed soon after the accession of George III., for the convenience of the shipping employed in the African and West India trades. The chief exports then consisted of hardwares, cutlery, and woollen goods. These were shipped in slave ships to the coast of Africa, where they were bartered for negroes, who were conveyed to the West India plantations; the ships returning thence loaded with sugar and rum. In 1764, more than half the African slave trade was carried on by the merchants of Liverpool; but that traffic has happily been suppressed, while ample compensation has been obtained by the town in the importation of cotton, palm-oil, tobacco, and breadstuffs. Cotton forms the chief staple of the commerce of Liverpool. Of palm-oil the imports have increased since 1807, the year following the suppression of the slave trade, from less than 200 tons to about 30,000 tons a year. In 1650, there were only 15 ships, mostly sloops and schooners, belonging to the port; about a century later, the number had risen to above 400, although at the latter period there were but three inns in the town, and not a single stage coach came nearer than Warrington.

The progress of Liverpool as a commercial port may be traced from the following tables, compiled from the 'Entry Office' documents at the custom-house.

Statement, showing the amount of Customs Receipts at various periods for the last 100 years:—

Year.	Customs Receipt.	Year.	Customs Receipt.
1750	£215,961	1820	£1,488,072
1760	248,312	1830	2,862,114
1770	231,994	1835	4,272,847
1780	188,830	1840	4,607,326
1795	469,438	1845*	3,434,521
1800	1,058,578	1850	3,366,384
1810	2,675,766	1851	3,510,038

In the year 1853, the declared value of British and Irish produce and manufactures exported from Liverpool, amounted to 47,152,194*l.*; the exports from London during 1853 being under 23 millions, of Hull under 11 millions, and of Glasgow less than 5 millions.

Imports of American cotton into Liverpool:—

In the year 1785 there were imported	5 bales.
" 1786	6 "
" 1787	108 "

From this period the cotton trade increased with almost inconceivable rapidity, as will be seen from the statement of annual imports, taken at decennial periods, commencing with the present century:—

In 1801 there were imported	98,752 bales of cotton.
" 1811	174,132 "
" 1821	413,183 "
" 1831	791,582 "
" 1841	1,164,269 "

The relative importance of Liverpool with all other ports in Great Britain, as regards the cotton trade, is indicated by the fact that 1,573,005 bales of cotton were received at Liverpool in the year 1850, while only 176,200 were received at all other ports of Great Britain; in 1851 the respective quantities were 1,748,946 bales at Liverpool, and 154,609 at all other British ports.

Of tobacco the total quantity imported into Liverpool in 1851 was 10,041 hhd.; the weight of unmanufactured tobacco on which duty was paid in that year was 26,611,165 lbs.

The number of vessels registered as belonging to the port of Liverpool on December 31st, 1853, was:—Sailing-vessels, under 50 tons 232, tonnage 8019; above 50 tons 1786, tonnage 704,342; steam-vessels, under 50 tons 24, tonnage 873; above 50 tons 102, tonnage 24,325. The number of vessels which entered and cleared at the port during 1853, with the amount of their tonnage, was:—In the coasting trade, sailing-vessels inwards 7046, tonnage 522,499; outwards 7090, tonnage 467,949; steam-vessels, inwards 2728, tonnage 898,851; outwards 2841, tonnage 884,678. In the colonial and foreign trade there entered and cleared, of sailing- and steam-vessels:—Inwards 2635 British, tonnage 1,102,955, and 1822 foreign, tonnage 902,976; outwards 2965 British, tonnage 1,171,840, and 2012 foreign, tonnage 977,442.

Numerous railways and canals diverge from Liverpool to all parts of England, Scotland, and the richest parts of Wales, by which the imported produce of foreign nations as well as the vast products of the manufacturing districts, and the mineral treasures of the surrounding counties are conveyed to and from Liverpool as the grand commercial centre of the three kingdoms. The Leeds and Liverpool Canal is 128 miles long; the Mersey and Irwell navigation, notwithstanding the competition of the railways, still conveys both goods and passengers to and from Manchester; the Duke of Bridgewater's Canal connects the Mersey with Birmingham and Staffordshire; the Ellesmere Canal, through the western part of Cheshire, communicates with North Wales; and the river Weaver navigation communicates with the salt district and the heart of Cheshire. These were indeed all important auxiliaries to the progress of Liverpool before the construction of railways. Now, an uninterrupted line of railway communication is open from Liverpool to Hull, thus practically joining the Irish Sea to the German Ocean. By one or other of the lines having their termini within the town, not only the metropolis, but any place of importance in England, Scotland, or Wales, may be reached by railway direct from Liverpool; whence electric telegraph messages may be exchanged with most railway towns in Great Britain and Ireland. In 1845, the Liverpool and Manchester and the Grand Junction railway united with the London and Birmingham line, the united companies assuming the title of the London and North-Western railway company. This line has a very handsome and commodious terminus in Lime-street. The East Lancashire and the Lancashire and Yorkshire lines have a joint terminus in Tithebarn-street, which is also an elegant and substantial structure. This is likewise used as the office of the Liverpool and Southport line. The Birkenhead, Lancashire, and Cheshire junction railway, on the opposite shore of the Mersey, connects Liverpool with Holyhead and the intervening towns of Chester and Bangor; as well as with Shrewsbury and the mineral districts of South Wales: and the vast and important coal-fields of Lancashire and Cheshire are connected by a goods railway from Liverpool to Runcorn.

Liverpool has benefited more than any port in the kingdom from the application of steam-power to navigation. Two magnificent lines of transatlantic mail steam-ships called the British and North American line, belonging to Cunard and Co., and the United States line, belong-

* At this period the duties were taken off cotton-wool and many other raw materials.

ing to Collins and Co., respectively make regular weekly voyages between Liverpool and New York, and fortnightly to Halifax and Boston. The average time of each voyage across the Atlantic is 10½ days from port to port. There is also a line monthly to Philadelphia. In addition to these gigantic floating palaces, which are propelled by paddle-wheels, innumerable steam-boats both on the paddle and screw principles leave Liverpool daily for Dublin and all parts of Ireland, from Cork to Londonderry, and for all parts of the British coast, from Southampton to Inverness. Of late there has been an extensive introduction of screw-steamers into the Liverpool shipping.

A continual and rapid intercourse is kept up between Liverpool and the Cheshire shore by means of a large number of steam-boats, which ply every quarter of an hour from the various ferries of Tranmere, Woodside, Birkenhead, Seacombe, Egremont, New Brighton, and the Liverpool Landing-Stage. This landing-stage is a triumph of mechanical skill adapted to public convenience: the stage is 500 feet long and 70 feet broad. It rests on a series of galvanised iron pontoons, and is connected with St. George's Pier by a spacious platform at either end for the passage both of pedestrians and carriages. These platforms are furnished with self-acting or universal hinges, which permit the stage to rise and fall according to the state of the tide. The average number of persons daily embarking and disembarking at the landing-stage is computed at upwards of 20,000. At Woodside Ferry alone 200,000 paid the penny toll during the year 1851. A considerable amount is derived from the transit of horses, cattle, vehicles, and merchandise by ferry steam-boats between Liverpool and Birkenhead. Since the formation of a railway and docks at Birkenhead the progress of that place has been surprising, and in a few years it must prove both a commercial rival and an auxiliary to Liverpool. Upwards of twenty-four millions sterling have been expended upon the improvements of the Mersey and the formation of 24 docks, whereby a stormy estuary and an unsafe anchorage have been converted into the most perfect harbour ever constructed by the skill of man. From the Cheshire shore at Seacombe the panoramic view is unrivalled. The port of Liverpool, with its 6 miles of river-wall and docks, crowded with forests of shipping of every size and from every clime, and the town with its tower, spires, domes, and gigantic warehouses, present to the spectator at a glance more of the grandeur of commerce than any other port in the world.

There are 34 consuls of various nations resident at Liverpool. The number of emigrants who left the port in 1851 exceeded 200,000, of whom the greater portion were destined for North America; but during the month of January 1852 several emigrant ships left the port with passengers for the British possessions in Australia. During the first four months of 1853 the total number of emigrants who left the port was 39,156, of whom 35,767 were for the United States, 81 for British North America, and 3224 for the Australian colonies. The number of registered lodging-houses within the borough in 1851 was 3250, of which 215, averaging 8 rooms in each, were exclusively devoted to sailors, and 239, averaging 12 rooms each, to emigrants. There are also very extensive establishments called Emigrants' Homes.

Liverpool is divided by the Municipal Corporation Act into 16 wards; each ward elects an alderman and three councillors, who with the mayor constitute the Town Council. By a private Act of Parliament the council is empowered to nominate persons to fill corporate offices, to make laws for the regulation of the police, the docks, and the town and port generally. The mayor is ex officio a justice of the peace during his year of office and the year succeeding. A recorder, appointed by the crown, presides as judge at the general quarter-sessions for the borough; a stipendiary magistrate presides daily in the police court, and the assizes for the southern division of the county are held twice a year in St. George's Hall, which building was opened for that purpose on December 8th 1851. There is also a county court at Liverpool, the judge of which is appointed by the Chancellor of the Duchy of Lancaster; and a court of passage, or poyage, presided over by an assessor, possessing coördinate power with the superior courts, has existed for upwards of 600 years.

There are many elegant public buildings in Liverpool, the most important of which are the Custom-House (already alluded to), the Town-Hall, the Exchange Buildings, the Collegiate Institution, the Sailors' Home, and St. George's Hall. There are besides numerous fine specimens of architecture in churches, banks, and public offices, but our limits preclude the mention of even the names of many of them.

The Custom-House, or Revenue Buildings, is in the Ionic style, and much admired for its chasteness and beauty; the 'long room' in the centre of the building is 146 feet long, 70 feet wide, and 45 feet high. The dome may be seen for many miles around Liverpool. The Town-Hall is a Grecian building, and contains on the ground-floor the council-rooms, several committee-rooms, the mayor's, treasurer's, and various other offices, in which the business of the corporation is transacted. A handsome staircase, on which is a colossal statue of George Canning, by Chantrey, leads to a spacious saloon, two extensive drawing-rooms, two magnificent ball-rooms, and a large banquet-room, all communicating with each other. The staircase is lighted by lateral windows, in a dome which is 106 feet high from the floor of the building, and on the summit of which is a fine statue of Britannia. The Exchange Buildings form three sides of a square, of which the Town-

Hall on the south forms the fourth, the architecture well harmonising. The quadrangular area is 197 feet by 178 feet, and is used by the merchants of the town as an exchange; in the centre is a bronze monument, erected in honour of Nelson, and emblematical of his principal victories. On the east side is a news-room, 94 feet by 53 feet, above which are the underwriters' and cotton sales rooms. The west and north sides are chiefly occupied as offices by merchants, and by the American and the Liverpool Chambers of Commerce.

St. George's Hall is of great magnitude, and has a very commanding appearance. The order adopted is the Corinthian; the eastern façade, 420 feet long, is polystyle, with an advanced colonnade in the centre 200 feet in length: the columns are 45 feet high. The south front has a grand portico 24 feet deep; the apex of the pediment is 95 feet from the ground. The interior contains numerous apartments, some of which are of noble proportions. The great hall is 161 feet long, 75 feet wide, and 75 feet high. Two large rooms are appropriated for the holding of assizes; the hall is used for public meetings, concerts, &c., and there is a second concert-room of considerable size, besides numerous offices and private apartments. The architect was Mr. H. Lonsdale Elmes, who died before its completion.

The Collegiate Institution, fronting Shaw-street, is one of the most elegant scholastic edifices in the kingdom: it is in the Tudor style, and built from a design by the late H. Lonsdale Elmes, the architect of St. George's Hall. The principal front is 280 feet long, and comprises a centre and two slightly-projecting wings. A magnificent arch rises above the central porch, and lofty oriel windows are carried up through two stories, the main building being four stories in height, the highest lighted from the roof. There are 48 apartments, varying in length from 20 to 50 feet, and all 25 feet wide; a well-lighted sculpture gallery, 218 feet long; a laboratory; a handsome lecture-hall, 50 feet high, with two galleries, which will hold 2300 persons; and a spacious music-room opening from the lecturer's platform, with rising seats for 300 performers, and a rich and powerful organ. This institution comprises three distinct day-schools for the youth of the three great classes of society, and evening-schools for adults. The foundation-stone was laid by Lord Stanley (now Earl of Derby) in October 1840; the Bishop of Chester is the visitor, and the instruction is strictly in accordance with the doctrines of the Church of England.

The Sailors' Home is a noble gothic building adjacent to the east end of the custom-house. The foundation-stone was laid in July 1846 by Prince Albert. The building contains a spacious hall with four tiers of galleries, a reading-room, library, chapel, and numerous commodious offices. The architect was Mr. John Cunningham. The institution provides board and lodging at a moderate charge for seamen frequenting the port, promotes their moral and intellectual improvement, and protects them from imposition and extortion. At the annual meeting January 31st 1852, the registry contained the number of 16,254 seamen of established character, many of whom had certificates from their captains for seven or eight voyages. The cost of the building was about 30,000*l.*, the corporation having gratuitously presented the site.

Liverpool contains 51 churches belonging to the Establishment, of which two, St. Nicholas and St. Peter's are parish churches. St. Nicholas is the oldest place of worship in Liverpool, having existed as a chapel of ease under Walton, before the town became a separate parish: both St. Nicholas and St. Peter's stand near the river, at a short distance from the town-hall. Many of the other churches were built and endowed with the funds of the corporation, and the remainder at the expense of private individuals. There are also 11 Roman Catholic, and 8 Scotch churches; 7 chapels belonging to the Independents (for one of which, in Great George-street, the sum of 12,000*l.* was subscribed in a few days). The Baptists have 10 chapels, the Wesleyan Methodists 15, of which 2 are Welsh; and the Calvinistic Methodists 7, including 1 Welsh; in addition to which there are numerous chapels and meeting-houses belonging to the Quakers, Unitarians, Jews, and various other denominations. The schools are very numerous. They consist, besides those already mentioned, of 2 Corporation Free schools; the Blue-Coat school founded in 1709, for 250 boys and 100 girls; National and British schools; 3 schools attached to the Mechanics Institution; 2 schools attached to the Royal Institution; schools for the blind, the deaf and dumb, &c. The Royal Institution possesses a museum of natural history, and collections of paintings and sculpture, minerals, and philosophical apparatus. To the town belongs a valuable collection of zoological specimens, the gift of the late Earl of Derby. A medical, a philharmonic, and a literary and scientific institution, severally flourish in handsome buildings, that of the philharmonic having been erected at a cost of upwards of 20,000*l.*

The town contains many buildings devoted to charitable purposes; a large and well managed infirmary, and two smaller hospitals; three public dispensaries, and an ophthalmic infirmary; a lunatic asylum, a fever hospital, and other public establishments for the alleviation or cure of disease. The workhouse is a spacious and convenient building. There are two bridewells within the limits of the town, besides the borough jail, and a house of correction; the latter belongs to the county, and is situated at Kirkdale, at the northern extremity of Liverpool.

The corporation have erected baths and wash-houses in various

parts of the town, which have been well attended by the labouring classes.

The principal places of amusement are:—the theatre in Williamson-square; an amphitheatre in Great Charlotte-street; the Adelphi theatre in Christian-street; the concert-hall, Lord Nelson-street; the music-hall, Bold-street; the botanic gardens at Edge-hill, and a zoological garden in West Derby road. Near the last named is the necropolis, which, with the cemetery of St. James, form the 2 principal places of sepulture. A statue of the late Mr. Huskisson stands in St. James's cemetery, in which place the remains of the deceased statesman are deposited.

The market-places in Liverpool are upon an extensive scale: St. John's market, which stands in the centre of the town, covers an area of 1½ acres, being 550 feet long and 135 feet wide, the whole under one roof, supported by 116 pillars. Meat, poultry, fruit, and garden vegetables, are daily sold in this market, but the principal market-days are Wednesday and Saturday. The fish-market is on the opposite side of the street in which St. John's market stands. There are several smaller market-places in different parts of the town.

The town is supplied with water by companies under the management of the corporation; a long and severe struggle having been successfully made to obtain powers for bringing water from Rivington Pike, a distance of several miles.

LIVERPOOL. [NOVA SCOTIA.]

LIVNO. [BOSNIA.]

LIVONIA, one of the Baltic provinces of European Russia, is situated between 56° 34' and 59° 3' N. lat., 23° 20' and 27° 38' E. long. It is bounded N. by Esthonia, E. by Lake Peipus, and the government of Pakow, S. by Vitsepak and Courland, and W. by the Gulf of Livonia, or Bay of Riga, which contains the great island of Oesel, and some smaller ones belonging to this province. The area is 18,058 square miles; the population in 1846 was 814,100. The province derives its name from its first inhabitants, the Liven, a Finnish tribe, whose race is now extinct or confounded with the Esthonians and the Lettonians.

The surface is level or gently undulating, with here and there some hills, which rarely exceed 100 feet in height. The highest ground of the whole province is the Meesenberg, near Wenden, which rises to the height of 1200 feet. Livonia is covered with vast forests, lakes, rivers, meres, marshes, and heaths. The woods contain fir, pine, beech, and alder; they supply abundant fuel, and even manure for the land, the timber being cut down and allowed to rot on the surface. The soil on the sea-coast (which is bounded by a cliff several fathoms high) is very sandy: in the interior, sand, clay, loam, and moorland alternate; but there are many very fertile tracts. In the south, especially on the banks of the Düna, there is some very picturesque scenery. Most of the forests and marshes are in the west. The Baltic forms the great bay of Riga, between the continent and the island of Oesel.

Of the lakes, 1120 in number, the most considerable are—the great lake of Peipus, united by a narrow channel with that of Pakow on the south-east; and the lake Werzierwe, or Wirzjerw, above 100 square miles in extent, in the centre of the province, which is connected by the Great Embach with lake Peipus. The lake *Peipus*, or *Tchoudakoe*, is about 50 miles long and 30 miles broad, and 1086 square miles in extent; of which 448 square miles belong to Livonia, 495 to St. Petersburg, and 142 miles to Esthonia; it contains several small islands, of which *Porka* is the largest. Besides the waters of lake Pakow it receives several rivers—the Embach, the Kosa, the Jellcha, the Tcherma, &c. Its waters flow in a north-east direction, and are carried by the Narova to the Gulf of Finland. The lake is deep enough for small frigates. It abounds in fish; its shores are low, wooded, and marshy. The channel which connects lake Peipus with the lake *Pskow* is rather more than 3 miles wide at its narrowest part. This last-mentioned lake is about 20 miles long, 10 miles broad, and covers an area of 92 square miles, only 24 of which belong to Livonia. It receives a large supply of water from the Velkaia River at its southern extremity. The principal river is the Düna, which is the boundary between Livonia and Courland till it reaches Kirchholme, where it changes its direction, and empties itself at Dünamunde, below Riga, into the bay of Riga. It receives on the right side the Ewest and the Oger, and on the left the Treider-aa, which runs from Courland along the Bay of Riga and falls into the Düna near its mouth. Other smaller rivers are—the Boulder-aa, which rises in the circle of Wenden; the Salis, which forms the outlet of lake Burtnek; the Pernau, which empties itself at Pernau into the Bay of Riga; the Little Embach, which flows into lake Werzierwe, which it leaves as a navigable stream under the name of the Great Embach, and runs into lake Peipus. The smaller rivers and streams are nearly 300 in number. [DÜNA; AA.]

The climate is disagreeable, being cold and raw till the end of May, but very hot in the three summer months, with frequent thunderstorms. September has often some fine days, though occasionally with night frosts.

The chief occupations of the inhabitants are agriculture and the distillation of spirits. Improved methods of agriculture have been introduced, slowly and partially it is true; but in the tillage of the soil Livonia is much in advance of Courland and Esthonia. The country produces rye, barley, flax, hops, hemp, and linseed. The fruit, such as apples, plums, and cherries is very indifferent. There

are some good horses on the estates of the nobles, but those of the peasantry are small and of little value. The horned cattle also are small; sheep of the German breed are kept by the nobles; the peasants have an inferior breed, the coarse black wool of which is manufactured into cloth. Goats, swine, and domestic poultry are kept chiefly by the nobles, citizens, and clergy. There is abundance of game; of beasts of prey there are bears, wolves, lynxes, and foxes; and of fur-bearing animals beavers, otters, martins, badgers, and squirrels. On the islands and sea-coast seals are taken, and fish of various kinds are abundant. Potters' clay and limestone are obtained in some parts. There are no manufactures of importance except in Riga. Coarse woollen and linen cloths are made for domestic use. Spirit distilleries are numerous. The exports are corn, hemp, flax, wool, and linseed; the imports salt, iron, lead, coal, colonial produce, wine, manufactured goods, and articles of luxury.

On the melting of the snow in spring and after the autumnal rains, barks loaded with the produce of the interior of Livonia and the adjacent provinces descend the Düna to Riga, and thither also masts and other timber are brought in large quantities in rafts. Flax and grain are brought in winter to Riga on sledges. In Riga, which is the chief trading port for a large portion of the north-west of Russia, large fairs are held. Between 1800 and 1400 foreign vessels enter and clear out of the harbour annually in ordinary times. The exports in 1841 amounted in value to above 2,327,000*l.*; the imports in the same year were under 850,000*l.* [RIGA.]

The population consists of Lettes, Liven, or Livonians, Esthonians, Germans, Swedes (who form the nobility, clergy, and burghers), and a few Russians and Jews. The great majority of the population are Lutherans. The Russians, who number only a few thousands, are of the Greek church. There are also a few Roman Catholics and Calvinists. The peasants were formerly serfs, but vassalage was abolished in 1818, and they are now nearly in the same condition as the German peasantry. The Jews are generally innkeepers and shopkeepers; the Russians, who are the most striving section of the inhabitants, are mostly gardeners, travelling mechanics, and tradesmen. The Lettes and Esthonians, each numbering between 300,000 and 400,000, form the bulk of the peasantry. The Esthonians of Livonia resemble their countrymen noticed in a preceding article. [ESTHONIA.] The Lettes, who occupy the south-west of the province, are of great natural intelligence, but timid, attached to the soil, without energy, and entirely devoid of the spirit of trade, which is so conspicuous in the Russian. Such is the manual dexterity of the Lette that he makes everything for himself—his house, his beer, his clothes. From his beech-wood he makes his furniture, his medicine, his dye-stuffs, his charcoal, his plough, his bottles, and his birkenwasser, if he is too poor to drink beer or mead. Both women and men ride on horseback or in sledges. Their dwelling-houses, to which are attached (the whole forming a circle or a square) stables, cow-houses, bath-houses, and the rige (for thrashing and drying the grain), are superior to those of the Esthonians; they have different apartments, an oven, and chimneys. The Esthonian has one room and no chimney. There are seldom more than two of these establishments built together; so that villages are rare.

The provinces of Livonia, Esthonia, Courland, and Semgallen belonged in the earliest times to Russia, to which however they only paid tribute, and had their own government. During the distracted state of Russia they made themselves wholly independent of it, and were not reduced to subjection till the time of Peter the Great. Livonia was almost unknown to the rest of Europe till 1158, when some traders from Bremen visited it, and formed settlements in it. In 1186 Meinhard, an Augustine monk, with other Germans, settled in Livonia, and having converted the natives to Christianity, became the first bishop. Albrecht, the third bishop, built in the year 1200 the town of Riga, and fixed his see there.

Towards the end of this century Canute VI., king of Denmark, made himself master of these provinces, which Waldemar III., one of his successors, ceded for a sum of money to the Teutonic Knights. The weakness of this Order, which was unable to resist the czar Ivan II., Wasiljewitsch, who sought to recover those provinces that had been detached from the Russian empire, caused the entire dissolution of the state. Esthonia placed itself under the protection of Sweden; Livonia was united with Poland; Courland and Semgallen became a duchy under Poland, which Gotthard Kettler, the last grand-master of the Teutonic order, obtained as a fief under that crown. From that time Sweden, Russia, and Poland disputed for Livonia from 1561 to 1660, when Poland ceded the provinces to Sweden, and they were united with Esthonia. By the treaty of Nystadt, in 1721, both were annexed to the Russian empire. The island of Oesel, which bounds the Gulf of Livonia on the north, is included in the province, and forms the circle of Arensburg. [OESSEL.] The small islands of Rouno, Kin, and a few others in the gulf are also comprised in the province of Livonia.

The province of Livonia is divided into five circles named from the chief town in each. These are—RIGA; Arensburg; DORPAT; Pernau; and Wenden. *Arensburg*, or *Arensberg*, is the capital of the island of Oesel. It lies on the Pedda, a small river on the south-east side of the island, and has a harbour for small vessels; vessels of large draught anchor about 5 miles below the town. The town

contains a Russian and a Lutheran church, a town-hall, public school, an hospital, and about 1500 inhabitants. *Pernau* is a well-built fortified town and port, with 10,000 inhabitants, at the mouth of the *Pernau*, which flows from the *Wirjærw* Lake, and falls into the north-eastern part of the Gulf of Livonia. Only vessels of 6 feet draught can come up to the town; those of larger size anchor in the roads about a mile from the harbour, where they are unloaded by lighters. The exports are chiefly corn, flax, and hemp; the imports consist of wine, brandy, salt, drugs, and various kinds of manufactured goods. The total value of the exports in 1842 was 108,015*l.* 16*s.* 2*d.*, which represents the freight of 75 ships of 4451 tons burden. *Wenden*, N.E. of Riga, situated on the *Aa*, which drains the centre of the province, has a population of 2500. The fortress of *Düsamünde*, built on an island, in the estuary formed by the embouchures of the *Diina* and the *Aa*, deserves mention for its lighthouse, and as defending the entrance to the harbour of Riga.

LIVORNO (Leghorn in English, Livourne in French) is a sea-port town on the west coast of Italy, in the grand-duchy of Tuscany. It stands at the southern extremity of a low and partly marshy plain, 14 miles S. by W. from Pisa, and 45 miles W. by S. from Florence, (in 43° 33' N. lat., 10° 19' E. long.), with which cities it is connected by railway, and has about 65,000 inhabitants.

The town is regularly built, clean, and lighted with gas; the streets are wide and mostly straight, and there is a fine square in the middle of the town. The western district, called *La Nova Venezia*, is intersected with canals, by which goods are carried in boats from the shipping in the harbour and landed before the warehouses of the merchants. Many of the private houses are handsome, uniting external elegance with interior comfort. The shops are well supplied with goods, and fitted up in good taste. The religious edifices are numerous, comprising a gothic cathedral and six parish churches, besides several chapels for different sects of Protestants, a mosque, and a synagogue. There are also three hospitals, two *monti-di-pietà*, a public library, an observatory, and a citadel. The natural insalubrity of the site has been in a great measure remedied by effectual drainage; and good water is brought to the town by means of an aqueduct 12 miles long. Of all the towns in the Mediterranean perhaps Livorno most resembles an English town; the English and Lutherans have chapels and burying-grounds, the Greeks and Armenians have each a church, and the Jews (who number about 8000 of the inhabitants) a very handsome synagogue. The English burying-ground, situated on the ramparts, is adorned with numerous marble monuments—among others is one to Smollett, who died here. The town itself is little more than 2 miles in circumference; but two large suburbs, one beyond the north or Pisa gate, and the other to the south, called *Borgo Cappuccini*, have gradually increased to the size of towns, and have been lately included within the boundaries of the *Porto Franco*, wherein goods can be landed and warehoused, and exported again without paying duty. The outer mole, which is more than a mile in length, and joins the lighthouse, affords a pleasant walk. The harbour is tolerably large, but not sufficiently deep for large vessels, which lie in the roadstead, where the anchorage is safe and good. The roadstead is between the harbour and the *Meloria* sand-bank, so named from the rocky islet of *Meloria*, the *Mænaria* of Pliny, on which a tower now stands. The *Darsena*, or interior harbour or dock, is only fit for smaller vessels. Near the *Darsena* is a fine colossal statue of Ferdinand I, the benefactor of Livorno. The *lazarettos*, of which there are three, outside of the town and on the sea-shore, are remarkable for their excellent distribution and perfect security, being surrounded by wet ditches, and furnished with extensive warehouses and convenient lodgings.

Livorno is entirely a commercial place; being a free port it is better stocked with English and French manufactures than any other town on the continent. It has a casino, or assembly-house, a theatre, very good inns and coffee-houses, and numerous elementary and infant schools. Among the population are individuals of every nation in Europe, besides Turks, Moors, Armenians, and Jews from Africa and Asia. Thirty-three foreign consuls reside at Leghorn.

Livorno is first mentioned as a village, parish, and fort adjacent to *Porto Pisano*, or the harbour of Pisa, in the 11th century. It was ravaged in the wars between Genoa and Pisa, was taken possession of by the Visconti of Milan, and afterwards by the French General *Boucicault*, who sold it in 1407 to the Genoese for 26,000 golden ducats. The Florentines, who purchased it from Genoa in 1421 for 100,000 golden florins, established ship-building docks and surrounded the place with walls. As the neighbouring *Porto Pisano* became gradually filled up [ARNO] the importance of Livorno as a port increased in proportion. But the great increase of Livorno took place under the dynasty of the Medici. The grand-duke *Cosmo I.* granted to all new settlers numerous and important privileges and immunities, built a mole and lighthouse, and made the harbour the station of the galleys of the military order of *St. Stefano*, whose avocation was to cruise against the Mussulmans. His successor *Ferdinand I.* greatly extended the improvements begun by *Cosmo*; he raised regular fortifications round the town, built warehouses, a fortress, a lazaretto, and numerous other buildings, and excavated a navigable canal communicating with the *Arno*. He confirmed the privileges and immunities to new settlers granted by *Cosmo*, and published an indulto, dated the

10th of June 1593, by which merchants of all nations and of every religion were invited to come and settle at Livorno, without fear of being molested on account of their religion.

During the first years of the war of the French Revolution, the neutrality adopted by the grand-duke Ferdinand, whilst all the rest of Europe was at war, favoured greatly the commerce of Leghorn. When Bonaparte however invaded Italy in 1796, he did not respect the neutrality of Tuscany, but seized upon all English, Portuguese, Neapolitan, and Austrian property at Leghorn. In 1808 Napoleon occupied Tuscany and annexed it to the French empire. Upon this, the trade of Livorno was annihilated, but with the peace of 1814 its prosperity returned. Population and buildings have rapidly increased. The immunities of the *Porto Franco* have been extended to the suburbs, an aqueduct and railways have been constructed, and other improvements have been effected. The town was taken by the Austrians under General *Aspré*, May 13, 1849; and it was for a long time subsequently occupied by an Austrian garrison.

The imports into Livorno are either for consumption or for deposit. In the first place, Livorno supplies with foreign goods Tuscany, *Lucca*, part of the Roman States, and partly also *Modena* and *Parma*. In the last century it used to supply Lombardy also, but Trieste has supplanted Livorno in this branch of trade. The deposit trade of Livorno was also in the last century more extensive than it is now. The English, Dutch, American, and other ships from the Atlantic carried thither manufactures and colonial goods, and exchanged them for cotton, silk, and other produce of the Levant, which were brought to Livorno by Italian and Greek vessels. This relation of things is now materially altered. Commerce is become more direct: the English, American, and other vessels from the west proceed straight to the Levant and the Black Sea to exchange their cargoes. Still the transit trade of Livorno is considerable; its warehouses are always well supplied, and it is a convenient place especially for the smaller vessels from the coasts of Italy and its islands to take in their cargoes.

The total number of vessels that entered the harbour, including the ships of foreign countries and 1280 coasters in 1840, amounted to 4131 (368,320 tons), and the departures in the same year numbered 4017 (354,050 tons). The total value of the trade of Leghorn in 1840 amounted to 4,784,400*l.* (imports, 2,928,000*l.*; exports, 1,856,400*l.*). In 1839 the imports were valued at 3,039,200*l.*; the exports at 2,022,400*l.* The principal articles of import are corn, tissues of cotton hemp, and wool; sugar, raw and manufactured silks, bronze work, and jewellery; salt fish, skins, and hides; hemp, flax, and cotton; coffee and cocoa; iron and other metals; wool, dyestuffs, drugs, gums, spices, wine, brandy, rum, &c. Many of these articles also appear among the exports, which comprise also oil, salt of tartar, paper and rags, straw hats, marble and alabaster, works of art, timber, cork, coral, tallow, anchovies, potashes, wool, &c.

Sixty coral boats are sent out annually to gather coral on the coasts of Barbary and Sardinia; half the produce is exported raw, the remainder is worked up into various articles at Leghorn in 16 coral factories. There are also numerous establishments in the city for the manufacture of leather, woollen caps, ropes, soap, glass bottles, crystals, wax, tallow candles, cream of tartar, borax, and sulphur. Ship-building gives employment to many hands; both steamers and sailing-vessels are turned out of the yards of Leghorn. There is a joint stock bank which issues notes and discounts bills. In the year 1853 there belonged to the port of Leghorn and its dependencies 504 vessels of all sizes, with a tonnage of 20,761.

To the south of Leghorn are the rugged hills of *Montenero*, the slopes of which are dotted with the country houses of the Livornese merchants. Livorno gives name to a department of Tuscany, which includes the isle of *Gorgona*, and has a total area of 88 square miles; the population of the department including that of the city was 85,884 in 1842. *Gorgona* is a small rocky and wooded island, situated between Leghorn and Corsica, about 8 miles in circuit, and inhabited by a few families who are engaged in the anchovy fisheries, for which its coasts are famous. A signal tower on the highest point of the island stands in 43° 26' 50" N. lat., 9° 54' 43" E. long. *Gorgona* is the ancient *Gorgon* or *Urgo*; it is about 20 miles from the mainland.

LIXNAW. [KERRY.]

LIZARD POINT. [CORNWALL.]

LJUNGAN-ELF. [ÄNGERMANNLAND.]

LJUSNAN-ELF, or LIUSNE. [SWEDEN.]

LLANARTH. [CARDIGANSHIRE.]

LLANBADARN-VAWR. [CARDIGANSHIRE.]

LLANBERRIS. [CAERNARVONSHIRE.]

LLANDAFF, Glamorgan-shire, the seat of a bishopric, in the parish of Llandaff, is situated on the right bank of the river *Taf*, or *Taff*, in 51° 30' N. lat., 3° 12' W. long., distant about 2 miles W.N.W. from Cardiff, and 168 miles W. from London. The population of the parish of Llandaff in 1851 was 1821. The living is a vicarage attached to the cathedral church of the diocese of Llandaff.

Llandaff (*Llan Taf*, the church of the *Taf*), though of episcopal rank, is scarcely more than a village; it contains two mansions, and one or two respectable but small dwelling-houses, with a number of cottages. The cathedral stands in a hollow by the river, at a little distance from the village. The limits of the edifice were contracted

in repairs executed in 1751, by building a new western front across the nave, the western portion of which, a fine specimen of early English architecture, was abandoned to decay. The original west front has a series of delicately executed lancet windows, of various sizes, and has at its northern angle a fine tower in the perpendicular style. The entire external length of the body of the church is 300 feet, the breadth 80 feet. At the eastern end of the choir is the lady chapel, which, with part of the choir, is of decorated English architecture. The presbytery, comprising the two eastern bays of the choir, has been restored, and the process of restoration is being applied to other portions of the edifice. The lady chapel having been restored, is now used as a parish church. The chapter-house, on the south side of the church, is a square building with a central pillar, from which spring the arches that support the roof; it is in the decorated English style, with plain but elegant groining. Near the cathedral are the ruins of the episcopal palace, consisting of a large gateway and part of the external wall. There are National schools for boys and girls. Two considerable cattle fairs are held yearly at Llandaff.

The diocese of Llandaff includes Monmouthshire with that part of Glamorganshire which lies east of the river Neath, and comprises 215 benefices. It contains only the archdeaconry of Llandaff. The chapter consists of the archdeacon, dean, chancellor, seven canons, and two minor canons. The income of the bishop is 4200*l*.

LLANDILO-VAWR, Caermarthenshire, a market-town and the seat of a Poor-Law Union in the parish of Llandilo-vawr, is situated on the right bank of the river Towy, in 51° 53' N. lat., 3° 59' W. long., distant 15 miles E. by N. from Caermarthen, and 202 miles W. by N. from London. The population of the parish of Llandilo-vawr in 1851 was 4565. The living is a vicarage in the archdeaconry of Caermarthen and diocese of St. David's. Llandilo-vawr Poor-Law Union contains 12 parishes and townships, with an area of 99,437 acres, and a population in 1851 of 17,967.

The town of Llandilo-vawr, or, as it is usually called, Llandilo, is beautifully situated, the parks of Dynevor and Golden Grove, which are to the westward of the town, adding much to the interest of the scenery. Considerable improvements have been made in the town of late years. A handsome stone bridge over the river Towy, with an elliptical arch of 145 feet span and 36 feet high, was erected in 1843. The parish church, dedicated to St. Teilo, from whom the name of the town is derived (Llan-dello-fawr, the church of Teilo the Great), was rebuilt in 1850 in the early decorated style. There are chapels for Wesleyan and Calvinistic Methodists, Baptists, and Independents; parochial schools; a mechanics institute; and a savings bank. A county court is held in the town: Saturday is the market-day. Fairs are held on February 20th, Monday before Easter, May 5th and 14th, June 21st, August 23rd, September 28th, November 12th, and the Monday before Christmas.

The town is seated in a locality very interesting to the geologist. It stands on the Llandilo-flag formation, to which it imparts its name. South of the town are developed the Caradoc sandstone, the Ludlow and Wenlock rocks, and on the north the claylate and grauwacke extend to the coast. On an eminence overlooking the Towy stands the ancient castle of Dynevor, or Dinas-fawr, celebrated as the residence of the ancient princes of South Wales: the remains consist chiefly of a square and a round tower, and the walls, which inclose an irregular area. Newton House, the present mansion of Lord Dynevor, is in a distant part of the grounds.

LLANDOVERY, Caermarthenshire, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Llandingat, is situated on the banks of the river Braen, in 52° N. lat., 3° 47' W. long., distant 25 miles E.N.E. from Caermarthen, and 191 miles W. by N. from London. The population of the borough in 1851 was 1927. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living of Llandingat is a vicarage in the archdeaconry of Caermarthen and diocese of St. David's. Llandoverly Poor-Law Union contains 11 parishes and townships, with an area of 118,055 acres, and a population in 1851 of 15,055.

Llandoverly is pleasantly situated near the junction of the Braen with the Towy. A stone bridge of one arch and a suspension-bridge cross the Towy near the town. The parish church stands in the middle of the town. There are in the town some chapels for Dissenters, and National and Infant schools. In 1847 a 'Welsh Educational Institution' was founded at Llandoverly by Thomas Phillips, Esq. The pupils receive a classical and mathematical education, but the Welsh language is an essential portion of the course of study. The income from endowment is 440*l*. a year. The number of scholars in 1851 was 80, of whom 20 were on the foundation. The market-days are Wednesday and Saturday. Seven fairs are held in the course of the year. Llandoverly is a favourite resort of anglers. Roman antiquities have been discovered at Llan Fair y Brynn, in the immediate neighbourhood of Llandoverly. The castle, which was probably built by some of the Norman barons who invaded the country soon after the Conquest, was ruined during the civil wars of the 17th century. Some vestiges of it remain on a hill by the Braen.

LLANDRINDOD. [RADNORSHIRE.]

LLANDUDNO. [CAERNARVONSHIRE.]

LLANELLY, Caermarthenshire, a market-town, municipal and

parliamentary borough, and the seat of a Poor-Law Union, in the parish of Llanelly, is situated on the small river Lliedi, near its confluence with the estuary of the river Burry, in 51° 41' N. lat., 4° 9' W. long., distant 13 miles S.S.E. from Caermarthen, and 217 miles W. by N. from London. The population of the borough of Llanelly in 1851 was 8710. The living is a vicarage in the archdeaconry of Caermarthen and diocese of St. David's. Llanelly Poor-Law Union contains 9 parishes and townships, with an area of 52,065 acres, and a population in 1851 of 23,324.

Llanelly is chiefly built on rising ground, and contains some tolerably good houses; the suburbs southward lie low, and are occasionally flooded by the river. The streets are lighted with gas. The church, dedicated to St. Elliw, has two towers, one surmounted with a spire, the other with an embattled turret. There are chapels for Independents, Baptists, and other Dissenters, National schools, and a savings bank. The market days are Thursday and Saturday; fairs are held on Holy Thursday and September 30th. Collieries, copper-works, lead- and silver-works, iron-foundries, and an extensive pottery-work employ numerous workmen. Coal is largely exported. Copper-ore is imported, and copper-cakes and sheathing exported. Commodious docks have been constructed for the convenience of shipping, by which vessels of considerable tonnage can frequent the port. The number of vessels registered as belonging to the port on December 31st 1853 were:—Under 50 tons, 40 vessels of 1098 tons; above 50 tons, 36 of 3329 tons; and 3 steam-vessels, tonnage 62. During 1853 there entered the port 1949 sailing-vessels of 97,928 tons, and 82 steam-vessels of 9783 tons; and there cleared 3107 sailing-vessels of 190,527 tons, and 77 steam-vessels of 9878 tons. The amount of customs duties received at the port in 1851 was 1174*l*. 6*s*. 6*d*. The South Wales railway has a station at Llanelly. Besides the railway there is communication by canal between Llanelly and Kidwelly. The Caermarthenshire railway runs between Llanelly and the limestone-quarries at Castell-y-Garreg, a distance of 16 miles. The Llanelly railway is a mineral line from Machynis Pool, near Llanelly, to the shore of the estuary, about 2 miles farther up. Near the town is an ancient camp supposed to be British.

LLANELLY. [BRECKNOCKSHIRE.]

LLANERCH-Y-MEDD. [ANGLESEY.]

LLANFAIR. [MONTGOMERYSHIRE.]

LLANFIHANGEL. [BRECKNOCKSHIRE.]

LLANFYLLIN, Montgomeryshire, a small market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Llanfyllin, is situated chiefly on the right bank of the river Cain, an affluent of the Vyrnwy, in 52° 46' N. lat., 3° 16' W. long., distant 23 miles N.N.W. from Montgomery, and 179 miles N.W. by N. from London. The population of the borough, which is contributory to the Montgomery district of boroughs, was 1116 in 1851. The borough is governed by 2 bailiffs and 12 aldermen. The living is a rectory in the archdeaconry of Montgomery and diocese of St. Asaph. Llanfyllin Poor-Law Union contains 23 parishes and townships, with an area of 117,958 acres, and a population in 1851 of 19,484. The principal street of Llanfyllin is crossed by the Abel brook, which flows into the Cain; over this brook is a neat bridge. The town-hall is a neat brick building with a covered area for a market underneath. The church is a brick building in the Venetian style, erected in 1710; it has a fine peal of six bells and chimes. The Wesleyan Methodists, Independents, Baptists, and Welsh Calvinists have places of worship, and there are a combined National and Endowed school, and a reading society with a news-room. The market day is Thursday: eight fairs are held in the course of the year.

LLANGADOCK. [CAERMARTHENSHIRE.]

LLANGAMMARCH. [BRECKNOCKSHIRE.]

LLANGATTOCK. [BRECKNOCKSHIRE.]

LLANGEFNI. [ANGLESEY.]

LLANGOLLEN. [DENBIGHSHIRE.]

LLANGORSE. [BRECKNOCKSHIRE.]

LLANGYNIWR. [BRECKNOCKSHIRE.]

LLANIDLOES, Montgomeryshire, a market-town and municipal and parliamentary borough, in the parish of Llanidloes, is situated chiefly on the right bank of the river Severn, in 52° 27' N. lat., 3° 31' W. long., distant 20 miles S.W. by W. from Montgomery, and 188 miles W.N.W. from London. The population of the borough, which is one of the Montgomery district of boroughs, in 1851 was 3045. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a vicarage in the archdeaconry of Merioneth and diocese of Bangor.

The parish of Llanidloes is extensive, including large tracts of waste land on the slope of Plinlimmon. The hills which bound the vale of the Severn are mostly laid out in sheep-walks. The town consists chiefly of two streets crossing each other at right angles. Of late years many good modern dwellings have been substituted for the ancient timber-framed houses. Two bridges cross the Severn here, one of them a handsome stone structure of three arches. The town is well lighted. The market or town-house is a massive old timber-framed building, the property of Lord Mostyn. There are large and commodious public rooms. The church, a fine old edifice, dedicated to St. Idloes, consists of a nave and aisle separated from each other by curious clustered pillars, the capitals of which are decorated with

palm-leaves. There are chapels for Independents, Old Welsh Baptists, and other Dissenters; National schools, and three other public schools. The staple manufacture of the town is flannel. Several factories for carding and spinning wool, fulling-mills, tan-yards, copper and lead-mines, and a large brass and iron foundry, give some employment to the inhabitants. Coarse slate and building stone are quarried in the surrounding hills. The market on Saturday is for wool, corn, and provisions; and nine fairs are held in the year, some of which are great sheep-fairs.

LLANRWST, Denbighshire, a market-town and the seat of a Poor-Law Union, in the parish of Llanrwst, is pleasantly situated on the right bank of the river Conway, which here separates Denbighshire from Caernarvonshire, in 53° 8' N. lat., 3° 47' W. long., distant 17 miles W. by S. from Denbigh, and 217 miles N.W. by W. from London. The population of the parish of Llanrwst in 1851 was 3984. The living is a rectory in the archdeaconry and diocese of St. Asaph. Llanrwst Poor-Law Union contains 17 parishes and townships, with a population in 1851 of 12,478.

The town of Llanrwst is encompassed with well-wooded hills. The houses are irregularly built; the streets, with the exception of that in which the town-hall stands, are narrow. The bridge over the Conway, erected about 200 years ago, from designs by Inigo Jones, consists of three arches; the span of the middle arch is 59 feet. The parish church is an elegant structure of recent erection; the Gwydir chapel, constructed in 1633, from a design by Inigo Jones, was for a considerable time the burial-place of the Gwydir family, and contains numerous interesting monuments and incised brasses. There are chapels for Baptists, Independents, and Methodists; National schools, and some almshouses. Tuesday is the market-day; nine fairs are held in the course of the year. Coracles are used for fishing in the Conway: the tide flows to within a mile and a half from the bridge, and in spring-tides boats of 12 tons can ascend the river. A county court is held in the town. Llanrwst is a favourite station for anglers.

LLANTRISSENT. [GLAMORGANSHIRE.]

LLANTWIT. [GLAMORGANSHIRE.]

LLERENA. [ESTREMADURA, Spanish.]

LLOUGHOR. [CAERMARTHENSHIRE.]

LLYSWEN. [BRECKNOCKSHIRE.]

LLYWELL. [BRECKNOCKSHIRE.]

LÓ, ST. [MANCHE.]

LOANDA. [ANGOLA.]

LOANGO, on the West Coast of Africa, is the most northern of the four countries or districts which are said to have anciently constituted the kingdom of Congo, as explained in the articles ANGOLA and CONGO. It extends along the coast from Cape Lopez Gonsalvo in 0° 44' S. lat. to the river Congo or Zaire, which separates it from Congo in about 6° S. lat. To the north it is said to be bounded by Gabon, or Pongo, and to the east by the country called Mokoko, or Anziko. It is said to extend about 200 miles from the coast towards the interior of Africa. The country is described by Dapper and other early writers to be divided into several districts, among which the following names occur:—Mayomba, or Majumba, Kilongo, Piri, Wansi, Loangiri, Loangomongo, Sette, and Gobbi.

Loango, the capital town, called by the natives Banza Loangiri, is in the province of Loangiri, which occupies the south-western angle of the country. It stands in a large plain, at the distance of three miles from the sea, in about 4° 39' S. lat., 12° 17' E. long. The houses are shaded by palm-trees. The town is said to be 10 miles round.

The government, like that generally prevalent among the barbarous tribes of this part of Africa, is the most absolute species of despotism. The kings of Loango are believed by their subjects to be divinities. In particular, they are held to have the power of bringing down rain from the sky; and this useful prerogative they exercise every year, on the petition of their subjects, with great ceremony. The king has an unlimited number of wives, and his children are counted by hundreds; his principal revenue is or was derived from the sale of slaves. The successor to the throne is the king's next eldest brother, or, if he have no brother, the eldest son of his eldest sister. Although the king however is independent of the nobles, the latter in their own sphere appear to exercise unlimited tyranny over the common people. The religion of the inhabitants, who resemble the negroes of Congo, is an idolatry of the most superstitious character.

A great part of the country is covered with thick woods, and it is mountainous only in the interior towards the south. In the north it possesses some lakes of considerable extent, from which, and from the mountains, many rivers descend to the sea. Among these however there are none of magnitude, with the exception of the Banna, at the mouth of which stands the town of *Mayomba*, about 6 miles S. from Cape Negro, or nearly in 3° 30' S. lat. A good deal of copper, ivory, and gum is got in the district of *Mayomba*.

Fish forms a great part of the sustenance of the people; the produce of the soil, which is said to yield three harvests in the year with very little cultivation, consists of various kinds of grain, such as are raised in the adjacent regions. Among the trees are some dye-woods. The only minerals found in the country seem to be iron and copper. The principal animals are elephants and apes.

LOANO, or LOVANO. [ALENGA.]

LOBOSITZ. [EGER.]

LOCANA. [IVREA.]

LOCARNO. [TICINO.]

LOCHES. [INDRE-ET-LOIRE.]

LOCHMABEN, Dumfriesshire, Scotland, an ancient royal burgh, a parliamentary burgh, and market-town, is situated about 9 miles N.E. from Dumfries, and 65 miles S.W. from Edinburgh. It is governed by a provost, three bailies, a dean of guild, and nine councillors; and unites with Annan, Dumfries, Kirkcudbright, and Sanquhar in the return of one member to the Imperial Parliament. The population in 1851 was 1092. The town consists principally of one main street, with the church, a neat and substantial building, at one end, the cross and town-house at the other, and several small cross streets. The town-hall, under which is the jail and lock-up house, was built in 1745. There are a Free church, a chapel for United Presbyterians, a subscription library, an Endowed and a Parish school. During the winter there is a weekly market for pork, in which much business is done. The castle, now in ruins, was formerly a place of great strength; the works covered nearly 16 acres.

LOCHWINNOCH. [RENFREWSHIRE.]

LOCKERBIE. [DUMFRIESHIRE.]

LOCRI was employed to designate the country of three distinct Grecian tribes, the Locri Epicnemidii, the Locri Opuntii and the Locri Ozola.

The Locri Epicnemidii and Locri Opuntii, who appear to have been more ancient than the Locri Ozolæ, since the latter are not mentioned by Homer, inhabited the eastern coast of Phocia, and were separated from the latter country by a mountain range which stretches from Mount Ceta to the borders of Boeotia. The northern part of this range, which is much higher than the southern, was called Cnemis, whence the Epicnemidii Locri derived their name. The Opuntii Locri derived their name from Opus, their chief town, on the borders of Boeotia. They pretended to be the most ancient Hellenic people in Greece.



Coin of Locri.

British Museum. Actual size. Silver.

The Locri Ozolæ were bounded on the west by Ætolia, on the north by Doris, on the east by Phocia, and on the south by the Corinthian Gulf. According to Strabo (ix. p. 427) they were a colony from the eastern Locri. The origin of their name is uncertain. The western Locrians are said by Thucydides (i. 5) to have been a wild and barbarous people even in the time of the Peloponnesian war. Their principal towns were Amphissa and Naupaetus. *Amphissa*, the capital of the Locri Ozolæ (now *Salona*), an inland town at the head of the Crissæan Gulf, was destroyed by Philip of Macedonia, who acted under the orders of the Amphictyons, B.C. 338, for cultivating the sacred plain of Crissa. It was afterwards rebuilt, and in the war with the Romans, B.C. 190, it is mentioned by Livy (xxxvii. 5) as a place of considerable importance. *Amphissa* was 60 stadia, or about 7 miles, from Delphi. The walls of the ancient acropolis still remain. *Salona* is now the capital of Phocia, and has a population of about 4000. *Naupaetus* (Nepakto, or Lepanto), on the sea-coast on the borders of Ætolia, was for a long time in the possession of the Athenians, who established there, in B.C. 455, at the close of the third Messenian war, those Messenians who quitted Ithome. On the termination of the Peloponnesian war it fell into the power of Sparta, and in later times was subject to the Ætolians. *Nepakto* is reckoned a town of the modern Greek province of Ætolia. It has about 2000 inhabitants.

The Locri Epizephyrii, who inhabited the south-eastern extremity of Italy, were a colony, according to Ephorus, of the Locri Opuntii, but according to Strabo of the Locri Ozolæ. The town built by this colony was called *Locri Epizephyrii*; according to some accounts it was founded B.C. 710, and according to others B.C. 683. It is supposed to have stood on or near the site of the present town of Gerace [CALABRIA, vol. ii. 236.] The Locri Epizephyrii are said to have been the first Greek people who had a written code of laws (Strabo, vi. 397), which was drawn up by Zaleucus about B.C. 664.

(Pausanias; Strabo; Müller; Dorians; Leake, *Northern Greece*.)

LODDON, a hundred in the county of Norfolk, which with the adjoining hundred of Clavering gives name to a Poor-Law Union. Loddon and Clavering hundreds are bounded S. by the river Waveney, which here separates Norfolk and Suffolk, and which also bounds Clavering hundred on the E.; on the W. the boundary is formed by the hundreds of Depwade and Humbleyard; and on the N. by the hundreds of Henstead Blowfield and Walsham. The hundreds of Loddon and Clavering comprise 40 parishes, with an area of 59,401 acres, and a population in 1851 of 15,029. Loddon and Clavering

Poor-Law Union contains 42 parishes, with an area of 56,393 acres, and a population in 1851 of 14,891. The village of Loddon is situated on the Chet, a small stream which flows into the Yare. It so closely adjoins the village of Chedgrave that the two form one street. The population of Loddon parish in 1851 was 1211. The parish church is a fine stone building, with an elegant tower; it was built by Sir Henry Hobart in 1478. The Wesleyan and Primitive Methodists have places of worship. The market-day is Thursday, and four fairs are held in the course of the year.

LODÈVE. [HÉRAULT.]

LODI-E-CREMA, a province of Austrian Italy, is bounded N. by the provinces of Milan and Bergamo; W. by that of Pavia; S. by the Po, which divides it from the duchies of Parma and Piacenza; and E. by Cremona and Brescia. The province is part of the great plain of the Po, and is watered by the Adda, Serio, Lambro, and other affluents of that river. Until the end of the last century this province was divided into two small ones, which were separated by the Adda, namely, Crema to the east of that river, which belonged to the republic of Venice; and Lodi, or Il Lodigiano, west of the Adda, which was part of the duchy of Milan.

The greatest length of the province is 30 miles from east to west, and about 27 miles from north to south. The area is 459 square miles. The population was 218,844 in 1850. The surface is a plain with slight undulations. The soil is partly sown with corn, flax, and pulse, and partly planted with the vine and mulberry trees; but the best part consists of artificial meadows rendered productive by irrigation. On these are fed a great number of cows, from the milk of which the rich cheese is made known in Lombardy by the name of Lodigiano, but called in the rest of Europe by the name of Parmesan. Great attention is paid to the rearing of silk-worms, and a good deal of coarse raw silk is brought to market. A considerable number of horses and pigs are bred. In every commune there is an elementary school.

Lodi, the capital of the province, is a well-built, walled, episcopal town, on the right bank of the Adda, with about 18,000 inhabitants (including the suburbs), who manufacture pottery, delft, and silks. It has a royal lyceum and a gymnasium, a theological seminary, an orphan asylum, two hospitals, a savings bank, a public library of 15,000 volumes, and a monte-di-pietà. The most interesting structures in Lodi are—the cathedral, a fine building in the pure Lombardian style; the great square, surrounded by arcades; the church of L'Incoronata, built by Bramante; and the stone bridge over the Adda, famous for the defeat of the Austrians by Bonaparte, May 10, 1796. The cathedral contains some antiquities brought from Lodi-Vecchio, including a very ancient bas-relief of the Last Supper. The Incorporata is decorated with the surpassingly beautiful paintings of Calisto da Lodi, a pupil of Titian. Lodi was founded in 1158 by the remainder of the inhabitants of an older city now called Lodi-Vecchio, a small place of 3000 inhabitants, 6 miles from Lodi. Lodi-Vecchio is said to have been founded by Cneius Pompeius Strabo, and to have been called Laus Pompeia. It was entirely destroyed by the Milanese, A.D. 1111.

Crema, an episcopal town on the right bank of the Serio, is a well-built place, with a gymnasium and 9000 inhabitants, who manufacture linen, lace, hats, silk, and linen-thread. Codogno, S.E. of Lodi, on the road from Milan to Cremona, is a flourishing town with 8000 inhabitants, a theatre, and a considerable trade in cheese, silk, &c. San-Colombano, at the foot of a hill near the right bank of the Lambro, has a population of 5000.

LOFODEN ISLANDS. [TRONDHEJEM.]

LOGANSFORT. [INDIANA.]

LOGRONO. [CASTILLA-LA-VIEJA.]

LOHEIA. [ARABIA.]

LOIR, RIVER. [LOIR-ET-CHER.]

LOIR-ET-CHER, a department in France, bounded N. by Eure-et-Loir, E. by Loiret and Cher, S. by Indre, and W. by Indre-et-Loire and Sarthe. It lies between 47° 13' and 48° 6' N. lat., 0° 38' and 2° 14' E. long. Its greatest length from north-west to south-east is 80 miles; its average breadth is about 38 miles. The area of the department is 2202.2 square miles. The population amounted to 249,462 in 1841, and to 261,892 in 1851. This last gives 118.92 to the square mile, being 55.66 below the average per square mile for the whole of France. The department is formed out of the south-west part of the former province of Orléanais, and is named from two of its rivers, the Loir and the Cher, tributaries of the Loire.

The surface presents a number of elevated and extensive plains, unbroken by any considerable hills, and sloping with very gentle inclination towards the south-west. The department is divided into two pretty equal parts by the Loire, which for about 80 miles of its course runs between two chains of low hills, that have their slopes covered with vineyards and orchards. The district north of the Loire is traversed by the Loir, which rising in the south-west of Eure-et-Loir flows south-east as far as Bonneval, and thence nearly south past Châteaudun to Vendôme, in this department. From Vendôme it runs nearly west, crossing the south of the department of Sarthe, and reaching the boundary below La-Flèche it enters the department of Maine-et-Loire, taking a south-western direction to its junction with the Sarthe on the left bank, nearly opposite to the point where that river is joined by the Mayenne, about 5 miles N. from Angers. The principal feeders of the Loir are the Ozane, the Yère, and the Braye

on the right bank, and the Conie on the left. The whole length of the river is about 160 miles, 65 miles of which are navigable. The navigation commences at Coëmont, near Château-du-Loir, in the department of Sarthe; but it is available for floatage from the mouth of the Braye on the western border of Loir-et-Cher. The Loir has abundance of water in all seasons, and it is seldom frozen. The principal articles conveyed along the stream are—timber, fuel-wood, hay and straw, charcoal, paving-tiles, lime, cut-stone, &c.

The district south of the Loire is drained by the CHER, its feeder the Sauldre, and by the Beuvron and Cosson, which throw their waters into the Loire, near the village of Candé, below Blois. The Cosson flows through the park that surrounds the fine old royal château of Chambord, which after being the residence of several kings of France, of Stanislas, king of Poland, of Marshal de Saxe, and of Charles IV., king of Spain, was given by Napoleon I. to Marshal Berthier. The Princesses of Wagram sold it in 1820, when it was purchased by subscriptions raised for the purpose, and presented to the Duke of Bordeaux, who takes from it the title of Count of Chambord. There are numerous ponds along the left bank of the Loire; and the south-east of the department, formed out of that part of the old district of Sologne which was included in the Blaisois, a dependency of Orléanais, and is now included in the arrondissement of Romorantin, presents a vast marshy plain, which contains many hundreds of ponds.

Roadway accommodation is afforded by 6 imperial, 16 departmental, and 11 parish roads. The department is crossed by the railroad from Paris to Nantes and Bordeaux, which runs through Blois; and by the Orléans-Bourges line, which has 32 miles of its length in the south-east of this department.

The soil in the north-east of the department, which includes a portion of the Beauce district, consists of a dark rich loam; in the south-east the arable lands are composed of strong clay and sand; along the Cher the soil is calcareous. In the Sologne district the arable soil consists of a light fine sand mixed with pebbly gravel and a small portion of vegetable earth, and yields only poor light crops. The north-west of the department, forming part of the arrondissement of Vendôme, has an arid hungry soil, very generally covered with heath, gorse, and broom. The supracretaceous strata which occupy the chalk-basin of Paris extend into the department from the north-east, and occupy the banks of the Loire as far as the junction of the Beuvron. In all other parts the department is occupied by the chalk itself. Agriculture is in rather a forward state; bread-stuffs are raised in quantity more than sufficient for the home consumption. Of wine the annual produce is about 13,200,000 gallons, a large portion of which is distilled into brandy. The department yields, besides excellent fruits and vegetables, beet-root, hemp, &c. The Sologne sheep are extolled for the fineness of their wool; but the horses of that district, though hardy, are small and ill-formed. Black cattle are of inferior breed. The arrondissement of Vendôme is famous for its breed of draught horses. The rivers and ponds abound in fish; the Sologne marshes supply a considerable quantity of good leeches. Poultry and game are plentiful. The department contains a good deal of natural and artificial grass-land, and in the arrondissement of Romorantin there are large pine-woods. The climate is in general mild and healthy, except in the marshy district of Sologne.

Iron-mines are worked; alabaster and building-stone are quarried; marl and potters' clay are found. Great quantities of gun-flints were formerly procured from the layers of flint in the chalk deposits of this department.

The manufactures consist of coarse woollens, blankets, swanskins, cotton cloth, hosiery, leather gloves, beet-root sugar, woollen yarn, leather, glass, and earthenware. About 160 fairs are held annually. The department contains 465 wind- and water-mills, 61 iron-foundries and smelting-furnaces, and 194 factories.

The area of the department is 1,569,408 acres, of which 913,500 acres are arable land; 77,500 acres are grass and meadow land; 65,710 acres are under vineyards; 201,813 acres are covered with woods and forests; 200,153 acres consist of heaths and barren moors; 84,161 acres of ponds, rivers, canals, &c.; and 19,030 acres are under orchards, nurseries, gardens, and plantations of different kinds.

The department is divided into three arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Blois . . .	10	138	181,817
2. Romorantin . . .	6	48	50,523
3. Vendôme . . .	8	110	79,553
Total . . .	24	296	261,892

1. Of the first arrondissement, and of the whole department, the capital is BLOIS. Of the following places the population given is that of the canton:—*Mer*, N.E. of Blois, on the right bank of the Loire, has 3686 inhabitants, who manufacture leather, and trade in wine, brandy, and vinegar. Close to *Mer* is *Menars*, where there is a very fine château, in which some years ago the Prince de Chimay, its owner, established a college. *Montrichard*, formerly an important fortress, defended by a strong castle, now in ruins, is situated on a hill on the

right bank of the Cher, 18 miles S. from Blois, and has 2526 inhabitants. The ancient walls of the town, which are pierced by four gates and flanked with towers, are still in a good state of preservation. The castle of Montrichard was founded A.D. 1010 by Foulques Nerra, count of Anjou, on his return from the Holy Land. The ground on which the castle was built belonged to Gelduin, lord of Saumur and Pont-le-Voy, who appealed to Eudes II., count of Blois, for redress. The latter assembling his forces at Pont-le-Voy attacked the Angevine troops, which marched out of Montrichard to meet him (July 16, 1016); the result of the engagement was the defeat and capture of Foulques Nerra. But Herbert, count of Maine, who had prudently effected a retreat from the previous battle, watching his opportunity, defeated Eudes a few days after, and delivered the Count of Anjou and all the other prisoners. The castle came into the hands of the lords of Amboise, the heirs of Gelduin. The kings of England, as counts of Touraine, strengthened the castle and maintained a garrison in it. In 1188 Philippe Auguste took it by assault, but by the treaty of Colombiers (July 5, 1190) it was restored to the king of England, and Richard Cœur-de-Lion then rebuilt the castle and surrounded the town with walls, which still remain. Near *St.-Aignan*, a small town close to the southern boundary, on the left bank of the Cher, are the great gun-flint quarries from which the French armies were supplied.

2. In the second arrondissement the chief town, *Romorantin*, stands at the junction of the Morantin with the Sauldre, 24 miles S.E. from Blois, and has tribunals of first instance and of commerce, a college, and 7962 inhabitants in the commune. The town, formerly ill built, has been considerably improved of late years, the streets having been widened and laid out more regularly, houses erected in a modern style, and the roadways well paved. It has important manufactures of cloth and woollen stuffs, several spinning-factories, tan-yards, and parchment-milla. At the siege of this town by the Black Prince, in 1366, Froissart says that artillery was used. The prince, compelled by King John to raise the siege, retreated towards Poitiers, where, overtaken by the French army, he gained his celebrated victory. *Selles-sur-Cher*, situated in a fertile country, 10 miles S.W. from Romorantin, on the Cher, which is here spanned by a fine bridge, has 4252 inhabitants, who manufacture cloth, and trade in corn, wine, &c. At one end of the town stands a fine château, erected by Philippe de Bethune.

3. In the third arrondissement the chief town, *Vendôme*, prettily situated on the slope of a vine-clad hill, above the Loir, which here divides into two branches, stands 19 miles N.W. from Blois, and has a tribunal of first instance, a college, and 8100 inhabitants, who manufacture woollen stuffs, gloves, cotton-yarn, calico, leather, and paper. The town is well built. On the height above it are the ruins of the old castle of the dukes of Vendôme, from which there is a fine view of the scenery of the Loir. Among the more remarkable structures are the church of La-Sainte-Trinité; the Benedictine monastery, now used as a barrack; the desecrated church of St.-Martin, now converted into a corn-market; the college buildings; and the theatre. Vendôme from a very early period gave name to a county, which in 1514 was raised to a duchy. In the wars of the League the town was taken by each of the opposing parties. Henri IV. took it by assault and dismantled the castle, which has since fallen to ruins. The Parliament of Paris met in the castle of Vendôme in 1227, during the minority of St.-Louis; and again in 1458, to try the Duke of Alençon for treason. Charles VII. and Francis I. resided in it occasionally. *Mondoubleau*, a small place of 1671 inhabitants, is prettily situated on a hill above the Graians, a small feeder of the Braye, 15 miles N.W. from Vendôme. A fine old castle, with walls, towers, and ditches, still nearly entire, stands above the town, and formed one of the chain of fortresses that defended the frontier of the old province of Maine. *Montoir*, a pretty town on the right bank of the Loir, and at the foot of a hill crowned by the château of St.-Otrille, has 3306 inhabitants, who manufacture linen, woollen hosiery, and leather. The church of St.-Gilles, the interior of which is richly ornamented with frescoes, and the handsome square in the centre of the town, are the most remarkable objects. *Savigny*, near the left bank of the Braye, in the north-west of the department, has a population of 3065.

The department forms the see of the bishop of Blois, is included in the jurisdiction of the High Court of Orléans, and belongs to the 18th Military Division, of which Tours is head-quarters. Loir-et-Cher is one of the departments comprised within the limits of the University Academy of Paris. It returns two members to the Legislative Body of the French empire.

LOIRE, LA (the *Liger* or *Ligeris* of the Romans, a river in France, the basin of which is bounded E. by the Cévennes and the Côte-d'Or, which divide it from the basin of the Rhône; N. by the Morvan Hills, the plateau of Orléans, the heights of Beauce, and their continuation westward round the source of the Mayenne, whence a ridge of hills runs in a south-south-west direction to the neighbourhood of Châteaubriant forming the watershed between the Loire and the Vilaine; and S. and S.W. by the Margeride Mountains, and the volcanic group of Auvergne, with its ramifications westward to the Atlantic, including the Limousin Mountains and the plateau of Gâtine. The limits thus described include a fourth part of France. The greatest length of the basin from north-west to south-east is 370 miles; its greatest breadth, 224 miles. Its area is estimated at above 50,700 square miles.

The Loire rises in Mont Gerbier-des-Joncs, one of the Cévennes in the neighbourhood of Mount Mezen, in the department of Ardèche. The general direction of its course is at first north, then north-west to Orléans, where it turns westward, and continues in this direction to its entrance into the Atlantic, 36 miles below Nantes. The number of streams received by the Loire is very great; its navigable feeders from the right bank are the Arroux, the Maine (formed by the junction of the Mayenne and the Sarthe); from the left—the Allier, the Loiret, the Cher, the Indre, the Vienne, the Thouét, the Sèvre-Nantaise, and the Achenau, all of which, with their feeders, give a total amount of internal navigation of about 1300 miles. In the upper part of its course, above the junction of the Allier, the valley of the Loire is narrow. At its source the Loire is about 4000 feet above the sea-level; below Nevers, at its junction with the Allier, 550 feet; at Orléans, 294 feet; a little below Tours, 160 feet; at the junction of the Mayenne, 115 feet; and at Nantes, 83 feet above the sea-level.

The whole course of the Loire is 546 miles, of which 505 miles are navigable; but of these 44 miles, from La-Noirie to Roanne, are navigable down the stream only. The navigation is interrupted by frost, deficiency of water, or by floods, during three or four months in the year. River steamers ply between Nantes and Moulins on the Allier. For two-thirds of the distance above Roanne the Loire is available for floating timber.

This river, with its larger affluents, constitutes the great outlet for the produce of central and western France. The banks are celebrated for their beauty, particularly in the neighbourhood of Tours. From the melting of the snows in the Cévennes, in which it has its source, the Loire is subject to great inundations, to prevent which it has been embanked in the level tracts below Orléans. [INDRE-ET-LOIRE.] The sand and soil which its waters bring down from islands or shifting banks in its course, which materially impede the navigation, especially above Orléans: to avoid this inconvenience a canal has been formed along the left bank of the river, from the Canal-du-Centre, at the junction of the Arroux, to the Canal de Briare, at Briare near Gien. The tide flows about 40 miles up the river to a short distance above Nantes. [LOIRE-INFÉRIEURE; NANTES.] The Loire is connected with the Saône by the Canal-du-Centre; with the Seine by the canals de Briare, d'Orléans, and du-Loing; and with Brest Harbour by the canal from Nantes to Brest.

At its mouth the Loire is about 7 miles wide, between Paimboeuf and St.-Nazaire, where formerly large vessels of all nations were seen afloat, prevented from going up to Nantes by the shallowness of the stream; only vessels of about 300 tons could get up to Nantes, larger vessels unloaded by means of lighters; but since the introduction of steam-tugs all vessels, except those of the largest size, are hauled up to Nantes with the flow tide. The entrance of the river is dangerous in consequence of the shoals and banks that traverse it, and of its want of shelter. In hard weather vessels make for Quiberon. The mouth of the river is indicated by two lighthouses—d'Aiguillon and du Commerce—which stand on the north shore about a mile apart. The d'Aiguillon light, 101 feet high, stands in 47° 15' N. lat., 2° 15' W. long. The du Commerce tower is 128 feet high, has a remittant light at three-minute intervals, and stands in 47° 16' N. lat., 2° 14' W. long. The distance between the two lights is 2132 yards. The general fall of the river is 2-132 feet in every 2132 yards of its course; its course therefore is rapid. In ordinary floods its waters rise 13 to 15 feet; in extraordinary floods 20 to 23 feet above low-water mark. The general width between the summits of the embankments is 639 yards, and the breadth of the stream in the embanked portion is ordinarily 419 yards.

LOIRE, a department in France, named from the river Loire, is bounded N. by the department of Saône-et-Loire, E. by those of Rhône and Isère, S. by those of Ardèche and Haute-Loire, and W. by those of Puy-de-Dôme and Allier. It extends from 45° 13' to 46° 17' N. lat., 3° 41' to 4° 45' E. long. Its greatest length is 77 miles; its average width is about 29 miles; the area is 1841-8 square miles. The population in 1841 amounted to 484,085; in 1851 to 472,588. This last number gives 256-5 to the square mile, being 82-01 above the average per square mile for the whole of France.

The department, which comprises the old province of Forez and portions of Lyonnais and Beaujolais, was included in the department of Rhône till 1793. It belongs almost entirely to the basin of the Loire, which is separated from that of the Rhône by the Cévennes Mountains on the east, and from that of the Allier by a secondary chain of the Cévennes Mountains on the west. The highest point of the eastern mountains is Mont Pilat, which rises 1509 feet above its base and 3985 feet above the sea. The highest summit of the western chain, which is connected also with the mountains of Auvergne, is Pierre-sur-Haute, 3884 feet above the level of the sea. The interior of the department may be described as two large inclined plains descending from these two mountain ranges, and intersecting in the water-line of the Loire; but as the mountains, in their course northward, trend off respectively in directions nearly north-north-east and north-north-west, the northern portion of the department has more the appearance of a single wide plain, which includes part of the former provinces of Beaujolais and Bourbonnais, and is called the plain of Roanne. The rest of the department is called the plain of Forez; and between it and the plain of Roanne the division is marked by a

chain of hills running east and west, and uniting the two mountain ranges before named, except at the point where it is broken through by the Loire. A small portion of the south-east of the department extends eastward of the Cévennes into the basin of the Rhône, which river runs along the boundary for about 6 miles. In the western part of the plain, at the foot of the mountains, several isolated volcanic swells, consisting of black basalt, lie in a general direction of north and south, and have in some instances their summits crowned with the ruins of ancient castles or monasteries. There are several of these basaltic excrescences on the slope of the mountains also.

The principal rivers are the LOIRE and the RHÔNE, by means of which the various industrial products of the department are conveyed to the Atlantic, or to the Mediterranean. The Loire runs through the centre of the department in a direction of north by west, and is navigable, in its whole length, in this department; but owing to the rapidity of the current it is only the down navigation that is available as far as Roanne, where the general navigation of the river commences. Its principal feeders in this department are the Ondène, the Furens, the Coise, the Lignon, and the Sornin. The *Gier*, the only feeder which the Rhône receives from this department, rises in Mont Pilat, in descending which it forms several cascades, passes St.-Chamond and Rive-de-Gier and enters the Rhône at Givors. The lateral canal of the Loire from Roanne to Digoin runs through the north of the department; another, the Givors Canal, which is fed by the Gier, runs from Rive-de-Gier to the Rhône. The department contains many ponds and tarns, about 450 of which are in the plain of Forez. A railroad runs along the right bank of the Loire, from Roanne to St.-Étienne, with a branch westward to Montbrison. From St.-Étienne the line is carried through the Cévennes, and continues up the right bank of the Rhône to Lyon; its length in this department is 79 miles. The department is also traversed by 6 state, 11 departmental, and 21 parish roads.

The heights of Forez and La-Madeleine, separating the valley of the Loire from that of the Allier, are chiefly composed of granitic rocks or of the older limestones and sandstones, disturbed in places by those curious protuberances of compact basalt thrown up by ancient volcanic agency already alluded to. Part of the high ground between the Loire and Rhône is occupied by the coal-measures; and the valley of the Loire is occupied by strata belonging to the supracretaceous group.

The mountains of the department abound with excellent pasture and medicinal plants; their lower slopes are cultivated or covered with vineyards and chestnut woods. In the upland districts of the department great numbers of cattle are reared and much cheese is made. In the plains the common breadstuffs—wheat, rye, barley, oats, &c.—are grown, but in quantity insufficient for the consumption; hemp, excellent fruits, oleaginous seeds, and dyestuffs are also raised. About 6,000,000 gallons of good ordinary red and white wines are produced annually. Horses and black cattle are small; the sheep are noted for their sweet flesh; poultry and game are abundant. In the valley of the Rhône, mulberry-trees are extensively grown for the production of silk. There are also extensive forests of pine, fir, beech, and oak; on Mont Pilat, near St.-Étienne, an immense number of deals are cut, saw-mills being established on every available stream of water. But much of the finest pine-timber is made into charcoal, in consequence of the great difficulty of transport from the mountain-heights on which it grows; the finest trees vary from 98 to 115 feet in height. Great quantities of chestnuts are grown; these enter largely into the food of the people; the finest are sent to Paris, where they are sold (like those of Ardèche) under the name of Marrons de Lyon.

The department contains one of the richest coal-fields in France, which, besides supplying the numerous factories and furnaces of St.-Étienne, and other places in the department, also furnishes large quantities for exportation to Lyon and the towns on the Rhône. The quantity of coal annually furnished by the mines of Loire amounts to one-third of all the coal raised in France. Lead- and iron-mines are also worked; building stone, granite, potters' clay, &c., are found; mineral springs are numerous.

The manufactures of the department are of great variety and importance, and give rise to a very extensive commerce. The chief products are fire-arms, ironmongery, and machinery of all kinds, silks, ribands, crape, velvet, plush, laces, linen, cotton, glass, bricks, steel, iron, scythes, hardware, canvas, mill-castings, files and tools of all descriptions, cotton and linen yarn, lace, cutlery, earthenware, tiles, lime, &c., &c. Great numbers of coal-barges and canal-boats are built at Roanne and St.-Rambert. The great centre of manufacturing industry is St.-Étienne. The number of wind- and water-mills amounts to 936; of iron- and steel-works to 94; of factories of different kinds to 714. About 300 fairs are held yearly for the sale of cattle and agricultural produce.

The department contains 1,173,780 acres, of which area 613,100 acres are arable land; 211,609 acres natural pasture land; 34,342 acres are laid out in vineyards; 156,824 acres are covered with woods; 31,821 acres with rivers, ponds, canals, &c.; 92,329 acres consist of barren heath and moorland; and 85,322 acres are occupied with roads, streets, buildings, &c.

The department is divided into three arrondissements, which, with their sub-divisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Montbrison . . .	9	138	132,116
2. Roanne . . .	10	108	135,324
3. St.-Étienne . . .	8	73	205,148
Total . . .	27	319	472,588

1. Of the first arrondissement, and of the whole department, the capital is *Montbrison*, which stands on the *Vizézy*, a small feeder of the Loire, in 45° 36' N. lat., 4° 8' 45" E. long., at a distance of 45 miles W. from Lyon (60 miles by railway), and has 6435 inhabitants in the commune. It is built round a basaltic hill (from the summit of which there is a fine view over the plain of Forez), and at the extremity of a branch railroad that joins the St.-Étienne-Roanne line at Montbrison. The town, which is ill built, with narrow winding streets and low houses, has a tribunal of first instance, communal and ecclesiastical colleges, a primary normal school, and a public library of 15,000 volumes. The principal building is the cathedral of Notre-Dame, which dates from 1225. The old ramparts and ditches are now replaced by handsome promenades. Montbrison is the capital of the department of Loire, which distinction it owes solely to its central situation; for with respect to population, for commercial and industrial activity, it is greatly surpassed by St.-Étienne and Roanne. The town originated in a castle and church built on the summit of a volcanic hill by the counts of Forez in the 13th century. It became the chief town of Forez and was taken and burnt by the English in the 14th century. In the religious wars of the 16th century it was taken by the ferocious baron Adrets, who committed unparalleled cruelties against the townfolk and the garrison. In 1590 the Leaguers, under the Duke de Nemours, took the castle of Montbrison, which was soon afterwards demolished by Henri IV. Of the other towns that are noticed the population is that of the commune in each case. *St.-Bonnet-le-Château*, on a high hill in the south of the department, and on the Roman road made here by Agrippa, has 2066 inhabitants. *Chazelles-sur-Lyon*, a small but well-built walled town E. of Montbrison, has a population of 3011. *Feurs*, the ancient *Forum Segusianorum*, and the midway station on the railroad from St.-Étienne to Roanne, from each of which towns it is 25 miles distant, stands in a fertile, well-watered plain near the right bank of the Loire, and has 2646 inhabitants. Roman antiquities, comprising four milestones, remains of an aqueduct, some mosaics, corinthian columns, and baths, still exist in the town; the high stone dykes which confine the Loire in the neighbourhood are said to be of Roman construction. The territory of Forum was called *Pagus Forensis*, whence the Forez is said to derive its name. The church of Feurs is built with materials from Roman buildings. *St.-Galmier*, 12 miles E. of Montbrison, on the St.-Étienne-Roanne railroad, 37 miles from Roanne, stands on a high hill near the right bank of the Coise, and has a population of 2758. It is said to occupy the site of the ancient *Aqua-Segeto*: and is still famous for its cold mineral spring. *St.-Rambert*, 11 miles S.E. from Montbrison, is prettily situated on the left bank of the Loire, and has 3078 inhabitants. The church of St.-Rambert is remarkable for its great antiquity. Nearly 3000 barges are built here annually, and sent down the Loire laden with coal to Roanne. In the neighbourhood are several iron-forges and smelting furnaces. *Sury-le-Comtal*, 7 miles S. from St.-Rambert, for a long time the residence of the counts of Forez, whose castle is still in good preservation, has 2454 inhabitants.

2. In the second arrondissement the chief town, *Roanne*, is situated on the left bank of the Loire, which is here navigable, at a distance of 50 miles by railroad from St.-Étienne, and has a tribunal of first instance, a consultative chamber of manufactures, a college, and 13,221 inhabitants in the commune. The town is well-built, with straight wide streets, formed by handsome houses; the bridge over the Loire, the public library, and the college buildings are the most remarkable structures. The manufactures, which are important, consist of mualin, calico, broadcloth, handkerchiefs, glue, oil, porcelain, linen thread, cotton-yarn, and leather; there are several dye-houses, and numerous boat-building yards. By means of the lateral canal of the Loire, which enters that river at Digoin, and by the numerous canals and rivers that join the Loire, Roanne has water communication with all the principal towns in France. The trade in corn, wine, flour, spun cotton, calico, planks, coal, charcoal, the manufactures of Lyon, and of the southern and eastern departments of France, is very considerable. *Belmont*, 3 miles N.E. from Roanne, has 3440 inhabitants. *Charlieu*, 12 miles N by E. from Roanne, on the Sornin, a feeder of the Loire, is famous for the remains of a Benedictine abbey, and has 3689 inhabitants, who manufacture linen, cotton, silk and cotton-yarn, and shoe- and glove-leather. The hospital of Charlieu, one of the oldest in France, was founded by St.-Louis. *Perreux*, on the Rodon, 4 miles from Roanne, has 2517 inhabitants. *St.-Symphorien-de-Lay*, 10 miles by railway S.E. from Roanne, has cotton factories, coal-mines, and 8989 inhabitants.

3. Of the third arrondissement, the chief town is *St.-Étienne* [*ÉTIENNE, St.*] *Bourg-Argental*, on the *Décome*, in a fertile valley abounding with mulberry plantations, from which silk of the best

quality is produced, stands 18 miles S. from St.-Étienne, and has 2629 inhabitants. *Le-Chambon*, 3 miles from St.-Étienne, is situated on the *Dondaine-Vachery*, and has 4028 inhabitants, who manufacture ribands, iron- and steel-ware, table cutlery, pocket-knives, &c. *St. Chamond*, beautifully situated at the confluence of the Gier and the Janon, 7½ miles N.E. from St.-Étienne, and near the Lyon-St.-Étienne railway, is a busy manufacturing town, containing a consultative chamber of manufactures, a council of prud'hommes, and 8204 inhabitants. The town is well built, and presents a great number of elegant houses inclosed in gardens. The church of St.-Chamond, the public baths, and promenades are the most remarkable objects in the town. There are extensive coal-mines, iron-forges, and smelting-furnaces in the environs. The town contains a great number of silk-mills, and has important manufactures of ribands, stay-laces, nails for the navy, hardware, &c. *Pelussin*, situated at the foot of Mont Pilat, at a short distance from the Rhône, and in a fertile wine district, has 3511 inhabitants. The preparation of raw silk for manufactures, and the working of the porphyry quarries of the neighbourhood, afford employment to a considerable part of the population. *Rive-de-Gier*, 13 miles N.E. from St.-Étienne, on the Lyon-St.-Étienne railroad, previous to 1815 had under 4000 inhabitants; it now has a population of above 12,000. It is built on the Gier, here crossed by several bridges, and rendered navigable by the Canal-de-Givors, which runs from this town to Givors on the Rhône. The town owes its prosperity to the coal-mines, exceeding 40 in number, which are worked in the neighbourhood. The basin of the canal is lined with quays, backed by vast coal stores. The reservoir of the Canal-de-Givors, a little south of the town, is formed by massive mason-work, and is a fine work of its kind. Besides its great trade in coal, with which Lyon and several other towns are supplied, Rive-de-Gier has above 40 glass-works, steam-engine-factories, iron-foundries and forges, steel-works, silk-mills, riband-factories, &c. At *Terre-Noire*, a station on the railway from St.-Étienne to Lyon, there are important iron-furnaces and foundries.

The department forms with that of Rhône the see of the archbishop of Lyon and Vienne; it is comprised in the jurisdiction of the High Court and University Academy of Lyon, and is included in the 8th Military Division, of which Lyon is head-quarters. It returns three members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1849; Statistique de la France; Official Papers.*)

LOIRE, HAUTE, a department in France, takes its name from its situation in the upper part of the basin of the Loire, and is bounded N. by the departments of Puy-de-Dôme and Loire, E. by Ardèche, S. by Lozère, and W. by Cantal. Its greatest length from east to west is 69 miles, from north to south 46 miles; it extends from 44° 44' to 45° 25' N. lat., and from 3° 4' to 4° 26' E. long. The area is 1916 square miles, and the population in 1841 was 298,137, in 1851 it was 304,615; which last gives 158.98 to the square mile, being 15.6 below the average per square mile for all France.

The department comprises the old district of Velay with portions of the Gévaudan, Forez, and Auvergne. The surface is mountainous. The Cantal Mountains, and the Margeride Chain, which unites them to the Cévennes, cover with their offshoots so much of the south-west and south of the department as lies on the left bank of the Allier: the south-eastern and eastern districts are occupied with the mass of the Cévennes, from which a secondary chain, running through the interior nearly north and south, forms the watershed between the Allier and the Loire, and is joined, near Chaise-Dieu, by another range that runs north-west from Mont Mezen, the culminating point of the Cévennes [CÉVENNES; ARDÈCHE]. The country, thus surrounded and traversed by mountains, is furrowed by numerous rivers, brooks, and torrents, which flow with rapid descent, either between steep banks that expose to view the volcanic formation of the country, or through picturesque and fertile valleys whereof the soil consists of decomposed lava and other volcanic deposits. On the mountains, which present numerous conical peaks and craters, and have their summits covered with snow, during five or six months in the year, there are large forests and extensive pastures, where great numbers of cattle and mules, the chief wealth of the country, are reared. The lower slopes are covered with chestnut woods and vineyards. In the north-west and north-east of the department there are some extensive plains of considerable fertility, all covered with a soil of decomposed volcanic matter.

The principal rivers are the ALLIER, which drains the west of the department; and the LOIRE, which, swelled by the Gazeille, the Lignon, and the Somme, from the right bank, by the Borne, the Arzon, and the Ance, from the left, drains the central and eastern districts. The department is traversed by 6 state and 12 departmental roads.

The agricultural produce of the department suffices the consumption. The usual crops are wheat, rye, barley, oats, mixed grain, beans, &c.; fruits are abundant. Of wine only 1,264,000 gallons are produced, and this is of inferior quality. Mules are reared in great numbers; horned cattle and pigs are fattened. Among the wild animals are boars, wolves, foxes, wild cats, badgers, &c.

The geological structure and mineral wealth of the department are of great variety, though the latter is not turned to much advantage.

The mountain range which runs north-west from Mont Mezen consists of trachytic rocks, and is reckoned among the most ancient of the volcanic structures of central France. Mont Mezen itself the culminating part of the Cévennes is a vast mass of volcanic accumulation, above 5000 feet high. [CÉVENNES.] The district of the *Velay*, which lies south and south-west of this range, and comprises nearly all the south of the department, is occupied with basaltic rocks and lava beds, the great antiquity of which is proved by their being covered with a soil formed by the decomposition of their surface. Along the banks of the rivers in this district, the basaltic columns laid bare to view assume a variety of beautiful forms; and the charred fragments of ancient eruptions, which were long subsequently rolled and worn in watercourses that have disappeared for ever, are seen in other places deposited in beds of clay and marl, piled up alternately one upon the other. Among the primitive rocks are found granite, gneiss, quartz, mica-schist, &c. Coal, lead-, and antimony-mines are worked; iron- and copper-ores are found at various points. Chalcedony, diamond-spar, sapphires, amethysts, tourmalines, &c., are found, and also marble, millstone-grit, gypsum, &c., &c. Mineral springs are numerous; they are all saline or acidulous.

The manufactures consist of common articles of necessity and use, and are unimportant, with the exception of silk and thread lace and ribands. The people are in general poor, and many of them emigrate during the winter months as sawyers, hawkers, porters, sweeps, &c. About 300 fairs are held.

In a country the highest point of which, Mont Mezen, is 5820 feet above the sea-level, whilst its lowest point, namely, where the Allier crosses the northern border, is only 1279 feet above the same level, there is room for great variety of climate and season. Seed-time and harvest differ in different cantons according to the elevation, the maximum variation amounting to as much as two months; and such is the difference of climate, that, while in some districts the vine flourishes, in others rye will hardly ripen. The south-west wind blows at times for weeks continually, and with great violence; the west and north-west winds bring rain.

The department contains 1,226,246 acres, of which area 560,258 acres are arable; 196,288 acres are grass land; 14,569 acres are occupied with vines; 177,896 acres with woods and forests; 222,994 acres consist of barren heaths and moors; 9371 acres of orchards, gardens, and plantations; and 12,680 acres are covered with rivers, tarns, and brooks.

The department is divided into three arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Le-Puy	13	111	134,430
2. Ysengeaux	6	37	87,161
3. Brioude	8	107	83,024
Total	27	255	304,615

1. In the first arrondissement the chief town, *Le-Puy*, which is now the capital of the whole department, as it formerly was of the district of Velay, is situated at the foot and around the southern slope of a steep hill, at the junction of three pretty valleys, watered respectively by the Loire, the Borne, and the Dolaison, in 45° 2' 46" N. lat., 3° 52' 55" E. long., 66 miles S.W. from Lyon, and has 14,004 inhabitants in the commune. Except the broad street at the foot of the hill, through which the roads from Clermont and Lyon run, the rest of the town is built in form of an amphitheatre round the steep sides of Mont Anis, which is surmounted by a lofty basaltic rock called *Corneille*. From a distance *Le-Puy* presents a most picturesque appearance: but the interior view disappoints the expectations thus raised. The streets are irregular, narrow, and in the upper part of the town inaccessible to carriages; they are paved with volcanic breccia, which in all weathers is slippery and dangerous to walk upon. The most important structures are—the cathedral, situated in the highest part of the town (the pavement of the nave is 2250 feet above the level of the sea); the church of St.-Laurent, situated at the foot of the hill, and containing the monument and part of the remains of Du-Guesclin; the prefect's residence in the spacious square of Du-Breuil; the college church; the museum, near the cathedral, in which are numerous paintings, Roman antiquities, and one of the best collections of geological and mineralogical specimens in France; the theatre, an ancient structure, supposed to have been a heathen temple; the ecclesiastical college; and the *Parneassac* gate, a fine specimen of military architecture over one of the promenades of the town. *Le-Puy* is the seat of a bishop, and contains tribunals of first instance and of commerce, a consultative chamber of manufactures, a college, a public library, and various literary and scientific societies. In the suburb de l'*Aiguille* is an isolated basaltic rock of pyramidal form, and 285 feet high, which is ascended by a staircase of 218 steps cut in the rock, and is surmounted by the highly ornamented chapel of St.-Michel, erected in the 10th century. Between this rock and that of *Corneille* stands a heptagonal building, said to have been a chapel dedicated to St. Clair, and now used as a corn-store. The chief industrial products of *Le-Puy* are lace, coarse woollens, wine-skins, nails, and leather; the commerce is in these articles, and in corn, iron, pottery, cattle, &c.

St.-Paulien, built on the ruins of an ancient city, said to be *Ruessium*, or *Revesia Vellavorum*, has a population of 3016; several Roman coins, vases, and monuments with inscriptions have been found and are preserved here. *Saugues*, a town of 3805 inhabitants, stands in a rich corn and pasture country, 16 miles W.S.W. from Le-Puy, and has some woollen manufactures. Just outside the walls is a monument of rudely cut stone without inscription, which is traditionally called the Tomb of the English General.

2. In the second arrondissement the chief town is *Ysengeaux*, or *Issengeaux*, an ill-built gloomy place, is situated on a rocky hill 14 miles N.E. of Le-Puy, and has a tribunal of first instance, a college, and 7518 inhabitants, who manufacture silk, lace, and ribands, and trade in timber, cattle, sheep, &c. It is supposed to occupy the site of *Icidmagus*. The town has a handsome pariah church, the pavement of which is 2822 feet above the level of the sea. It contains also several large and well-built houses. *Bas-en-Basset*, on the left bank of the Loire, 12 miles from Ysengeaux, has 5783 inhabitants, who manufacture lace and pottery. The town, which is commanded by the old castle of Rochebaron, has a mineral spring. *St.-Didier*, 14 miles N.E. from Ysengeaux, has silk factories and 3972 inhabitants, who manufacture ribands and articles in papier-mâché. *Monistrol*, 12 miles N.E. from Ysengeaux, near the right bank of the Loire, is an ugly ill-built town, with an important corn-market, and 3975 inhabitants, who manufacture lace, ribands, hardware, satin, silk handkerchiefs, leather, and papier-mâché articles. A few miles east of Ysengeaux is *Montfaucon*, the old capital of the Velay. It was destroyed in the religious wars of the 16th century, and is now a small place of only 1200 inhabitants. It was formerly defended by a very strong castle, and gave title to a barony. *Tence*, a manufacturing town of 5468 inhabitants, is prettily situated on the right bank of the Lignon, 9 miles E. by S. from Ysengeaux.

3. In the third arrondissement the chief town, *Brioude*, is situated 29 miles N.W. from Le-Puy, near the left bank of the Allier, and has tribunals of first instance and of commerce, a college, and 4635 inhabitants. It is an ill-built town, and stands on a site 1466 feet above the sea. The most remarkable structures are the church of St.-Julien and the college buildings. Brioude occupies the site of the ancient *Brivas*, a town of the Arverni. There is said to have been a Roman bridge over the river here, and that this circumstance gave origin to the name Briva, or Brivas, meaning a bridge. Constantine is said to have built a church in Brivas. The church of St.-Julien dates from the reign of Louis le Débonnaire, and occupies the site of a still more ancient church, which was built over the spot where the saint suffered martyrdom. *La-Chaise-Dieu*, 15 miles E. from Brioude, a town of 2000 inhabitants, takes its name from the monastery of Chaise-Dieu (*Casa Dei*), which, with the exception of the church, was destroyed during the revolution of 1793. The abbey church, a gothic structure, erected about the middle of the 14th century, at the expense of Pope Clement VI., a native of Chaise-Dieu, is considered one of the finest abbey churches remaining in France; it contains tombs of Clement VI. and Gregory XI., some very ancient tapestries, and is greatly admired for the carved wood-work of the 156 stalls in the choir. The walls of the choir are ornamented with ancient paintings in fresco, representing the Danse Macabre, or Dance of the Dead. The total length of the church is 302 feet, and the width within the walls 95 feet. The choir is 131 feet long, and its bold groined roof is supported by 22 pillars, each 26 feet in circumference. In the middle of the choir is the black marble monument of Clement VI., who was educated in the abbey of Chaise-Dieu and buried in the church. The organ is a splendid instrument. The portal entrance of the church is decorated with numerous bas-reliefs executed in black basalt. *Langeac*, built in a pretty situation, on the left bank of the Allier, has 3231 inhabitants. There are coal-mines and stone-quarries near this town.

The department forms the see of the Bishop of Le-Puy, is included in the jurisdiction of the High Court of Riom, and of the University Academy of Clermont, and belongs to the 20th Military Division, of which Clermont is head-quarters. It returns two members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

LOIRE-INFÉRIEURE, a department in the west of France, is bounded N. by the departments of Morbihan and Ille-et-Vilaine, E. by those of Mayenne and Maine-et-Loire, S. by that of Vendée, and W. by the Bay of Biscay. It extends from 46° 52' to 47° 52' N. lat., 0° 55' to 2° 32' W. long.; its greatest length from east to west is 74 miles, from north to south 69 miles. The area is 2654.3 square miles: the population in 1841 was 486,806; in 1851 it amounted to 535,664; which last gives 201.89 to the square mile, being 27.31 above the average per square mile for all France. The department is formed out of part of Bretagne, and derives its name from its position along the lower course of the river Loire. The south-west portion of the department constituted the old duchy of *Retz*, of which Pornic, Paimboeuf, and Macheouel were the chief towns. It was originally included in Aquitaine, in the extended application of that term [AQUITAINE]; subsequently it belonged to Poitou; and finally it was annexed to the diocese of Nantes, and thus came to be considered part of Bretagne. The castles of Macheouel and Champtoce (the latter near Ingrande, in the department of Maine-et-Loire) were the

scenes of the atrocious crimes of Gilles de Laval, lord of Retz, the original of Blue Beard.

The coast line is about 55 miles in length. It presents an irregular outline, broken towards the north by the bays of Pennebe and Pembron, which are separated by the promontory of Piriac and by the bay of Croisic, sheltered on the south and west by the long tongue of land on which the town of Croisic is built; in the centre by the embouchure of the Loire, to the north of which are some islets called the *Leven Isles*; and in the southern part by the large Bay of Bourgneuf, which extends southward from Point-St.-Gildas between the mainland and the island of Noirmoutier. Of the promontory of Croisic there is a dangerous ledge called *Le-Four*, on which a lighthouse is built. There are considerable salt-marshes along this coast.

The surface of the interior of the department is level, with the exception of a line of low hills, which crosses it in the north, forming the watershed between the Loire and the Vilaine. The principal river is the Loire, which enters the department below Ingrande in Maine-et-Loire, and divides it into two unequal parts. It is 5 miles wide at its mouth, and is navigable for large vessels up to Nantes, to a few miles above which the tide ascends. [LOIRE, LA.] The principal feeders of the Loire in this department are, from the left, the Sèvre-Nantaise [SÈVRES, DEUX] and the Achenau, which last is the outlet of the Lake of Grand-Lieu; from the right, the Erdre, which below Nort swells out into the proportions of a lake, and enters the Loire at Nantes. The Vilaine touches the department on the north-west, receiving the Don and the Isaac. The other most considerable rivers are the Maine and the Moine, feeders of the Sèvre-Nantaise; the Ognon and the Boulogne, which flow from Vendée into the Lake of Grand-Lieu; the Falleron, a small stream which falls into the Bay of Bourgneuf, after forming for about 10 miles the boundary between Loire-Inférieure and La Vendée; the Brivé, which enters the Loire above St.-Nazaire; and the Tenu, a feeder of the Achenau. The department is crossed by the canal from Nantes to Brest; also by 6 royal, 17 departmental, and a great number of pariah roads. A railway through Angers, Tours, and Orléans connects Nantes, the capital of the department, with Paris. The climate is healthy, although somewhat damp; the heat in summer is often very great.

Grand-Lieu, the largest lake in France, and the reservoir for the waters of the Boulogne, the Ognon, and some smaller streams, is situated near the left bank of the Loire, with which it has communication by its navigable outlet the Achenau. It has an area of 29 square miles, and abounds in fish; its shores are marshy. North of the Loire there are many small lakes, and extensive marshes and bogs. It has been recently proposed to drain the lake of Grand-Lieu.

The quantity of cereal grain produced suffices the consumption. The chief crops of this kind are wheat, rye, buckwheat, and mixed grain. Barley is grown in small quantity. The meadows and pastures along the Loire, in the islands formed by the deposits of the river, and in the neighbourhood of the marshes are excellent. Cattle of good breed are very numerous; horses, of which also great numbers are reared, are small. The apple-tree is extensively cultivated north of the Loire for making cider; and in the same district there are forests of vast extent. The *Bocage* district, which stretches south-east of the Lake of Grand-Lieu, is hilly and well wooded, as the name implies, every field being inclosed with hedgerows and lines of timber-trees. The vineyards of the department yield 32,200,000 gallons of wine annually, rather less than a third of which is used for the home consumption; of the surplus part goes to the supply of Paris, some is distilled into brandy, and the rest is sent to Orléans to be converted into vinegar. The wines are considered of middling quality; the sweet wines are prized for their agreeable flavour and for their keeping qualities. Fishing affords occupation to a great number of the inhabitants. The principal kinds of fish taken along the coast are mackerel, herring, salmon, turbot, sardines, soles, skait, oysters and other shell-fish, &c.

The department is occupied chiefly by the coal-measures, and the underlying strata is covered in some places by alluvial deposits. Granite, quartz, mica, kaolin, and feldspar are found in the arrondissement of Nantes; in that of Châteaubriant extensive slate-quarries are worked, and iron-ore is abundant, supplying 20 forges, blast-furnaces, and foundries. In the arrondissements of Châteaubriant and Ancenis there are important mines of coal of excellent quality. The most important mines are those of Nort and Montrelais. Magnetic iron is found in isolated particles on the surface of the ground on the right shore of the embouchure of the Loire. Peat is dug on the north shore of the embouchure of the Loire. Near Crossac there is a mine of lead not worked. A tin-mine is worked near Piriac. There are mineral springs and sea-bathing establishments at Plaine and Pornic.

The principal manufactures are linen, calico, printed cotton, serge, and coarse woollen stuffs, which are manufactured chiefly at Nantes, Clisson, Châteaubriant, and Guérande; ship-building is extensively carried on at Nantes, Paimboeuf, and Pellerin; and at Indret, one of the islands in the Loire, near Nantes, there are establishments for the manufacture of steam-machinery, and slips for building steam-frigates. Other articles of industrial produce are—paper, leather, porcelain, glass, ship-cordage, chain-cables, cotton-yarn, refined sugar, &c. [NANTES.] There are in the department 1698 wind- and water-mills, 52 iron-forges and blast-furnaces, and 76 factories of various kinds.

The department has an important commerce with foreign countries coastwise, and with the interior. The principal articles of trade are—wine, brandy, fruits, salt (of which a vast quantity is made along the coast), hardware, oil, provisions, soap, wool, and other French and colonial produce. Ships are fitted out for the whale, herring, and cod fisheries; and the mackerel and pilchard fisheries along the coast are actively plied. About 340 fairs are held annually. At these fairs not cattle only, but broadcloth and small wares of all descriptions are sold.

The department contains 1,698,768 acres. Of this area 794,722 acres are cultivated; 259,490 acres are grass-land; 72,518 acres are under vine-culture; 92,796 acres are covered with woods and forests; 27,143 acres with orchards and plantations; 319,647 acres are heaths and moor-land; 43,749 acres are occupied with rivers, lakes, canals, &c.; and 71,285 acres with roads, streets, &c.

The department is divided into five arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Nantes . . .	17	66	240,440
2. Ancenis . . .	5	27	48,102
3. Châteaubriant . . .	7	37	71,462
4. Paimboeuf . . .	5	25	46,767
5. Savenay . . .	11	51	128,893
Total . . .	45	206	535,664

1. In the first arrondissement the chief town is NANTES, which is also the capital of the whole department: population of the commune, 91,303. With the other places noticed the population given is that of the commune. *Charrenat*, situated on a hill above the right shore of the Loire, has a population of 8935. *Clisson*, beautifully situated on the slopes of two hills at the junction of the Moine and the Sèvre-Nantaise, has a population of 2759, who manufacture woollen-cloth, cotton-yarn, leather, and paper. On a rock above the town stand the majestic ruins of the ancient castle of Clisson, which for extent, construction, and beauty of site, has scarcely an equal among the castellated structures of France. Some repairs were made a few years ago by M. Lemot, its possessor, in order to arrest the progress of decay among these magnificent ruins. In the castle Olivier de Clisson was born in 1386; the Duke of Orléans, afterwards Louis XII., took refuge in it from the intrigues of Madame de Beaujeu; Charles VIII., after his marriage with Anne of Brittany, entertained the Breton nobles within its walls. *Légé* is situated in the south of the department, near the right bank of the Logne, a feeder of the Boulogne, on a hill which commands a fine view of a rich well-cultivated country. The town, which suffered greatly in the civil war between the Vendéans and the Republicans, has 3401 inhabitants. On the Nantes road, at a short distance from *Légé*, a monument was erected in 1827 to the Vendean general Charette, which was demolished during the short frenzy of 1830. *Loroux-Bottereau*, a few miles E. of Nantes, has 5000 inhabitants: within the town, in a spacious circular place surrounded by trees, a statue of Louis XVI. is erected. *Machecoul*, an ill-built town on the little river Falleron, and formerly the capital of the duchy of Retz, is 20 miles S.W. from Nantes, and has 3745 inhabitants. This town was the scene of great cruelties and of some severe actions during the Vendean war. *St.-Philbert*, 14 miles S.W. from Nantes, is situated on the navigable river Boulogne, near its entrance into the Lake of Grand-Lieu, and has 3285 inhabitants. It stands in a fertile wine and corn country, and is a place of some trade in agricultural produce, timber, &c. *Vallet*, 5 miles N. from Clisson, is situated on a height among rich vineyards that yield the best wine of the department, and has 5583 inhabitants. *Vertou*, 5 miles S. by E. from Nantes, stands near the right bank of the Sèvre-Nantaise, and has 5635 inhabitants.

2. Of the second arrondissement the chief town, *Ancenis*, is prettily situated among vine-clad slopes on the right bank of the Loire, 21 miles by railway N.E. from Nantes, and has a tribunal of first instance, a college, and 3661 inhabitants in the commune. The old castle of the dukes of Bethune, from the gardens of which there is a splendid view of the valley and islands of the Loire; the Ursuline convent, now a cavalry barrack; and the hospital, are deserving of notice. The steamboats that navigate the Loire make Ancenis one of their stations. *Montrelais*, N.E. of Ancenis, on a hill near the eastern boundary of the department, stands upon a valuable coal-field, and has about 2500 inhabitants. Coal-mines are worked also at *Monzeil*, a small place near Montrelais. *Varades*, 8 miles by railway E. from Ancenis, stands on a hill near the right bank of the Loire, and has 3483 inhabitants. It was before Varades that the Vendean army, after their defeat at Chollet by the Republicans, crossed the Loire in 1793. At *Meillerie*, near Varades, is the celebrated monastery of the order of La Trappe. Driven from their retreat by the revolution of 1792, the Trappists of Meillerie emigrated and founded several monasteries in foreign countries; among others, one near Lulworth Castle, Dorsetshire, where they devoted themselves, as elsewhere, to agriculture and reclaiming waste lands. After the general peace they returned from Dorsetshire to their original monastery of Meillerie in 1816, with increased skill in agriculture, and furnished with superior agricultural

instruments; repurchased the abbey and some farms adjacent, and established a model-farm. On the accession of Louis Philippe, however, they were again expatriated in 1831, and we believe again took refuge in England.

3. In the third arrondissement, the chief town, *Châteaubriant*, stands 37 miles N. by E. from Nantes, and has a tribunal of first instance and 4010 inhabitants, who manufacture common woollen stuffs, cordials, earthenware, tiles, and leather. The town in its architecture is a model of the unsymmetrical irregularity and bad taste which prevails in old Breton towns generally. It seems to have been originally called *Cadette*. The present name was assumed in 1015, from Briant, count of Penthievre, who built the castle. The castle was taken and demolished, with the exception of the keep and two other high towers which still remain, by La Tremouille in the reign of Charles VIII. There is a new château, which contains a fine gallery and other handsome apartments. *Moisson*, on a hill near the right bank of the Don, has iron-mines, iron-forges, and 2305 inhabitants. *Nort*, 15 miles N. from Nantes, is situated on the right bank of the Erdre, across which a stone bridge of six arches leads to the suburb of St.-Georges. The Erdre here becomes navigable for steamers which ply daily to and from Nantes. *Nort* is a busy town, with a population of 5561, who trade largely in wood, charcoal, coal, iron, leather, cattle, &c. *Nozay*, 11 miles N. from Nort, on the road from Nantes to Rennes, has 3002 inhabitants. *Rougé*, 5 miles N.W. from Châteaubriant, gives name to important iron-mines, and has 2272 inhabitants.

4. The fourth arrondissement is named from its chief town, *Paimboeuf*, which stands 24 miles W. from Nantes, on the left bank and near the embouchure of the Loire, and has a tribunal of first instance, a naval school, and 4080 inhabitants, who are chiefly engaged in the construction and repairing of ships, in the manufacture of cordage, tiles, and bricks, and in the fisheries and coasting trade. The town consists chiefly of one long street, which is built along the quays that line the river. It has a harbour formed by a well-constructed mole, and capable of admitting the largest ships. Steamers ply several times a day to Nantes. The population of Paimboeuf was nearly 10,000 before the French lost the West Indian Islands. *Bourgneuf-en-Retz*, 15 miles S. from Paimboeuf, is situated on the Bay of Bourgneuf, opposite the isle of Noirmoutier, in a low marshy place, and has 2625 inhabitants, who are engaged in the fishery along the coast, and in the manufacture of salt. *St.-Père-en-Retz*, 4 miles S. from Paimboeuf, has 2679 inhabitants. *Pornic*, a small fishing village, situated on an inlet of the Bay of Bourgneuf, is much frequented in summer for its fine sea-bathing: population about 1500.

5. The fifth arrondissement is named from its chief town, *Savenay*, a small place of 2331 inhabitants, situated 22 miles N.W. from Nantes, near the right bank of the Loire. The town, which has a tribunal of first instance, was the scene of a most bloody engagement (November 25, 1793) between the Republican army under Westermann, Kléber, Marceau, and Tilly, and the gallant Vendéans, who were entirely defeated. A monument in honour of the slain has been erected in the cemetery of Savenay. *Batz*, situated among the salt-marshes on the sea-shore, where it has a good fishing harbour, is a well-built town with 3597 inhabitants. It has a handsome church with a tower, terminating in an elegant cupola 180 feet high, which serves as a land-mark for sailors. *Blain*, near the right bank of the Isac, has 5441 inhabitants. The town was formerly defended by a strong feudal castle, erected by Alan, duke of Bretagne, in 1105. This fortress, which, with the exception of its towers, is still in tolerable preservation, subsequently belonged to the family of Clisson, from whom, by the marriage of Beatrix, daughter of the Constable Olivier de Clisson, it passed to the dukes of Rohan. *Coueron*, prettily situated a few miles below Nantes, on the right bank of the Loire, which here forms a commodious harbour for the repairing of vessels, has glass-works and 4214 inhabitants. *Croisic*, situated on the extremity of a small tongue of land that juts out into the Bay of Biscay, is an ill-built place with 2539 inhabitants, who are chiefly engaged in the fisheries, in the manufacture of salt and soda, and in the coasting trade. *Guéméné*, situated on a hill near the right bank of the Don (which here begins to be navigable), at a distance of 22 miles N.N.E. from Savenay, has 4013 inhabitants. *Guérande*, an ancient town, situated about 3 miles from the sea and 25 miles W. from Savenay; has an ecclesiastical college, two hospitals, and 8503 inhabitants, who manufacture great quantities of salt, linen, serge, cotton, and woollen-yarn, &c. The town, built on the slope of a hill, is commanded by an old castle flanked with towers; it is surrounded by walls built of granite, and pierced by four gates situated at the cardinal points. The ditches which formerly surrounded this ancient fortress are now filled up and converted into shady walks. *Herbignac*, 18 miles N.W. from Savenay, has extensive potteries and 3176 inhabitants. *St.-Nazaire*, a town of 3771 inhabitants, composed chiefly of sailors, pilots, fishermen, and custom-house officers, is situated on the northern shore of the embouchure of the Loire. It has a lighthouse at the head of the mole which forms the harbour; its chief trade is in fish, corn, and salt. Steam-tugs for hauling large vessels up the river to Nantes lie off St.-Nazaire. *Pont-Château*, on the left bank of the Brive, which is navigable by means of the tide from this town to its entrance into the Loire a little above St.-Nazaire, has a corn-market, tan-yards, and 3516 inhabitants.

The department forms the see of the Bishop of Nantes, is included in the jurisdiction of the High Court and University Academy of Rennes, and belongs to the 15th Military Division, of which Nantes is head-quarters. It returns four members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers.*)

LOIRET, a department of France, lies between 47° 29' and 48° 20' N. lat., 1° 32' and 3° 5' E. long., and is bounded N. by Seine-et-Oise and Seine-et-Marne, E. by the department of Yonne, S. by those of Nièvre, Loir-et-Cher, and Cher, and W. by Eure-et-Loire. Its greatest length from east to west is 72 miles, and its average breadth from north to south is 42 miles. The area is 2612.1 square miles, and the population in 1841 was 318,452, in 1851 it amounted to 341,029; which last gives 130.55 to the square mile, being 44.03 under the average per square mile for the whole of France. The department is formed out of the eastern part of Orléanais, and a small portion of Berri. The greater part of Gâtinais proper, a sub-division of Orléanais, is comprised in Loiret.

The department is divided into two unequal parts by the Loire. The district situated south of this river is part of the old district of Sologne [CHER], and presents a barren sandy soil, covered with heath, but here and there swelling into hills, which are planted with vines, yielding red and white wines of moderately good quality. The district north of the Loire is composed of fertile and well-cultivated plains, separated by wooded hills, and diversified by extensive forests, rich meadows, and pasture lands. A chain of hills that forms part of the watershed between the Seine and the Loire traverses the department from south-east to north-west, at no great distance from the right bank of the LOIRE, which river crosses the department in the same direction as far as Orléans, where it sweeps round to the south-west.

The department takes its name from the *Loiret*, a little river that rises all at once in full flood from a spring in the park of Château-de-la-Source, a few miles S.S.E. from Orléans, and flowing westward enters the Loire on the left bank after a course of 7 miles. The waters of the Loiret never freeze, owing to the high temperature which they have on issuing from the earth, and to the shortness of their course. The *Duis*, a sluggish muddy stream, is the principal feeder of the Loiret; before its junction with the latter it enters a whirlpool by which part of its waters are generally absorbed, the remainder being conducted to the Loiret by a short canal. But at certain seasons of the year, when the waters of the Loiret are highest, a portion of them ascends the canal and enters with the Duis into the whirlpool, which is said to have an underground communication with the Loire. When the waters of the Loire however rise above the usual level, the whirlpool then, instead of absorbing the waters of either of the small rivers, overflows and adds considerably to their quantity. The Loiret is navigable almost from its source; it drives the machinery of several mills and factories. The *Loing*, which receives the Ounne and several other feeders, flows north through this department from that of Yonne in its way to join the Seine. The north-western districts are drained by the *Essonne*, which flows north and enters the Seine in the department of Seine-et-Oise. The department possesses great advantages from internal navigation by the Loire, and by the Canal-d'Orléans and the Canal-de-Briare, which unite near Montargis, whence the Canal-du-Loing runs northward into the department of Seine-et-Marne, and, passing Nemours, enters the Seine near Moret. The department is also traversed by the Paris-Orléans, the Orléans-Nantes, and the Orléans-Bourges railways; and by 9 state, 14 departmental, and a great number of parish roads.

The climate is mild and extremely healthy; the prevailing winds are the west and south-west.

The greater part of the department is occupied by the supracretaceous rocks belonging to the chalk-basin of Paris. These occupy the valley of the Loire for a short distance on each side of the river; and extend over all the country northward of the Loire and westward of the Loing. The districts east of the Loing and south of the Loire are occupied by the chalk which surrounds the Paris basin, except for a short distance from the banks of the Loire on each side of the river where the chalk is covered by supracretaceous rocks.

The district north of the Loire is very productive of rye and other bread-stuffs; but, owing to the infertility of the Sologne district, the produce of the department is barely enough for the consumption. Yet it has a most important trade in corn, which however is supplied from the great wheat districts of Beauce, Poitou, Anjou, and Lower Auvergne, and finds easy distribution from the great granaries of Orléans, by the means of transit before mentioned, to different parts of France. The quantity of oats grown is enormous; the annual exports amount to 1,375,000 quarters. Saffron is extensively and profitably cultivated. Asparagus and many pot-herbs are raised in large quantities. About 22,000,000 gallons of wine are made annually, of which about one-fourth goes to the home consumption; most of the remainder is exported under the name of Vins d'Orléans, generally of ordinary quality; some is retained for making vinegar. Apple, pear, and all fruit-trees common to the north and centre of France are successfully cultivated, and a great quantity of preserves is made. The forests contain chiefly oak, beech, birch, elm, and chestnut. Cattle are of good breed, and also sheep, except in the Sologne, where they

are small but well fleeced. Bees are carefully tended; game, poultry, and fish are abundant. Building- and lime-stone, marl, chalk, and potters'-clay are the only minerals found.

The manufactures, except those of Orléans, are unimportant; but the commerce of the department is very extensive. The chief articles of trade are corn, flour, wine, brandy, vinegar, groceries, drugs, fruits and fruit-trees, peas and beans, chestnuts, cider, fish, honey, saffron, salt, wool, firewood, oak-staves, charcoal, cattle, &c. About 220 fairs are held in the year.

The department contains 1,671,760 acres. Of this area 975,088 acres are under tillage, 60,454 acres are grass-land, 98,554 acres are under vineyards, 280,966 acres are covered with woods and forests, 15,855 acres are occupied as orchards and plantations of different kinds, 27,640 acres are covered with rivers, canals, &c., 140,509 acres consist of barren heath and moor-land, and 50,626 acres are occupied as roads, streets, and buildings.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Orléans . . .	14	106	154,600
2. Pithiviers . . .	5	98	60,833
3. Gien . . .	5	49	49,162
4. Montargis . . .	7	93	76,434
Total . . .	31	348	341,029

1. Of the first arrondissement, and of the whole department, the capital is ORLÉANS: population, 43,405 in the commune. The population given with the other places noticed is in each case the population of the commune. *Beaugency*, 17 miles from Orléans, 19 miles from Blois by railroad, is built at the foot and on the slope of a hill, on the right bank of the Loire, and has about 5000 inhabitants. The Loire is crossed at Beaugency by a stone bridge of 39 arches. The town was formerly defended by a castle, walls, towers, and bastions, some of which works still remain. There is a massive octagonal tower 130 feet high, and of unknown antiquity, in the town. The town-hall is a small but elegant building of the time of François I. In the religious wars of the 16th century Beaugency was taken several times. Brandy, broadcloth, and leather are the chief industrial products, which, together with the excellent wine of the neighbourhood, corn, flour, and wool, are the chief articles of trade. The kings of France had a palace at Beaugency in the 14th century. *Château-neuf-sur-Loire* stands on the right bank of the Loire, E. of Orléans, and has woollen-cloth and beet-root sugar factories and 2994 inhabitants. *Cléry*, prettily situated near the left bank of the Loire, 9 miles S.W. from Orléans, has 2578 inhabitants. This town is famous for its beautiful church of Notre-Dame, in the nave of which is a marble monument to Louis XI., who was buried here. The monument which was erected to the memory of Louis and his wife, Charlotte of Savoy, was completed in 1622. It figured after the first French revolution in the Museum of French Monuments in Paris, but was replaced in the church of Cléry in 1816. *Jargeau*, 11 miles E. from Orléans, on the left bank of the Loire, here crossed by a fine bridge, has a population of 2247. *Meunay*, a well-built town, situated on the right bank of the Loire, 12 miles by railroad W. by S. from Orléans, has 4515 inhabitants, who manufacture leather, room-paper, and felt hats, and trade largely in flour. *Patay* is a small town of 1200 inhabitants, 15 miles N.W. from Orléans, near which Jeanne d'Arc defeated the English in 1429 and took Talbot prisoner.

2. The second arrondissement is named from its chief town, *Pithiviers*, which is situated on the slope and at the foot of a hill above the *Genf* (a feeder of the Seine, which lower down takes the name of *Essonne*), 25 miles N.E. from Orléans, and has a tribunal of first instance and 3772 inhabitants. The town, which is pretty well built, is famous for its almond-cakes and lark-pies. Pithiviers, which is also called Piviers, existed in the 10th century, when the square castle was built, of which there are still some remains. In 1058 Henri I. took both town and castle. The English unsuccessfully besieged it in 1350; but they took it after an obstinate resistance in 1428. The Prince of Condé took it in 1562, and again in 1567. Henri IV. caused the fortifications to be dismantled in 1589. *Beaune-la-Rollande*, 8 miles N.E. from Pithiviers, near the *Essonne*, has a population of 2212.

3. The third arrondissement takes its name from *Gien*, a well-built town, situated on the right bank of the Loire, which is here crossed by a handsome stone bridge of 12 arches, at a distance of 36 miles E.S.E. from Orléans. From the left bank of the river the view, comprising the bridge and the town, built along the slope of a hill, which is surmounted by the church of St.-Louis and a fine old castle in good preservation, is very pretty. Gien has a tribunal of first instance and 5349 inhabitants, who manufacture porcelain and leather, and trade in salt, corn, wine, saffron, and wool. The castle of Gien was founded by Charlemagne, and became the property of Étienne de Vermandois, a descendant of his second son. In 1410 the marriage of the Count of Guise to the daughter of John the Fearless, duke of Burgogne, took place in the castle of Gien. In 1420 the treaty

called the League of Gien was signed in it. Here Jeanne d'Arc prevailed upon Charles VII. to march upon Reims. In 1494, Anne of France, regent during the minority of Charles VIII., repaired and enlarged the castle. François I. inhabited it in 1523; and Louis XIV. with all his court made a long stay in it in 1652. Briare, 6 miles E. by S. from Gien, stands on the right bank of the Loire, at the point where the Briare Canal enters that river. It has a population of 3229, and a good trade in wine, wood, and charcoal. *Châtillon*, farther up the Loire and on its left bank, has 2785 inhabitants. *Sully*, 13 miles W. from Gien, on the left bank of the Loire, has a population of 2153, and is remarkable for the castle of the lords of La Tremoille, which was restored by Henri IV.'s minister, Sully, who resided here after the death of his master.

4. In the fourth arrondissement of Montargis, the chief town, *Montargis*, situated near a forest of the same name, in a plain, 40 miles E. by N. from Orléans, and at the junction of the canals of Briare, Orléans, and the Loing, which complete the navigation between the Loire and the Seine, has a college, tribunals of first instance and of commerce, and 7300 inhabitants. The town, which is pretty well built, has cloth-factories, tan-yards, paper-mills, and a considerable trade in corn, saffron, hides, wool, cattle, &c. The most remarkable objects at Montargis are the church of La-Madeleine, the old walls of the town, and a few remains of the extensive castle of Montargis, which was erected by Charles V. on a hill that commands the town. The castle was of elliptic plan, surrounded by deep ditches and strong walls, flanked with battlemented towers. Three vast courts capable of lodging a garrison of 6000 men surrounded the royal apartments which were attached to the keep, and contained a hall 184 feet long, 55 feet wide, and lighted through 17 noble painted windows. The interior of the hall was decorated with paintings; over one of the six fire-places, by which the interior was heated, was a painted representation of the celebrated story of the Dog of Montargis. Montargis was unsuccessfully besieged in 1427 by the English, under the earls of Suffolk and Warwick; they took it however in 1431, but were forced to evacuate it the following year. It surrendered to the Great Condé in 1652. *Château-Renard*, situated 11 miles E. from Montargis, near the right bank of the Ouanne, has 2378 inhabitants. *Châtillon-sur-Loing*, 14 miles S.S.E. from Montargis, on the canal and river Loing, has a population of 2067. *Courtenay*, with a castle, which is the cradle of the ancient house of Courtenay, who are descended from one of the sons of Louis le Gros, is situated 15 miles E. by N. from Montargis, on the little river Clare, a feeder of the Loing, and has 2567 inhabitants. *Lorris*, formerly a favourite residence of the kings of France, and famous for its ancient charter of privileges, renewed and confirmed by Philippe Auguste in 1187, is situated 12 miles S.W. from Montargis, and has a population of 1847. The old castle or palace of *Lorris*, of which there are still remains of two old towers, was rebuilt in the 11th century by Philippe I. Louis le Gros, Louis le Jeune, and Philippe Auguste resided frequently in *Lorris* castle, and conferred upon it numerous privileges. A treaty called the peace of *Lorris* was concluded in the town between St. Louis, and Raymond, count of Toulouse. The castle was forsaken by the royal family of France in the 14th century; it then fell to ruin, and the town lost its importance.

The department forms the see of the Bishop of Orléans, is included in the jurisdiction of the High Court of Orléans, within the limits of the University Academy of Paris, and belongs to the 1st Military Division, of which Paris is head-quarters. It returns two members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Statistique de la France; Annuaire pour l'An 1853; Official Papers.*)

LOJA. [ECUADOR; GRANADA.]

LOKERËN. [FLANDERS, EAST.]

LOMBARDO-VENETIAN KINGDOM, or Austrian Italy, is composed of the former duchies of Milan and Mantua and of the territory of the republic of Venice. Its boundaries proceeding from east to west are the Alps of Friuli, and the Carnic Alps, which separate it from Carinthia and Carniola, and several offsets of the Rhetian Alps, which divide it from the Tyrol: farther to the north-west it is bounded by the main chain of the Rhetian Alps, from the Ortler Spitz to Monte Jorio, which divide it from the Grisons. From Monte Jorio, an irregular boundary-line, not very definitely marked by nature, divides the Lombard territory from that of the Swiss canton of Ticino. This boundary-line between the two states terminates on the eastern coast of the Lago Maggiore, a few miles north of the influx of the river Tresa. Thence southward, the Lago Maggiore, and the river Ticino, which issues from it, mark the western boundary of the Lombardo-Venetian Kingdom, and divide from the Sardinian territories. The course of the Po marks its southern boundary, and separates it from Parma, Modena, and the Papal States, except in one part of the Modena frontier, where a slip of ground along the southern bank of the Po, which belonged to the old duchy of Mantua, continues to form part of the present Austrian Lombardy. In the delta formed by the Po, the branch of that river called Po d'Ariano, the mouth of which is named Porto di Goro, marks the limits between the Austrian and Papal territories. The eastern boundary of the kingdom is formed by the Adriatic. Its limits to the north-east are fixed at the mouth of the river Ausa, west of the Isonzo.

Until the rebellion of 1848-9 Austrian Italy was governed by a Viceroy, who was generally an arch-duke of the Imperial Austrian family, and resided at Milan: it consisted of two great administrative divisions: 1, Province Lombarde, or government of Milan; and 2, Province Venete, or government of Venice. These divisions acknowledged for their respective political heads the governors of Milan and Venice. Each division was subdivided into provinces called Delegazioni, at the head of which was a delegate; each province was divided into districts, and at the head of each district was a commissary. The districts were subdivided into communes, and each commune had a podesta for its local magistrate. Since 1848 until very recently Austrian Italy has been governed by martial law. Field-Marshal Count Radetzky, the governor-general, resides at Verona, two military commanders under him have their head-quarters respectively at Milan and Venice, in which cities are the supreme courts of appeal and finance. After the marriage of the emperor of Austria in the spring of 1854 the civil government of the country was partially re-established.

By the division of the Austrian empire, established in 1849, Lombardy and Venice form two of the crownlands of the empire. Lombardy is divided into nine provinces, the area and population of which according to the official returns of 1850 and 1851 are as follows:—

Provinces.	Area in Square Miles.	Population.
Bergamo	1616·3	378,123
Brescia	1306·3	356,325
Como	1090·2	433,206
Cremona	523·1	204,558
Lodi-e-Crema	459·3	218,844
Mantova	903·1	270,100
Milano	745·7	604,512
Pavia	401·3	171,622
Sondrio	1253·0	98,550
Total	8,298·0	2,725,740

The crownland of Venice contains eight provinces as follows:—

Provinces.	Area in Square Miles.	Population.
Belluno	1239·8	157,120
Padova	831·0	312,765
Rovigo	428·0	153,783
Treviso	929·1	286,199
Udine, or Friuli	2519·3	429,844
Venice	1056·1	298,425
Verona	1094·2	302,902
Vicenza	1083·4	340,694
Total	9,180·9	2,281,732

The total area of Austrian Italy then is 17,479 square miles; and the total population in 1850 was 5,007,472.

Before the regular administration was superseded by the military government, which was established in consequence of insurrectionary movements and the invasion of the Austrian territory by the Sardinians in 1849, the governor of each of the two great divisions of Milan and Venice was advised and assisted by a central congregation or provincial assembly, consisting of landholders and deputies from the royal towns, of which there were several in each province. Every province returned two landholders, one noble and the other not noble, as deputies, and every royal town returned one deputy. The respective communal or municipal councils selected three persons, out of whom the emperor, as king of Lombardy, chose one as a deputy. The deputies were elected for six years. These congregations were not legislative assemblies, but boards of administration; they settled the proportion of the taxes, both general and local; they inspected the accounts of repairs of roads, bridges, &c., and had also the superintendence of the charitable establishments of the country and their revenues. They could petition the sovereign concerning the wants and wishes of the people. Their resolutions were carried by a majority of votes. In every head town of a province there was a provincial congregation consisting of eight, six, or four landowners, one-half nobles, and the other half not noble, who concerned themselves especially with the administration of the municipal and communal finances of their respective districts. The communes had their own councils, and a complete system of communal administration was established.

The administration of Austrian Italy paid peculiar attention to the material improvements of roads, bridges, canals, dykes, and other public works, for which immense sums were dispersed by the state independent of the expenditure of the communes for the communal or parish roads. At the beginning of the 19th century there were few communal roads in Lombardy deserving the name. St. Valery in his 'Voyages en Italie,' observes that "nowhere perhaps on the continent is the administration of the roads and bridges more actively and usefully employed than in Lombardy. The roads are like the walks of a garden, and they are kept in repair with the greatest care. This government, economical and parsimonious in other respects, is great

and magnificent in this." Among other public works of great utility must be mentioned the repairing of the dykes in the province of Mantua; the completion of the great canal, called Naviglio; the construction of roads in the mountainous districts of Bergamo: the great commercial road of the Splügen; the road over the Stilsfer Joch, and its continuation along the eastern bank of the lake of Como down to Lecco; completing the cathedral of Milan; the splendid bridge at Buffalora on the Ticino; the construction of railways from Venice to Treviso; from Venice through Padua, Vicenza, and Verona to Milan, which is all but completed from Verona to Mantua, and from Milan to Como; and finally the measures taken for the free navigation of the Po from the mouth of the Ticino by means of steam-tugs.

In the department of popular education the Austrian government has extended to the Lombardo-Venetian kingdom the same general and uniform system established in its German states. The elementary schools were first opened in Lombardy in 1822, and ten years after there was hardly a commune without its school, whilst several of the more extensive and populous communes had two. The number of communes in the Lombard provinces is 2284, and the elementary schools for boys are 2038 and those for girls 1852. There were besides 328 adult schools, 25 infant schools, 75 training or upper schools, and 874 high schools, making a total of 5192 schools of all kinds in the crownland of Lombardy in 1847. The total number of schools in the crownland of Venice in the same year amounted to 2218.

In the upper elementary schools of the chief towns of provinces there are courses of methodical teaching for those who are intended for schoolmasters. There are also in the towns and villages of Lombardy Sunday and holiday schools for children above twelve years of age, or for those below that age who cannot on account of their occupations attend the daily elementary schools.

From the upper elementary schools boys who intend to pursue their studies pass into the gymnasias, of which there are 64 in Lombardy and 24 in the crownland of Venice. The gymnasial course lasts six years, four of which are employed in the study of Latin and Greek, the geography and history of the Austrian empire, and Roman history. The other two years are engrossed by rhetoric and poetry, study of the classics, algebra, general geography, and history, ancient and modern, and religious instruction. Besides the gymnasias there are numerous private institutions for youth approved of by the government, which exercises an inspection over them. There are two general direzioni, or boards, at Milan and Venice, for the superintendence of all the establishments for secondary or grammar education throughout the kingdom. For the instruction of young ladies there are several female colleges, mostly under the direction of the nuns of Santa Teresa, of Saint Francis of Sales, of Santa Chiara, and other orders, which devote themselves to the education of youth.

The Lombardo-Venetian kingdom is not only better supplied with elementary instruction than any other Italian state, but it is the only one in which a universal system of popular education has been established. With regard to 'secondary' or gymnasial education this kingdom is also better provided than any other Italian state, the continental dominions of the king of Sardinia alone excepted. Above the gymnasias are the Lycea, or schools of philosophy, of which there are 20 in the crownland of Lombardy and 16 in that of Venice. The Lycea are devoted to philosophical studies, and the course lasts two years. Lastly, the two universities of the kingdom, Padua and Pavia, supply instruction in all professional branches of learning.

The object of the Austrian government in this extensive system of education was clear and definite; it proposed to form a population of docile but not indolent or ignorant subjects; to make individuals in general contented with their respective stations in life, without precluding any one from using his honest exertions to make the best of that station; and also, if talents and opportunity should favour, to rise to a higher one without injury to others or disturbance to society. The emperor Francis being urged, says St. Valéry, once by some Milanese noblemen to proclaim a distinct criminal statute for his Italian territories, as the Austrian statute was considered too mild for the temper of the Italians, he refused, saying that the spread of education and civilisation would render his code as fit for Lombardy as it was for the hereditary states. "When all the people shall be able to read," said he, "they will stab no longer." Events since 1848 have blunted the point of this hopeful observation.

The Austrian civil and criminal codes are in force in the Lombardo-Venetian kingdom. According to this system trials are not public. Every species of torture has been abolished since the reign of Joseph II. The Austrian penal code also abolished the penalty of confiscation, which the Code Napoleon retained in certain cases—among others, against emigrants; but since 1849 the Austrian government has violated its own code by confiscating the property of the emigrants settled in Sardinia. By the Austrian law, the property of a state prisoner or political emigrant who will not surrender himself for trial is placed in the hands of trustees, who administer it for the benefit of his family, creditors, and heirs; and it is restored to him on his return, or to his next of kin after his death if he dies an emigrant.

Religious toleration is guaranteed by the Austrian laws. The Jews have synagogues at Venice, Mantua, Padua, and other towns.

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The Italian regiments are—eight of infantry of three battalions each, one battalion of light infantry, and one regiment of cavalry. These are numbered among the other regiments of the Austrian army, and, like them, are called to do duty in any part of the empire. There are besides two garrison battalions at Mantua and Venice; and a corps of gendarmerie for the police service. There is a military college and a school of artillery at Milan. The principal station of the Austrian navy is at Venice, where there is a college for cadets, also a corps of marines, and a battalion of naval artillery. [AUSTRIA, vol. I., col. 734.] In all, the number of the military furnished by the kingdom in time of peace amounts to about 36,000 men. There are eight fortresses in the kingdom, namely, Mantua, which is the strongest of all, Peschiera, Legnago, Osopo, Pizzighetton, Rocca d'Anfo, Palma Nova, and Venice. Since the late rebellion Verona has been greatly strengthened, the walls being built in the Cyclopean style. The Austrian troops garrison also, conformably to treaties, three frontier places belonging to neighbouring states, namely, Piacenza in the duchy of Parma, and Ferrara and Comacchio in the Papal States. The military head-quarters is stationed at Verona.

The hierarchy consists of two archbishops, of Milan and Venice, the latter of whom has the rank of patriarch, and 18 bishops. The parishes number 4483, and the clerical seminaries 20.

The judiciary in ordinary times consists of a tribunal of first instance, both for civil and criminal matters, in every head town of a province; of two courts of appeal, one at Milan and the other at Venice; and lastly, of a supreme court for the whole kingdom, called the Senate, which sits at Verona. Two commercial courts are established, one at Milan and the other at Venice. In each of the smaller towns is a Pretore, or inferior judge.

The Lombardo-Venetian kingdom is generally one of the most fertile countries of Europe; and the industry of the inhabitants and the extensive system of irrigation increase the natural fertility of the soil.

The numerous rivers which come from the Alps are perennial, and the fields of Lombardy never appear in that parched condition which those of southern Italy, and of many parts of Spain and Portugal, exhibit in summer. The most fertile provinces of the kingdom are those of Lombardy proper, and those of Padua, Treviso, Vicenza, Verona, and Friuli, in the Venetian territory. The poorest provinces are Sondrio or Valtellina, and Belluno.

Lombardy proper produces in abundance everything that is necessary for the sustenance of its population, corn, wine, rice, fruits, cheese, and excellent meat. The two principal articles of exportation are silk and rice. The districts in which the rice is cultivated are the low flats of the provinces of Mantua, Lodi-e-Crema, Cremona, and part of that of Milan, as well as the provinces of Padua and Rovigo. The cultivation of rice, which requires the fields to be laid permanently under water for a certain period, is considered by many as productive of diseases among the peasantry. The other articles of exportation are cheese, especially from Lodi, and hemp, which is cultivated in the provinces of Padua, Venice, and Rovigo. Salt is imported from Istria, Parma, and Sicily.

The principal manufactures, besides those of silk, are glass, especially at Venice, paper, ornamental works in bronze, and straw hats. There are also establishments for spinning cotton, and other minor works. Lombardy is essentially an agricultural country, and receives most of the manufactured goods which it uses from other parts of the Austrian empire. The bookselling and publishing trade, although subject to the censorship, was until lately more flourishing at Milan than in all the rest of Italy put together. About 1000 new works of every description were published annually throughout the kingdom. The journals published in the Lombardo-Venetian kingdom amounted to nearly 40; but it is needless to say that under the military government which has lately prevailed the greater number of these have been suppressed. Milan and Venice have each an academy of the fine arts, and Milan has also a 'conservatorio,' or college for musical pupils.

The public charitable establishments, hospitals, orphan and foundling asylums, houses of industry, 'monti di pietà,' &c., in the whole kingdom, are to the number of 88.

The taxes paid by the kingdom amount in ordinary times to about three millions and a half sterling, and the sources of taxation have remained for the most part the same as they were under the French administration, but the respective burdens have been somewhat alleviated. The tax which the French government had put on those who exercised the liberal professions has been abolished, and a cheap postage has been established. Since the late rebellion the provinces have had to pay more than one forced loan.

Lombardy takes its name from the *Longobardi*, a nation of ancient Germany, mentioned by Tacitus ('German,' 40) as a tribe of the Suevi: he describes them as few in number, but secured by their bravery against their more powerful neighbours. It appears that they lived east of the Elbe, towards the shores of the Baltic Sea. Warnefridus says that they came originally from Scandinavia, and that their name was Viniles, which was afterwards changed into that of Langobards, from two Teutonic words, 'lang' and 'bart,' 'long-beards.' The Longobards joined Arminius against Maroboduus, king of the Suevi. (Tacit., 'Annal,' ii. 46.)

During the 3d and 4th centuries of our era the Longobards followed the general movement of the northern nations towards the south, and came to the banks of the Danube, where we find them acting as allies of Odoacer, king of Italy, whose dominion extended also over Noricum, and bordered on the region then occupied by the Longobarda. The Longobards afterwards totally defeated and almost exterminated the Heruli; and about the middle of the 6th century they occupied part of Pannonia, under their king Audoin. Here they came in contact with the Gepids, a nation settled in Dacia, on the borders of the Eastern empire, and which the Longobards, with the assistance of the Avari, a tribe of the Hunni, totally defeated.

In the year 568 Alboin crossed the Julian Alps, near Forum Julii, and led the Longobards to the conquest of the plains of North Italy, which have ever since been called by the name of the conquerors. Pavia became the capital of the Longobards. After Alboin's death the Longobards elected Clefo as his successor, A.D. 573; but on his being murdered by a servant, eighteen months after, the nation became divided among a number of dukes, a duke of Ticino, or Pavia, a duke of Friuli, a duke of Trento, a duke of Bergamo, a duke of Brescia, besides thirty dukes in as many other cities. Under these dukes the Longobards penetrated south of the Apennines, and conquered Tuscany, Liguria, Umbria, and part of Campania. The Byzantine emperors retained Ravenna, Rome and its duchy, Padua, Genoa, Apulia, Calabria, Naples, and the southern extremity of Italy with Sicily. After ten years of this disorderly dominion of the dukes, the Longobards chose for their king Autaris, son of Clefo, 586—592. His reign was prosperous: he repulsed the attacks of the Franks on one side, and of the Byzantines on the other; and he carried his arms into southern Italy, where he founded the dukedom of Benevento. After the death of Autaris, his widow Theodolinda, who was a daughter of the king of Boiaria, or Bavaria, married Agilulfus, duke of Turin, who was acknowledged by the Longobards as their king. Agilulfus, through the persuasion of his wife, became a Catholic, most of his countrymen being Arians, and made peace with Gregory the Great, bishop of Rome. Theodolinda built the church and palace of Monza, where was deposited the iron-crown (so called from a nail, said to be from the cross of our Saviour, which is riveted inside of the crown), which has served ever since for the coronation of the kings of Lombardy. Agilulfus took Cremona, Padua, and other towns which still sided with the Eastern Emperor. Agilulfus died in 615, and was succeeded by his son Adaloaldus, under the regency of Theodolinda. Adaloaldus, ten years after, was deposed, and Ariovaldus was elected in his stead. Ariovaldus reigned twelve years, and died A.D. 636. It was under his reign that Columbanus, the Irish monk and missionary, after passing through Helvetia and Rhaetia, came into Italy and founded the monastery of Bobbio, near the Ligurian Apennines, which afterwards became celebrated for its wealth and its collection of manuscripts.

After the death of Ariovaldus, Rothar, son-in-law of Agilulfus, was elected in his place. Rothar was the first who made a compilation of the unwritten laws and usages of the Longobards, and published them in a kind of barbarous Latin, under the name of 'Edict,' with his own preface and observations. This edict drew a marked distinction between the Longobards and the Roman or subject population, which continued to live under the Roman law. By a subsequent law of King Liutprand, who made considerable additions to the edict of Rothar, it was enacted that if a Roman married a Longobard woman, the children born from such a marriage were Roman, and followed the condition of the father. Pecuniary compensation was awarded for most personal injuries. Adultery and theft were punished with death. The judges were enjoined to decide causes within a limited number of days. Duelling was tolerated, though its practice was characterised by Liutprand as absurd.

With regard to the political system of the Longobards, it may be considered as a federation under an elective king, who was the chief of the nation. When Autaris was elected king, the dukes in a general assembly agreed to give one half of their revenues for the support of the royal office and state, but in other respects they acted as sovereigns in their respective duchies, each making wars and conquests on his own account, as appears by the chronicles and also by the letters of Pope Gregory the Great. The orders and enactments of the king required the sanction of the people, or army (for the two words are used as synonymous) of the Longobards. The king was supreme judge and commander, but not absolute legislator. These relations were maintained with tolerable fairness among the Longobards themselves, but the 'Roman' or Italian subjects of the Longobards were looked upon as a conquered and subject race. They had neither the same political nor civil rights as the conquerors; they had no voice in their assemblies; they had no appeal against the caprice of their Longobard rulers; they lived among themselves according to the Roman law, but in any affairs between them and the Longobards they were judged by Longobard judges and according to the Longobard law.

Rothar, having conquered the towns of the Thuscia Lunensis, or the Riviera of Genoa, and defeated the troops of the exarch of Ravenna, died A.D. 653, and was succeeded by his son Rodoaldus, who after five years' reign was killed by a Longobard for having seduced his wife. Aripertus, a nephew of queen Theodolinda, being elected in his place, reigned till the year 661, when he died, and his two sons Pertharitus and Godebertus divided the supreme authority between them.

Godebertus however conspired against his brother, who was obliged to run away; but Godebertus himself was killed by Grimoaldus, a chief from Benevento, who took possession of the crown, A.D. 662. Grimoaldus was an able and warlike usurper. He defeated the Franks, who had entered Italy, and had advanced to near Asti. Shortly after, Constans II, emperor of Constantinople, and grandson of Heraclius, having landed with an army at Tarentum with the intention of recovering Italy from the Longobards, took Luceria, and laid siege to Benevento, of which Romualdus, son of Grimoaldus, was duke. Grimoaldus marched with an army to the assistance of his son, and obliged Constans to raise the siege and retire to Naples. Under the reign of Grimoaldus, Aseck, a chief of Bulgarians, emigrated to Italy with all his tribe, and put himself under the protection of the Longobard king. The king sent him to his son the duke of Benevento, who assigned to him the towns and territories of Boianum, Sæpinum, Aesernia, and other places in the country of Samnium, which had remained desolate in consequence of the wars. Warnefridus (b. v. ch. 29) adds that the descendants of those Bulgarians continued there in his days, "and although they spoke Latin, had not lost the use of the language of their ancestors;" a remarkable passage, which shows that the general language of Italy in the time of Charlemagne was still the Latin, and was adopted by the northern tribes which settled in the country.

Grimoaldus died at Pavia, A.D. 671. After his death the exile Pertharitus, who had wandered as far as England, returned, and by universal consent resumed the crown. Pertharitus reigned seventeen years, and died in 688, leaving his son Cunipertus, who had married Ermelinda, an Anglo-Saxon lady. Cunipertus was driven away by Alachis, duke of Tarentum, but he returned, defeated and killed Alachis, and resumed the crown. In the meantime Romualdus, duke of Benevento, took Tarentum and all the neighbouring country from the Byzantines, and annexed it to his dominions. Cunipertus died in the year 700. His infant son Limpertus was put to death by Aripertus, duke of Turin, who assumed the crown. Asprandus, whom Cunipertus had appointed guardian to his son, fled into Boiaria with Liutprand, the son of Asprandus. Nine years afterwards they returned at the head of an army of Bavarians, and after a battle, in which Aripertus was drowned in attempting to cross the Ticinus, Asprandus was acknowledged king of the Longobards; he died soon after, and his son Liutprandus succeeded him by common consent, A.D. 713.

Liutprandus reigned thirty-two years. He was the most illustrious of the Longobard kings. He took Ravenna and the Pentapolis, but afterwards made peace with the Byzantines and restored Ravenna, was friendly with the Pope Zacharias and the people of Rome, who at that time were alienated from the Eastern emperors in consequence of the schism of the Iconoclasts; and he was also friendly with Charles Martel, to whom he sent assistance against the Saracens, who had entered Provence in the year 739. Liutprand raised many churches and other buildings. His laws are joined to those of his predecessors Rothar and Grimoald, in the collection of the laws of the Longobards. Liutprand died in 744, and was succeeded by his nephew Hildebrand, who was deposed a few months after for his misconduct, when Ratchis, duke of Friuli, was elected king. Ratchis, after five years' reign, voluntarily renounced the crown, and went to Rome, and afterwards to Monte Casino, where he became a monk. Ratchis was succeeded by his brother Astolphus. Astolphus took Ravenna in 751, and put an end to the dominion of the Exarchs, attacked the duchy of Rome, and aimed at subjecting that city also to his authority. Pepin, king of the Franks, came twice to the assistance of the pope, and each time defeated Astolphus near Pavia, and obliged him to give up Ravenna, the Pentapolis, and other towns, which Pepin bestowed upon the Roman see. Astolphus died in 756, and Desiderius, a Longobard duke, was elected his successor. Desiderius renewed the quarrel of Astolphus with the pope, and not only seized the towns given up by Astolphus, but likewise devastated the duchy of Rome. The Pope Adrian I. applied to Charlemagne for assistance. Charlemagne came into Italy A.D. 774, defeated Desiderius, and carried him prisoner into France, where he became a monk. Adelchis, son of Desiderius, fled to Constantinople, from whence he returned to Italy with some troops, and fell in battle. The kingdom of the Longobards ended with Desiderius, and the Longobard nation and its territories became subject to Charlemagne.

The overthrow of the kingdom of the Longobards by Charlemagne did not destroy the political existence of that people. They retained their laws and institutions, their property, and their numerous and powerful nobility; they continued a nation and a kingdom, subject however to the monarchy of the Franks. At Pavia, which was then the capital of the country, the successors of Charlemagne were crowned with the iron crown of Lombardy as kings of Italy, previous to their coronation at Rome as emperors of the West and kings of the Romans. The Longobard code continued in force for the Longobard population, while the descendants of the ancient inhabitants, or Romans, as they were called, lived under the Roman law. The name of Lombardy was retained, but only for a part of the former dominions of the Longobards: the duchies of Spoleto, Friuli, Tuscany, and Benevento, although some of them continued to be ruled by Longobard dynasties, were not included in the general name.

The feudal system, according to which the possession of land was

the pay of the soldier, and constituted his liability to military service and feudal duties, was more fully developed under the successors of Charlemagne, when every duke, count, or marquis divided and subdivided the land belonging to him among numerous subfeudatories called vassors, who swore fealty and homage to him, and were bound to follow him to the war.

About the 9th century, the towns began to rebuild their walls, which had been razed by the barbarians, in order to defend themselves against the incursions of the Hungarians, Saracens, and other predatory bands. The towns had retained the ancient system of curias, or municipalities, and the citizens elected their own magistrates. The distinction between Longobard and Roman became gradually obliterated among the people; they became all Italians or Lombards together.

After the deposition of Charles the Fat in 888, the crown of Italy was disputed for about 70 years among a succession of pretenders, Italians and Burgundians, until Otho I. of Saxony seized it with a firm hand, and was crowned at Rome by the pope, A.D. 961. Otho and his successors resided chiefly in Germany; they came now and then to Italy at the head of armies, when they generally pitched their tents and held their sovereign court in the plain of Roncaglia near Piacenza, whither all the great feudatories of Lombardy and other parts of Italy, and the magistrates of the towns, were summoned to pay their homage, and to listen to the sovereign's decisions and 'placita.' But with the emperor's return to Germany the great vassals retired to their castles, and the magistrates and bishops returned to their cities. Each town and district was in a manner independent of every other, all acknowledging allegiance to a distant sovereign. A veil covers the first period of the history of the municipal emancipation of the towns of Lombardy; it seems to have grown silently under the reign of Otho and his successors, the citizens slowly and gradually appropriating to themselves the prerogatives of the sovereign, and not wishing to attract attention to their encroachments.

Towards the middle of the 11th century we find discord first breaking out in Milan and other cities between the various classes of the population. The vassors, or inferior nobles, of whom there were several gradations, rose in arms against the great nobles, at the head of whom was the archbishop Heribert. The archbishop defeated them and drove them out of Milan, but being joined by the malcontents from the neighbouring towns, they appealed to the emperor Conrad, who came to Italy in 1036, and deposed and imprisoned the archbishop. Heribert soon made his escape, and returned to Milan, where he was joyfully received by the clergy, the nobles, and the people, and in order to defend himself against the imperial forces he called to arms the people of every district of the town, without distinction of condition. Till this time the use of arms had been a privilege of the nobles. On this occasion Heribert introduced the caroccio, or cart drawn by oxen, in imitation of the ark of the Israelites, with the great banner of the city fixed upon it, which was drawn in the midst of the militia, and upon which stood the leaders, who from a raised platform gave their directions during the fight. By degrees every city adopted the caroccio, which became a kind of palladium, and the emblem of popular independence. Thus it was that the episcopal government of Milan and other cities prepared the way for their municipal liberty. In 1041 the plebeians, or burghers, headed by Lanzo, himself a noble, rose against the class of nobles, who were obliged to leave with their families. The archbishop Heribert, who this time had taken no part in the quarrel, emigrated with the rest. The nobles, being joined by others, blockaded Milan, and reduced the citizens to famine, when after three years Lanzo managed to bring about a reconciliation, and the nobles returned.

In 1059 began the long struggle at Milan and in the rest of Lombardy on account of the married clergy. The church of Milan had its peculiar liturgy and system of discipline (called Ambrosian from its great bishop St. Ambrose), according to which married men could be ordained priests, and could continue to live with their wives, though an unmarried priest could not marry after his ordination. This quarrel agitated the city till the time of Pope Gregory VII., when the archbishops of Milan became gradually dependent on Rome, received the pallium from the Pope, and swore obedience to him. As a consequence of this the clergy became subjected to the Roman discipline, and the regulation was enforced of not admitting any persons to orders except unmarried men.

In the great contest of the investitures, Milan, Lodi, Cremona, and other Lombard cities were at first swayed by the nobility, who were mostly favourable to the emperor, but at last in the decline of the imperial authority they joined the Countess Matilda and her second husband Guelf, with whom they formed an alliance. It was during this long struggle that the cities really established their independence, acknowledging no longer the imperial *missi*, or vicars. The citizens then began to elect a certain number of magistrates, whom they styled consuls, who administered justice and commanded the militia; they were chosen from three orders, namely, captains, or nobles of the first rank, vassors, and burghers. Laws and written constitutions were few in those times, and the consuls enforced the customs and precedents, which were collected in 1216 in a kind of code, and published at Milan and other cities. The war of the investitures

being over, the cities continued to acknowledge, at least nominally, the emperor's sovereignty over Italy.

The Lombard cities having now secured their municipal liberties began to fight among themselves. Milan and Pavia were rivals of old; and Cremona, which was the third great city of Lombardy, was also jealous of Milan; but before they turned their arms against one another they began by attacking their weaker neighbours: Cremona attacked Crema, Pavia attacked Tortona, and Milan attacked Lodi and Novara. At last Lombardy became divided between two parties: that of which Milan was the head included Brescia, Crema, and Tortona; and the other consisted of Pavia and Cremona, Lodi and Como.

In 1107 the Milanese commenced war upon the people of Lodi, destroyed their harvests for four consecutive years, and at last, in June 1111, took the town, killed many of the inhabitants, plundered the rest, razed their houses, and drove the survivors to the neighbouring villages. The spot is still known by the name of Lodi-Vecchio. The people of Pavia on their side took Tortona and burnt it. In 1118 the Milanese began a furious war against Como, which in 1127 was obliged to submit to pay tribute to Milan, and the walls of their town were razed; but in the year 1154 Frederick of Hohenstaufen crossed the Alps, assumed the iron crown of Italy at Pavia, and afterwards the imperial crown at Rome. He ordered the Milanese to let their neighbours of Lodi live in peace, and allow them to rebuild their town. The Milanese with scorn refused to obey, and the war began between the emperor, joined by the militia of Pavia and Cremona, on one side, and the Milanese and their allies on the other. The war lasted several years, and horrid cruelties were committed by both parties. At last Milan was obliged to surrender, in March 1162; the inhabitants were ordered to leave the town with all they could carry, after which Milan was sentenced to be treated as it had treated Lodi—to be razed to the ground; and the people of Cremona, Pavia, Lodi, and Como readily executed the sentence.

Frederick having returned to Germany, his officers and podestas treated the Milanese and other Lombards with the most unsparring rigour, and oppressed them in every way. The emperor was applied to for redress, but in vain. At last a general spirit pervaded the cities of Lombardy, and extended to those of the marches of Verona and Treviso beyond the Adige. In April 1167 a secret conference was held by deputies of the various cities in the convent of Pontida, in the territory of Bergamo; and it was resolved to form a league for the common protection, and to assist the Milanese in rebuilding their city. Pope Alexander III. declared himself protector of the Lombard league, which consisted of fifteen cities—Cremona, Bergamo, Brescia, Ferrara, Bologna, Modena, Milan, Parma, Piacenza, Verona, Vicenza, Padua, Venice, Treviso, and Lodi, which was obliged to follow the rest. The league was afterwards joined by Ravenna, Rimini, Reggio, Bobbio, Tortona, Vercelli, Mantua, and Novara. Pavia only remained attached to the emperor's party, and as the Marquis of Montferrat took the same side, the allies, after rebuilding Milan founded a new town on the borders of Montferrat, which they called *Alessandria*, from the name of their protector. The towns reestablished their consular governments, and a kind of federal diet was assembled at Modena, composed of consuls of the various cities, who were styled *rectors* of the league. But this appearance of a federal union lasted only as long as the contest with Frederick, after which it dissolved itself. The league however carried its purpose bravely for the time. After several campaigns the Lombard militia completely defeated the Imperial army at Legnano in May 1176, took the emperor's camp, and Frederick was obliged to escape alone to Pavia. This led to a truce, and afterwards to the peace of Constance in 1183. By this celebrated treaty, which served for ages after as an authority for regulating questions which arose between the German empire and the North Italian states, the cities were confirmed in their independent administration; they had the right of declaring war, of coining, in short all the attributes of sovereignty, under an acknowledgment however of the emperor as king of Italy and their suzerain.

The glorious struggle of the Lombards for their independence being terminated they soon fell again to quarrelling among themselves. Several of the towns, in order to check their internal factions, adopted the institution of the Podesta, which Frederick had first introduced. This officer was a kind of dictator; he was supreme judge, assisted however by lawyers or assessors, and had the right of inflicting capital punishment. He was always chosen from the territory of another town, and from among the nobility, and changed generally every year. It was imagined that by choosing a stranger impartiality might be better secured. Milan chose in 1186 for its podesta Uberto Visconti, of Piacenza. The consuls still remained as magistrates of various kinds. In 1198 a fresh rupture broke out at Milan between the nobles and the 'popolani,' or burghers. The latter insisted on having their separate councils; the wealthier merchants, and the vassors, or inferior nobles, also had each their own council. Each of these councils ('*credenze*') had its consuls, who made edicts for those under their respective jurisdiction; but the four *credenze*, and those they represented generally, resolved themselves into two parties, the nobles and the popolani. The nobles were haughty and overbearing towards others and quarrelsome among themselves; and the burghers on their part as they became wealthier would no longer brook their assumed superiority. The consequence was that the

nobles were driven out of Milan and Brescia; but they returned, being supported by their friends from Cremona and other places. Reggio, Bologna, and other cities were likewise distracted. Besides these internal feuds there was the old rivalry among the towns, which revived after their united contests with the emperor had terminated. The interminable list of these petty wars, which is given by Bossi and other historians, without any intelligible account of the origin of most of them, excites a feeling of indignation mixed with contempt; people were killed, property was destroyed, and families were made unhappy by these absurd feuds.

It has been said that notwithstanding all these feuds the Italian free cities prospered; the real truth is that some of them flourished at the expense of the others. It is observed that a number of towns which are mentioned as being of importance in the 11th century, had disappeared in the 13th. We read of the glory and wealth of Milan and Florence, but we take no account of the depopulation and calamities of Lodi and of Pisa. Several causes contributed to keep up the wealth of the great Lombard cities during the middle ages; the extraordinary fertility of their territory, their manufactures in which they were unrivalled in Europe, and the practice of their citizens of lending money at high interest throughout Europe, whence the name of Lombard became synonymous with that of banker as well as usurer. But however flourishing the cities might be, the subject country had little participation in their splendour, and the greatest sufferers in the continual wars between them were the unfortunate country people, who in all these republics had no political rights, had no voice in these quarrels, but were doomed to suffer from both parties, who treated them like dogs.

In the contests between the popes and Frederic II. the Lombard cities were divided: Milan, Brescia, Piacenza, and Modena were against the emperor; Cremona, Parma, Modena, Reggio, were for him. But his most effective ally was Ecelino da Romano, whom the Veronese had made their podesta. In 1237 Frederick attacked the Milanese and their allies at Cortenova, near the river Oglio, and completely defeated them. Still the emperor was prevented from pursuing his advantage, and Milan was saved. A desultory war continued till his death.

Meantime renewed affrays between the nobles and the burghers of Milan induced the latter, who were dissatisfied with the podesta for favouring the nobles, to have a distinct podesta, or magistrate for themselves, as they had already a separate credenza and separate consuls. They chose for this office Pagano della Torre, lord of Valsesina, on whose death the people chose his nephew Martino for their chief magistrate, with the title of 'Elder,' 'Anziano della-Credenza,' for an indefinite time. Martino expelled Paolo di Soresina, the podesta of the nobles; the latter then had recourse to Ecelino da Romano. Ecelino advanced towards Milan with a splendid army, crossed the Adda, but found himself hemmed in by enemies on all sides, and in attempting a retreat was wounded and taken prisoner, and died of his wounds, in October, 1259.

The exiled nobles of Milan still kept the field, and Martino della Torre, unable to reduce them for want of cavalry, engaged Pelavicino (a former friend of Ecelino) and his troops in the service of Milan, with the title of captain-general for five years and a pension. This was the beginning of the practice so prevalent afterwards of hiring mercenary troops, or condottieri. The Milanese emigrants were besieged in the castle of Tabiago, near Brianza, where having exhausted their provisions and the water of the wells, and their horses having died, they surrendered at discretion. They were taken to Milan in chains, and confined in iron cages exposed to public view, and kept there for years.

In 1260 Martino della Torre was chosen by the towns of Lodi and Novara as their 'signore,' or lord, which in those small communities implied a more absolute authority than that which he had at Milan. The fashion spread; Cremona chose for its lord the marquis Pelavicino; Verona chose Martino della Scala; Mantua, the Count San Bonifazio; Ferrara, the Marquis of Este, &c. The desire of tranquillity and repose from factions induced the citizens to submit to a chief who could make himself feared, and they chiefly required of him to punish quickly and severely those who troubled the public peace. They preferred summary and often brutal justice to anarchy.

After the death of Archbishop Perego, Pope Alexander IV., named to the see the canon Otho Visconti, of a noble and powerful family, who had been exiled with the other nobles some years before. But as the Della Torre family opposed his coming to Milan, considering him as an emigrant, the archbishop elect continued for several years to remain on the estates of his family near the Lake of Como, where he collected many of the disaffected, with whom he carried on a sort of predatory warfare against Milan. Martino della Torre having died in 1263, his brother Philip succeeded him as lord of Milan, Lodi, and Novara, to which he added Como, Vercelli, and Bergamo, which towns elected him as their lord. Thus the foundation was laid of that consolidation of Lombardy into one state which in after times was known by the name of the duchy of Milan. Philip della Torre died in 1265, and was succeeded by his nephew Napoleone della Torre.

After the death of Pope Gregory X. in 1276, Archbishop Visconti took possession of Como and Lecco, and at last marched against Milan. Napoleone della Torre came out to meet him, but was surprised and taken prisoner, and he and his relations were confined

in cages, after the example set by his uncle Martino. The people of Milan, hearing of the defeat, rose against the adherents of the Torriani, pelted them with stones, and drove them out of the city. A deputation of citizens was sent to the archbishop Visconti, whom they saluted as 'Perpetual Lord of Milan.' This occurred in January, 1277.

The power of the Visconti, though in fact hereditary, was at first, at least in form, dependent on the sanction of the people, who, at the death of the actual lord, elected his successor. The council of the elders continued to discuss the laws which the lord proposed, to levy the taxes, superintend the expenditure, and to exercise the other functions of a legislature. But gradually, and especially from the time of Bernabò Visconti, the lord took upon himself to issue his own laws or statutes, to impose taxes, let to farm the revenue, make war, and, in short, exercise all the acts of sovereignty. In the 14th century the Visconti ranked among the most powerful Italian princes. They extended their dominions not only over Lombardy proper, north of the Po, but over part of Montferrat, including Asti, Alessandria, Bobbio, Tortona, and also to Parma, Piacenza, Bologna, and other towns south of the Po. Gian Galeazzo Visconti received in 1395, from the Emperor Wenceslas, the title of 'Duke of Milan and Count of Pavia.' The charter of investiture included 26 towns and their territories, extending from the hills of Montferrat to the lagoons of Venice. Besides these he obtained also possession by force or fraud of Genoa, Lucca, Pisa, Siena, Perugia, Bologna, and other parts of the Romagna. Florence alone stood in his way, and he was preparing to attack it with all his forces, when he died of the plague, in September, 1402. In the following century the duchy of Milan became circumscribed within narrower limits. The Venetians took the three provinces of Brescia, Bergamo, and Crema, between the Mincio and the Adda, which last river became the boundary of the two states. The Swiss took possession of Bellinzona, and other valleys north of the Lago Maggiore. The duchy of Milan likewise lost its conquests south of the Po. On the side of Piedmont its boundary was the Sesia, including within its limits the extensive province of Novara, which now forms part of the Sardinian territories. The duchy of Milan therefore, as possessed by the later Visconti and their successors the Sforza, from whom it came into possession of Charles V., extended about 70 miles north to south from the Alps to the Po, and 60 miles east to west. Its principal cities were Milan, Pavia, and Cremona. Mantua formed a separate duchy until the war of the Spanish succession, when it was taken possession of by the house of Austria, and annexed to the duchy of Milan. These two duchies constituted Lombardy proper.

The duchy of Milan, during a century and a half that it remained under the Spanish branch of the house of Austria, declined greatly from its former prosperity. With its transfer to the German branch of the house of Austria, Lombardy began to recover. But it was under the reign of Maria Theresa that improvements of every sort proceeded with rapid strides, and the duchy of Milan assumed a new aspect. The population also increased rapidly. In 1749 it was 900,000, and in 1770 it was 1,130,000. Joseph II. pursued the career of improvement in Lombardy. The consequence of all this was, that the people of Lombardy grew attached to the Austrian way. Austria continued to govern these united states till Bonaparte's invasion of 1796. By the peace of Campoformio of the following year Austria gave up Milan and Mantua, and received as a compensation for them and Belgium, which was also taken from her by the French, the territory of the republic of Venice, which Bonaparte had overthrown. Milan and Mantua, or Lombardy Proper, were constituted first as a republic dependent on France, and afterwards into a kingdom, of which Napoleon I. made himself king in 1805. At the close of that year, in consequence of the campaign of Austerlitz, Napoleon I. retook from Austria the Venetian territories, which he annexed to Lombardy, styling the whole by the name of the kingdom of Italy, though this new kingdom did not comprise above one-third of Italy. He added to it the state of Modena, the Legations, and lastly in 1808 the Papal Marches. The whole population of this kingdom was about 6,000,000. In 1814 the Austrian and allied forces occupied the kingdom of Italy, and the emperor Francis again took possession of his former territories of Milan and Mantua, and also of Venice, the latter as a compensation for his loss of Belgium; and this measure was confirmed by the Congress of Vienna. The districts south of the Po were restored to their former sovereigns; Modena to its duke, and the Legations and Marches to the Pope. The emperor Francis then constituted the territory of Milan, Mantua, and Venice into a kingdom, styled Lombardo-Veneto, which was annexed to the imperial crown of Austria.

Making every allowance for the political aspirations and disappointed national feelings of the Italians, who regret being dependent on a foreign power, it may be affirmed with safety that the Lombardo-Venetian kingdom was previous to the outbreak of 1848 in a thriving and progressive condition, and that it was the best administered country in Italy, excepting perhaps Tuscany. An outline of the history of the late insurrection, and of the war with Sardinia, is given in the article AUSTRIA. The provinces and chief towns of the two crownlands are noticed in separated articles. [See ITALY in SUPPLEMENT.]

LOMBEZ. [GERA.]

LOMBOK, an island of the Indian Archipelago, lying between 8°

and 9° S. lat., 116° and 117° E. long., has the island of Bali on the west and that of Sumbhawa on the east. Its mean length and breadth are respectively 53 miles and 45 miles. The surface of the island is mountainous. Two ranges run along the north and south coasts, inclosing a well-watered plain laid out in rice-fields. In the northern range is a volcanic peak above 12,000 feet high. On the slopes of the mountains maize and coffee are grown. The island is well cultivated, and the whole surface is covered with verdure. It is abundantly supplied with springs of water which feed several small streams, some of which fall into the sea on the west side, where there is a commodious harbour named Ampanam. Trading ships and whalers resort to Ampanam for provisions, procuring from the natives abundant supplies of oxen, swine, goats, poultry, and vegetables. The chief town of the island is named Mataram. There is a town named Lalm-Hadje on the east coast, and a good roadstead at Pejow. The inhabitants, who numbered about 305,000 in 1852, carry on a brisk trade with Java and Borneo: their chief food is rice, of which they export large quantities. Lombok was, and perhaps is still, subject to the sultan of Bali, who may now be considered to be a dependent of the Dutch. [BALL.] The Dutch claim Lombok as one of their colonial possessions in the east. The ponies of Lombok are in high repute in the east.

LOMOND, LOCH, the most celebrated of the Scottish lakes, extends between 56° and 56° 20' N. lat., 4° 30' and 4° 42' W. long., in a direction from N. by W. to S. by E. about 24 miles, and is bounded E. by the counties of Stirling and Perth, and W. by Dumbartonshire. The southern portion, which is nearly one-third of its length, is from 4 to 7 miles wide, and contains several well-wooded islands. The whole number of islands is about thirty. North of Luss in Dumbartonshire the lake becomes gradually narrower. It covers a surface of 45 square miles. Its general depth is about 20 fathoms, but in some places its depth is 120 fathoms. The surface is 22 feet above the level of the sea. Its waters are supplied by a great number of small rivers, which descend from the adjacent mountains; the Endrick is the only considerable stream which falls into it. [STIRLINGSHIRE.] Loch Lomond is famous for the grand and beautiful scenery which its banks exhibit. The country around the southern portion of the lake is hilly, but fertile, rich, and well cultivated: it is dotted with gentlemen's seats, surrounded with fine natural woods and plantations, while the lake gives a peculiar charm to the scenery. Where the lake begins to narrow, Ben Lomond on the eastern bank raises its head 3197 feet above the sea. The Arrochar hills rise on the other side with a steep acclivity and with bare and rocky summits to nearly the same elevation as Ben Lomond. The northern extremity of the lake is completely inclosed by high, steep, rocky, and dark mountain masses.

LONATO. [BRESCIA.]

LONDON, the metropolis of the British Empire, mostly in the counties of Middlesex and Surrey, stands on both sides of the Thames, about 60 miles W. from the sea, by the course of the river to the Nore Light, or about 40 miles direct distance. The centre of the dome of St. Paul's Cathedral is in 51° 30' 47.59" N. lat., 5' 48.2" W. long. The tides influence the Thames as high as Teddington, and steam-boats ascend it to Hampton Court, but ship-navigation terminates below London Bridge. At London Bridge the tide flows 5 hours and ebbs 7 hours. The velocity upwards on an average is about 3 miles an hour; downwards about 3½ miles an hour. The rise of the tide at the London Docks, on an average of spring-tides, is 18 feet; neap-tides is 14 feet. The width of the Thames, between London Bridge and Westminster Bridge, varies from about 300 to 400 yards; and in this part of its course the river makes a great bend, the direction of Blackfriars Bridge being north and south, while Westminster Bridge is nearly west and east, and Waterloo Bridge, which is intermediate, north-west and south-east. The volume of the Thames, immediately above the tidal influence, has been calculated to be equal to about 1337 cubic feet per second, or 115,516,800 cubic feet per day.

London stands on alluvial deposits, consisting of beds of clay and gravel, beneath which is the geological formation denominated the London Clay. The gravel-beds are thickest and most numerous on the north side of the river, and convey water in considerable abundance, especially in the city, where there are many springs which would rise to the surface, but they are now nearly all covered in, and supply water to pumps. For manufacturing purposes wells are sunk to the depth of from 200 to 300 feet, and in some places deeper, and a large supply of water is thus obtained. The Fleet River, Walbrook, and other smaller streams, which formerly flowed through London, now pass under it in the sewers.

The mean temperature in London is 50.5° Fahr., that of the surrounding country being about 48°. The mean temperature in each month is as follows:—January 36.34° Fahr., February 39.6°, March 42°, April 47.61°, May 55.4°, June 59.36°, July 62.97°, August 62.9°, September 57.7°, October 50.79°, November 42.4°, December 38.71°. The temperature in the summer seldom rises to 80° in the shade, but has been known to reach 96°; it seldom falls in winter to 20° during the day, but has sunk as low as 5° below zero at night. In 1813-14 the Thames was frozen over, so as entirely to stop the navigation above London Bridge, and it has been partially frozen over three or four times since. The mean height of the barometer in London is 29.74 inches; the mean elevation is 30.356 inches; the mean depression is 29.075 inches. The average quantity of rain which

falls in the year is 25 inches. Fogs occasionally occur in the winter, and are sometimes exceedingly dense.

London is the largest city at present existing in the world, and is probably the largest that ever has existed. The left bank of the river slopes gently upwards. The right bank is a uniform flat. As a compact mass of houses the metropolis may be taken as a parallelogram about 6 miles in length and 3¼ miles in width—thus covering an area of 21 square miles. There are besides some continuous lines of houses extending to suburban towns, which are included in the Returns of the Census as a part of the metropolis. The returns for 1851 include in the London district an area of 78,029 acres, or 121.92 square miles, which are equal to a circle of more than 12 miles diameter, and in fact extend in some directions to a distance of 8 miles from St. Paul's Cathedral. Within these limits are included—on the east, Bow and Woolwich; west, Hammersmith; north, Highgate; and south, Herne Hill.

According to the Census of 1851 the population of the metropolis is 2,362,236, of whom 1,106,558 are males, and 1,255,678 are females. The number of houses inhabited is 305,933, which gives 7.721 persons to a house. There are besides 16,643 houses uninhabited, and 4815 building. If all these houses were arranged as closely as they are in the city and liberties of London and the borough of Southwark conjointly, they would cover an area of about 30 square miles. The limits adopted by the late Mr. Rickman, who superintended the population returns from 1801 to 1831 inclusive, comprised 29,350 acres, or 46.64 square miles.

The following is a list of the Registration Districts and Poor-Law Unions of the Metropolis, with the area of each, and population for 1851:—

Registration Districts and Poor-Law Unions of the Metropolis.	Area in Acres.	Population in 1851.
Bermondsey (St. Mary)	688	48,128
Bethnal Green	760	90,193
Camberwell (St. Giles)	4,342	54,667
Chelsea	865	58,538
Clerkenwell (St. James)	380	64,778
George, St., Hanover Square	1,161	73,230
George, St., in-the-East	243	48,376
George, St., Southwark	282	51,824
Giles, St., in-the-Fields, and St. George, Bloomsbury	245	54,214
Greenwich	5,367	99,365
Hackney	3,929	58,429
Hampstead	2,252	11,986
Holborn	196	46,621
Islington (St. Mary)	3,127	95,329
James, St., Westminster	164	36,406
Kensington	7,374	120,004
Lambeth (St. Mary)	4,015	139,325
Lewisham	17,224	34,835
London, City of	434	55,932
London, East	153	44,408
London, West	136	28,790
Luke, St., Old Street	220	54,055
Margaret, St., and St. John, Westminster	917	65,609
Martin, St., in-the-Fields	305	24,640
Marylebone, St.	1,509	157,696
Newington (St. Mary)	624	64,816
Olave, St.	189	19,375
Panorama, St.	2,716	166,956
Poplar	2,918	47,162
Rotherhithe (St. Mary)	886	17,805
Savion's, St.	250	35,731
Shoreditch (St. Leonard)	646	109,257
Stepney	1,257	110,775
Strand	174	44,460
Wandsworth and Clapham	11,695	50,764
Whitechapel	406	79,759
Total	78,029	2,362,236

The houses of the metropolis, with the exception of public buildings and a few others belonging to clubs, bankers, insurance-offices, and private persons, are built of brick, but many of them are faced with stucco. Nearly all the streets are paved with granite, but a few are macadamised, and some small portions are paved with wood. The streets have a foot-path on each side laid with flags, and divided from the carriage-way by being raised two or three inches above it. The greater part of the houses are covered with tiles, the rest with slates.

The central and oldest portions of the metropolis are the City and Liberties of London, the City of Westminster, and the Borough of Southwark. To these must be added the Metropolitan Boroughs, comprising a number of parishes and districts. We shall first describe the metropolis as consisting of the separate portions of the City and Liberties of London, and the metropolitan boroughs of Westminster, Marylebone, Finsbury, the Tower Hamlets, Southwark, and Lambeth, and then add such statements as relate to the metropolis generally.

City and Liberties of London.—London was one of the chief stations of the Romans, at least in the later times of their occupation of Britain. By Tacitus and other Roman writers it is called Londinium, Londinun.

and Augusta; by the Britons it was called *Lundayne*, and by the older Saxons *Lundenceaster*, 'ceaster' signifying a fortified place. The wall appears, from careful examinations of certain portions, to have been originally built by the Romans, and to have extended from the Tower to Cripplegate, whence it was carried direct south to the Thames. Fitzstephen, writing of the wall in the reign of Henry II., says:—"The wall of the city is high and massive; it has seven gates with double doors, and on the north side towers set at proper distances apart. In like manner London has also walls and towers on the south side; but that great river, the Thames, which abounds in fish, and in which the tide ebbs and flows, running on that side, has in course of time loosened, overthrown, and washed away the walls on that part." Stow, in his 'Survey of London,' describes the circuit of the wall as it existed in his time, specifying the distances from place to place in perches, which are here converted into yards. "From the Tower of London to Aldgate, 451 yards; from Aldgate to Bishopsgate, 470 yards; from Bishopsgate to Cripplegate, 891 yards; from Cripplegate to Aldersgate, 412½ yards; from Aldersgate to Newgate, 363 yards; from Newgate to Ludgate, 231 yards; from Ludgate to the Fleet Dyke, 330 yards; from the Fleet Bridge to the Thames, 385 yards: total, 3536½ yards, or 2 miles 16¼ yards." Excavations which have been made at various times show that the general level of the streets of Roman London was from 15 to 20 feet below the present level; and that Spitalfields and other districts eastward outside the walls were used as a cemetery. Many sepulchral remains have been discovered in these portions. Within the walls have been discovered tessellated pavements, foundations of buildings and other architectural remains, coins, urns, pottery, utensils, tools, and ornaments of a great variety of kinds. A collection of the remains of Roman London has recently been formed under the auspices of the corporation. London does not seem to have extended much beyond the limits of the present city and liberties up to the time of Stow, who, in his 'Survey,' which bears the date of 1603, states that there were then 110 churches in the City and Liberties of London, and only 13 churches in the suburbs, including Westminster and Southwark.

The great fire, which occurred in the year 1666, destroyed almost the whole of London within the walls, including 84 churches. It is stated that the number within the walls was previously 97, so that only 13 escaped. Some of these afterwards became ruinous, and were taken down and rebuilt. Sir Christopher Wren, besides St. Paul's cathedral, rebuilt 53 of the pariah churches, and 34 were never rebuilt, the parishes being respectively united to adjoining parishes which had churches. Other churches have since been taken down, and the parishes united to others in like manner. Thus one was taken down when the present Bank of England was built, one for making the approaches to London Bridge, and two to make room for the present Royal Exchange. The number of parishes is now 109, but the number of the pariah churches is reduced to 70. The area of the whole and the respective areas of the parishes are probably nearly the same as they were in Stow's time. The entire area (including the Inns of Court, most of which are extra-parochial) is 600 acres, or 40 acres less than a square mile.

After the great fire Sir Christopher Wren proposed a plan for rebuilding the city which would have secured a convenient width for the streets, a sufficient degree of regularity, and open places for ventilation and as sites for public structures. Wren's plan was not adopted; and the actual process of rebuilding left only the great lines of thoroughfare of a proper width, while all the rest of the city consisted of narrow streets, lanes, and alleys. Most of Wren's churches are built in the sides or at the angles of these narrow streets and lanes, and in order to fit them for their respective situations they are built in a great variety of ways, of smaller or larger size according to the extent of the respective parishes, and with more or less of solidity and architectural decoration according to the funds allowed him by the pariah authorities. Some are domed, some have towers, some have towers and spires, some have the interior divided by columns into a nave and aisles, and some are simple rectangular buildings of four walls with a small belfry. Several of the towers and spires are eminently beautiful.

The City and Liberties of London comprehend the City of London within the Walls and the City of London without the Walls. London within the Walls is limited to the area formerly inclosed by the walls. London without the Walls extends westward to Holborn Bars and Temple Bar, northward some distance beyond Aldgate and Bishopsgate, eastward to the Minories, and southward over London Bridge so far as to include a portion of ground on the Surrey side of the river. London within the Walls comprises an area of 370 acres, and in 1851 had 7174 houses inhabited, 1127 uninhabited, 17 building, and a population of 54,702. London without the Walls comprises an area of 230 acres, and had 7406 houses inhabited, 332 uninhabited, 12 building, and a population of 73,167: total population, 127,869.

The City and Liberties of London contain a large number of public buildings. We can only notice briefly the most important of them.

The Tower of London lies just outside the city and liberties, but may be noticed here, as it has in reality formed the nucleus of modern London. It consists of a number of structures inclosed within a wall and ditch. The oldest part is the White Tower, which stands nearly in the centre of the quadrangle, and is known to have been built by

Gundulph, bishop of Rochester, for the Conqueror, about the year 1078. The area within the walls of the Tower exceeds 12 acres. The ditch is now dry. Round the quadrangle are several towers which have distinctive names, and at the north-western corner is the church of St. Peter-ad-Vincula. Several of the kings of England occasionally resided in the Tower, and courts, coronation-fêtes and tournaments were held in it. For five or six centuries however it was chiefly used as a state-prison; and in it were retained as captives kings, queens, statesmen, philosophers, and patriots. Many of the prisoners were publicly executed, and not a few were privately tortured and murdered. The horse armoury, Queen Elizabeth's armoury, and the regalia are now exhibited in the Tower. Large portions of the Tower buildings have been rebuilt within the last few years.

St. Paul's cathedral was built by Sir Christopher Wren on the site of a former St. Paul's cathedral, of gothic architecture, which was burnt by the great fire in 1666. Sir Christopher laid the first stone June 21st 1675, and he completed it in 1710, being then in his 78th year. It is the only English cathedral built in the classic style. It is built in the usual form of a cross. The length from east to west is 500 feet; the length of the transept is 285 feet. Over the intersection of the nave and transept rises a dome surmounted by a lantern, globe, and cross. The height to the summit of the cross is generally stated to be 404 feet, but some authorities reduce it to 365 feet from the ground. Two campanile towers, 220 feet high, flank the great western portico. In the interior are many monuments and statues erected in honour of naval and military commanders, and a few in honour of philanthropists, literary men, and artists. In the crypt the remains of Nelson and Wellington are deposited—those of Nelson in the sarcophagus originally prepared by Cardinal Wolsey, and intended by him for his own interment in the chapel at Windsor; those of Wellington lie about 20 feet east of Nelson's.

The Mansion House, the official residence of the Lord Mayor during his year of office, was erected by Dance between 1739 and 1753. The principal room is the Egyptian Hall, in which the civic banquets are held. The justice room, in which the Lord Mayor sits as a police magistrate, is on the left of the principal entrance. The Mansion House is richly furnished, and contains a large supply of valuable plate. The Guildhall was originally built in 1411, but continued to receive additions and decorations till about the commencement of the 16th century. The great fire destroyed all within and near it, but left the walls so far uninjured that they still stand. The Guildhall as it now stands was almost entirely rebuilt in 1789 by Dance. The entrance-porch is a part of the original structure, and the crypt is still in its original state. The Hall is 152 feet in length, 50 feet in breadth, and 55 feet in height. Various courts are held in other apartments of the Guildhall.

The Royal Exchange stands on the site of the old Royal Exchange, with some additional area. It was erected by Mr. Tite. The first stone was laid by Prince Albert, January 17, 1842, and the structure was opened by Queen Victoria, October 28th, 1844. The length from the portico at the west end to the columns of the east entrance is 308 feet; the width of the west end is 119 feet, of the east end 174 feet. The interior quadrangular area is 170 feet by 112 feet, of which 111 feet by 58 feet is uncovered, leaving 21 feet for the width of the ambulatory clear of the plinths. The height of the bell-tower to the top of the vane is 177 feet. In front of the grand or western entrance is a bronze equestrian statue by Chantry of the Duke of Wellington.

The Bank of England was originally erected from a design by Mr. George Sampson, 1732 to 1734, and then comprised only the centre of the south front, the hall, bullion court, and court-yard. The east and west wings were added by Sir Robert Taylor between 1766 and 1786; and the remainder of the structure was completed by Sir John Soane, who was appointed the architect to the Bank in 1788. He rebuilt many of the parts constructed by Sampson and Taylor, and the whole of the edifice, as it now stands, may be said to be from his designs. The exterior appearance has since been improved by Mr. Cockerell. It now covers an irregular space of four acres. Near the Bank, on the east side, is the Stock Exchange, in Capel Court.

The Central Criminal Court, in the Old Bailey, consists of two courts, the Old Court and the New Court, which meet monthly, and both sit at the same time for the greater despatch of business. The Recorder and Common Serjeant are the presiding judges in most cases, but one of the judges of the superior courts assists occasionally; and a third court is sometimes presided over by one of the chief law officers of the corporation.

In the angle between the Old Bailey and Newgate-street stands the prison of Newgate, built by Dance, and completed in 1733. It is a massive and prison-like structure. In Giltspur-street, on the opposite side of Newgate-street, stood the Giltspur-street Compter, also by Dance; it was also a prison for criminals, but having been superseded by the new city prison at Holloway, it is now (November, 1854) being taken down. Whitecross-street Prison is for debtors; and Bridewell is a place of confinement for persons summarily convicted before the Lord Mayor and Aldermen.

The General Post Office, St. Martin's-le-Grand, was built between 1824 and 1829 from the designs of Sir Robert Smirke. The building is of the Ionic order, 389 feet long, 130 feet wide, and 64 feet high. The Hall, in which letters and newspapers are delivered, is 80 feet

long and 60 feet wide. The Custom House in Lower Thames-street, was erected 1814-17, from the designs of David Laing, but in consequence of the foundation having given way, the original centre was taken down and the present front towards the Thames erected by Sir Robert Smirke. The East India House, the house of business of the East India Company, was built by Mr. R. Jupp, in 1799, and subsequently enlarged from designs by C. R. Cockerell and W. Wilkins. The façade is 200 feet in length. The pediment is of the Ionic order. The Mint, on Tower Hill, was by Mr. Johnson, but the entrances, &c., were by Sir Robert Smirke, who finished the works in 1811.

The Corn Exchange, Mark-lane, opened in 1747, was enlarged and partly rebuilt and reopened June 24th, 1823. The Coal Exchange, Lower Thames-street, was built by Mr. J. B. Bunning, between December 1847, and October 30th, 1849, on which day it was opened by Prince Albert. The new building for Billingsgate Market is a handsome and commodious structure, affording great facilities for the landing and sale of fish of all kinds.

The principal educational establishments of the city are Christ's Hospital, St. Paul's school, the Merchant Taylors' school, the Mercers' school, the Charter-House school, and the City of London school. Christ's Hospital, in Newgate-street, commonly called the Blue Coat school, was founded by Edward VI., June 26th, 1553, and occupies the site of the Gray Friars Monastery. The first stone of the new hall was laid April 28th, 1825, and the hall publicly opened May 28th, 1829. The architect was James Shaw. In 1853 there were 950 boys on the foundation in London, who are instructed in the classics and mathematics, and 450 boys and 70 girls in a branch school at Hertford, which was founded in 1683. St. Paul's school is opposite the east end of St. Paul's cathedral. The number of scholars is limited to 153, the number of fish taken in the miraculous draught (John, xxi. 11). The Merchant Taylors' school, founded in 1561 by the Merchant Taylors' Company, in 1853 had 260 scholars, to which number it is limited. The City of London school, Milk-street, Cheapside, is partly an old foundation of 1442. The present structure was erected in 1835. The school is open to the sons of any respectable persons recommended by a member of the corporation. Each pupil has to pay 8*s.* a year school fees. The number of scholars in July 1852 was 579.

Doctors' Commons, on the south side of St. Paul's Churchyard, are so called because the doctors of the civil law here dine in common. The original buildings were destroyed by the great fire in 1666, and rebuilt at the expense of the professors. It is here that the Ecclesiastical and Admiralty Courts are held.

There are five principal markets within the limits of the city and liberties of London—Smithfield Market, for the sale of live cattle and sheep; Newgate Market, chiefly for the sale of meat in the carcase; Leadenhall Market, chiefly for poultry and game; Billingsgate Market, for fish; and Farringdon Market for general purposes. A new market for the sale of live cattle and sheep is being constructed at Copenhagen Fields, near Holloway, on the completion of which Smithfield Market will be discontinued.

Three bridges cross the Thames within the limits of the city. London Bridge was built after the designs of John Rennie, under the superintendence of his son Sir John Rennie. It was commenced March 15, 1824, and opened by King William IV., August 1, 1831. The bridge and its approaches cost little less than two millions sterling. It stands about 180 feet higher up the river than old London Bridge, which was not pulled down till after the new one was completed. London Bridge is built of granite, and has five semi-elliptic arches, of which the central arch has a span of 150 feet. The total length of the bridge, including piers and abutments, is 920 feet. It combines massive strength with elegance of structure, and is a truly magnificent work. Southwark Bridge was erected by John Rennie, between 1815 and 1819, at the expense of a company of proprietors. It consists of three arches, the central arch being 240 feet in span, and the other arches 210 feet each. The two piers and abutments are of stone; all the rest of the bridge is of iron, 5780 tons of cast iron and 50 tons of wrought iron being used in the work. Tolls are levied on this bridge, foot-passengers being charged one penny each. Blackfriars Bridge was erected by Mr. Mylne, a Scotch engineer, between 1760 and 1769. The funds for the work were raised by a city loan, to be repaid by tolls. The government purchased the tolls, and made the bridge free in June, 1785. The bridge consists of nine elliptic arches, of which the central arch is 100 feet in span. The length, between the abutments, is 996 feet. This bridge is in a somewhat insecure condition.

The Monument on Fish-street Hill, is a fluted column of the Doric order, erected by Sir Christopher Wren, 1671-1677, to commemorate the great fire of London. The bas-relief on the pediment is the work of Caius Gabriel Cibber.

Temple Bar, the gateway which separates the liberties of the city of London from the city of Westminster, was erected by Sir Christopher Wren in 1670. The statues in niches (Queen Elizabeth and James I. on the east side, Charles I. and Charles II. on the west side), are all by John Bushnell, who died in 1701.

The Inn of Court called the Temple, is nearly all within the limits of the City Liberties, but is extra-parochial. The buildings belong to

the two law societies of the Inner Temple and the Middle Temple. The Temple is so called from the Knights Templars, to whom it originally belonged. The buildings, which for the most part consist of chambers, are arranged in various courts. Each Temple has a hall, and the beautiful Temple Church, the restoration of which was completed in 1842, is common to both societies. The Hall of the Middle Temple is one of the most magnificent in the metropolis. The Inner Temple Garden is an extensive lawn, bordered on three sides with shrubs and flowers, and open in front to the Thames. The public are admitted to it on summer evenings.

Some of the insurance societies possess handsome structures of stone. Several of the banks have massive fronts of granite, and present an appearance of great solidity, and even grandeur.

The Halls, as they are called, of the various London Companies are for the most part extensive quadrangular buildings with a courtyard in the centre; some of these consist of two quadrangles which are separated by the banqueting-hall. With the exception of the Goldsmiths' Hall in Foster-lane, Fishmongers' Hall at the foot of London-bridge, and Ironmongers' Hall in Fenchurch-street, few of these structures have any pretensions to architectural elegance of exterior; the interiors however are in some instances of considerable extent. The Goldsmiths' Hall is a magnificent structure of stone, of classic architecture, designed by P. Hardwick, and opened July 15th, 1835.

For municipal purposes the City and Liberties of London are divided into 26 wards, and are governed by a Lord Mayor, 26 aldermen, including the Lord Mayor, and 240 common-councilmen. There are two sheriffs, who are jointly sheriffs of London and Middlesex, a recorder, common serjeant, chamberlain, town-clerk, and a variety of other officers. The Lord Mayor is elected annually from among those aldermen who have served the office of sheriff. He enters upon the duties of his office on the 9th of November, when there is a procession called the Lord Mayor's Show. The aldermen are chosen for life by such householders of the wards as are freemen. They constitute the court of aldermen, and every alderman is a justice of peace for the city of London, and presides in the court of wardmote in his ward. The common-councilmen are elected annually on St. Thomas's Day, at a wardmote in each ward, the electors being the same as in the elections of aldermen. They do not meet in any court exclusively their own, their sittings being presided over by the Lord Mayor, and the aldermen having the right to attend. The sheriffs are chosen annually by such of the freemen as are liverymen of some of the City Companies. The recorder is elected for life by the court of aldermen. The livery of London is the aggregate of the members of the several City Companies, of which 81 still exist.

London is the seat of a bishopric. The diocese comprises the county of Middlesex and several parishes in the counties of Essex, Kent, and Surrey: the number of benefices is 813. The chapter comprises a dean, 2 archdeacons, 4 canons, a precentor, chancellor, 28 prebendaries, and 12 minor canons. The income of the present bishop is returned at 11,700*l.*; that of his successors is fixed by Act 6 and 7 Wm. IV. c. 77, at 10,000*l.* The Bishop of London takes precedence of the other bishops, ranking next after the archbishops.

Besides the Central Criminal Court, there are the Lord Mayor's Court, a court held by each of the sheriffs, and two police-courts, one held at the Mansion House, before the Lord Mayor, and the other at Guildhall, before one of the aldermen. The London sessions are held eight times a year, before the Lord Mayor, aldermen, and recorder, for minor misdemeanors and poor-law appeals.

The police of the City and Liberties of London are under the control of a commissioner, who is appointed by the common council, but subject to the approval of the crown. The number of policemen, usually about 500, is fixed by the mayor, aldermen, and common-council.

The sewers are under the management of commissioners of sewers appointed by the corporation. They have authority to compel the proper drainage of houses, and they also attend to the repairs of the streets. A medical officer has been recently appointed by the corporation to take cognisance of matters affecting the public health within the city. Gas is supplied chiefly by two companies, and the total consumption is about 750,000,000 cubic feet per annum.

The City and Liberties of London are under three Poor-Law Unions, which are denominated respectively the City of London Union, East London Union, and West London Union. The London workhouse admits about 1000 inmates, the East London 600, and the West London about 650.

The revenue of the corporation amounts to about 190,000*l.* The expenditure in 1850 was about 170,000*l.* Besides this revenue, which strictly belongs to the corporation, a considerable income is collected from duties on coals and other sources, which is appropriated to public improvements, including the construction of new streets, the repair of the bridges, and some other specific purposes. The total amount of dues collected in the port of London on the importation of coal or coke in the year 1851 was about 110,000*l.* By the same duties charged on coals brought by railway to London, the Corporation collected in 1851 about 7500*l.*; and on coals brought by the Grand Junction Canal and by road, about 765*l.* was collected. The duty on wine produced 6620*l.* The City and Liberties of London return four members to the House of Commons. The right of election is in

the freemen, being liverymen, and the inhabitant householders occupying dwellings of 10*l.* yearly value.

The Corporation of the City of London is conservator of the Thames, and the Lord Mayor is chief magistrate of the river as well as of the city. The port of London extends, for general purposes, from London Bridge to a little below Blackwall; but, in connection with the coal-trade, it reaches to a little below Gravesend. The control of the maritime affairs within the port of London rests chiefly with the harbour-masters, of whom there are four, one principal and three subordinate. The Corporation receive dues varying from one half-penny to three farthings a ton from every vessel that enters or leaves the port, whether engaged in the foreign, colonial, or coasting trade. These dues amounted in the year ending July 25th 1851 to 16,038*l.* 12*s.* 6*d.* About a fourth of the whole British shipping trade is conducted through the port of London. The number and tonnage of vessels belonging to the port of London on December 31st 1853 were—under 50 tons 749, tonnage 24,621; above 50 tons 2209, tonnage 654,694. Of steam-vessels under 50 tons, there were 116 of 3759 tons, and above 50 tons, 291 of 109,598 tons. In the coasting trade during 1853 there entered the port 19,240 sailing-vessels, of 2,744,524 tons burden; and 7721 steam-vessels of 553,452 tons; and there cleared 1592 sailing-vessels of 446,925 tons, and 1565 steam-vessels of 431,082 tons. In the colonial and foreign trade there entered (including steamers) 6261 British vessels of 1,524,219 tons; and 5502 foreign vessels of 1,069,894 tons; and cleared 3807 British vessels, tonnage 1,060,408; and 4954 foreign vessels, tonnage 946,634. The amount of exports in the year 1852 was 18,802,122*l.*, in 1853 it was 22,991,082*l.*

Connected with the port of London are the Docks. Nearest to the Tower, on the north side of the river, are the St. Katharine's Docks, which include an area of 23 acres, 11 acres of which are water. The London Docks are three;—London Dock, with an area of 20 acres, East London Dock, with an area of 7 acres, and Shadwell Basin, with an area of 3 acres. The West India Docks are about one mile and a half east from the London Docks. The entire area occupied by these docks, including the canal cut to avoid the bend of the Thames at the Isle of Dogs, is 295 acres. The East India Docks are below Blackwall. The import dock has an area of 19 acres; the area of the export dock is 10 acres. These docks, since the opening of the trade to India, have been purchased by the proprietors of the West India Docks, and are now open to vessels from all parts. On the south side of the river are the Commercial Docks, the Grand Surrey Canal Docks, the Greenland Dock, the East Country Dock, and some smaller docks.

The City and Liberty of Westminster extends from Temple Bar on the east, to Kensington and Chelsea on the west, and from the Thames on the south to Marylebone on the north. It embraces the parishes of St. Clement-Danes, St. Mary-le-Strand, St. Paul, Covent Garden, St. Martin-in-the-Fields, St. Anne, Soho, St. Margaret, Westminster, St. James, Westminster, St. George, Hanover-square, and St. John the Evangelist. It includes an area of 2355 acres. The population in 1851 was 199,799. The Metropolitan Borough of Westminster includes, in addition to the City and Liberty, the district of the Savoy and the lordship of the duchy of Lancaster, which are situated between the Strand and the bank of the Thames. The Metropolitan Borough has an area of 2500 acres, and had in 1851 a population of 241,611. It returns two members to the Imperial Parliament.

Westminster, next to the City of London, contains the largest number of public buildings of the metropolis. The most ancient of these, and in many respects the most interesting, is Westminster Abbey. A church was built on the site by Sebert, king of the East Saxons, and dedicated to St. Peter; but the first Westminster Abbey was erected by Edward the Confessor, 1049 to 1066. Henry III., in 1220, commenced the building of a chapel dedicated to the Virgin at the east end of the church. In 1245 he began to take down and rebuild the church. He died in 1272. The parts of the present structure erected during his reign are not exactly known; but he is supposed to have completed the choir and transepts, besides erecting the chapel to the Virgin and the chapel of Edward the Confessor. The building was afterwards carried on by successive abbots. Henry VII. took down Henry III.'s chapel to the Virgin, in order to make room for his own Lady Chapel, which is now called Henry VII.'s Chapel. The upper parts of the two western towers were added by Sir Christopher Wren. The interior length of the Abbey, including Henry VII.'s Chapel, is 511 feet; entire breadth, across the transepts, 203 feet; length of the nave, 166 feet; length of the choir, 155 feet; breadth of the nave and aisles, 79 feet; breadth of the choir, 38 feet; height of the roof, 102 feet; height of the western towers, 224 feet. Henry VII.'s chapel is 103 feet long, 70 feet wide, and 60 feet high.

Westminster contains, in addition to the Abbey, 42 churches belonging to the Established Church, among which the most conspicuous are St. Martin's-in-the-Fields and St. Mary-le-Strand, both built by Gibbs; Whitehall Chapel, erected by Inigo Jones as the banqueting-hall for the intended palace of Whitehall; and St. Margaret's church, near Westminster Abbey, which possesses one of the finest windows of painted glass in the metropolis. The church erected

at the expense of Miss Burdett Coutts is a very fine example of the modern gothic.

The Palace of Westminster, as it is called, which contains the new Houses of Parliament and other apartments appropriated to parliamentary business, is not yet completed. Sir Charles Barry is the architect. The first stone was laid April 27th 1840. The east or river front, which is finished, has a length of 900 feet, and is separated from the Thames by a terrace formed of Aberdeen granite. The walls of the whole structure are constructed externally of magnesian limestone from Anston, in Yorkshire, and lined internally with brick. The main beams and joists all through the building are made of iron: the oak wainscoting, which covers a large portion of the interior surface of the walls, is the only material used that can cause any danger from fire. The style of the building is highly-decorated palatial Tudor. The west or land front is the most picturesque of the fronts, because the most varied in surface. The Central Tower, which contains the Grand Central Octagon Hall, is nearly finished, and will, when completed, present one great lantern, three lights in height, with flying buttresses pinnacled; above this a second story two lights high, and over all a richly-crocketed gothic spire, the summit rising to the height of 300 feet. The Victoria Tower, which stands in the south-western angle of the building, and forms its grandest single feature, is 75 feet square, and rises over four magnificent pointed arches 60 feet in height, two of them opening on two sides direct into the street; the other two opening respectively on the Guard Room and the Royal Staircase. This stupendous tower is raised at the rate of only 30 feet a year; it has not yet reached much more than a half of its intended height, 340 feet. The Clock Tower, which stands at the north-western angle of the building, is 40 feet square. It is to bear an eight-day clock with four faces, each nearly 30 feet in diameter, striking the hours on a bell weighing 9 tons, and chiming the quarters on eight bells. It is to be surmounted by a richly-decorated belfry spire, the summit of which will be 320 feet above the ground. A large window in the western face of the Clock Tower is to open into a wing which will displace all the houses on the south side of Bridge-street, extend up to Margaret-street, thence cross to the corner now occupied by the Law Courts, and thence return to Westminster Hall, thus inclosing the whole area of New Palace Yard. An additional tower of metal-work, of rather large dimensions, is being erected near to the principal front. To afford light to the interior parts of the structure there is a long series of courts connected together by groined archways under the chief buildings. Westminster Hall, which is 270 feet long, 74 feet wide, and 90 feet high, will, when the Westminster Palace is completed, be incorporated, and form a part of this magnificent whole.

St. James's Palace, a dingy brick structure opposite the bottom of St. James's-street, was originally built in 1532 by Henry VIII., after a design by Holbein. Many of the kings and queens of England up to the time of George III. resided in it, and the court is still held there. Buckingham Palace, at the west end of St. James's Park, is the town residence of Queen Victoria. It was commenced by Nash for George IV.: a new front towards St. James's Park has been recently added. Considerable improvements are in progress in the vicinity of the palace. Behind the palace is a large garden.

On the south side of Whitehall are some of the most important government offices—the Treasury, extending from Downing-street to the Horse Guards, and including the Board of Trade; the Horse Guards, which contains the offices of the Secretary-at-War, the Commander-in-Chief, and the Quarter-Master-General; and the Admiralty, which contains the offices of the First Lord of the Admiralty and the four Junior Lords. The office of the Master-General of the Ordnance is in Pall Mall. Other government offices are held in Somerset House, Strand—the Stamp and Tax offices, the offices of the Poor-Law Commissioners, the Inland Revenue office, the Audit office, and the office of the Duchy of Cornwall. In the buildings of Somerset House the Royal Society, Astronomical Society, Geographical Society, and Geological Society have apartments. The University of London has apartments in Somerset House: it is an examining body, not educational, and confers degrees in arts, laws, and medicine. King's College occupies the east wing of Somerset House. It was founded in 1828 for imparting a university education in accordance with the principles of the Church of England. A hospital is attached to the college, and it has museums and libraries. The matriculated students, unlike those of University College, are distinguished by an academical dress. In 1853 there were 79 theological students, 102 in general literature and science, 46 in engineering, manufactures, and architecture, and 239 in medicine. This college has several exhibitions at Oxford and Cambridge, and some valuable prizes.

In this borough are the Westminster, the St. George's, and Charing-cross hospitals. Westminster contains most of the theatres of the metropolis. The old Covent Garden theatre was burnt down September 20th 1803, was rebuilt by Smirke, and was opened September 18th 1809. The old Drury-lane theatre was also burnt down February 24th 1809, was rebuilt by B. Wyatt, and opened October 10th 1812. The Opera House and Haymarket theatre are both in the Haymarket; the St. James's theatre is in King-street, St. James's; the Adelphi, Lyceum, and New Strand are in the Strand; and the Olympic is in Wyob-street.

The Pantheon, in Oxford-street, originally a theatre, is now a bazaar. There are several other bazaars in Westminster.

There are several buildings and rooms for lectures, exhibitions, concerts, and balls. The chief of these are the Royal Institution, Albemarle-street; the Society of Arts, John-street, Adelphi; the National Gallery, Trafalgar-square, and Marlborough House, Pall-Mall, for the National collection of pictures; the British Institution, Pall-Mall; Gallery of British Artists, Suffolk-street, Pall-Mall; the Old and New Water-Colour Societies' Galleries, Pall-Mall; the Egyptian Hall, Piccadilly; Wyld's Great Globe, Leicester-square; the Panopticon Institution, Leicester-square; the Leicester-square Rooms; the Hungerford Market Rooms; the Hanover-square Rooms; the Argyle Rooms; Exeter Hall; and the Whittington Club Rooms. The Penitentiary and the Bridewell prisons are in Westminster.

The London and Westminster Bank has erected a handsome new building for its Bloomsbury branch. The design is by Mr. Henry Baker, and presents a four-storied front in the Italian style, with rusticated projections at the sides.

The two principal markets in Westminster are Covent Garden for vegetables, fruit, and flowers, and Hungerford Market for fish, fruit, &c.

In Westminster are included Hyde Park and Kensington Gardens, as far as the Serpentine River, the Green Park, and St. James's Park. A new line of street, called Victoria-street, has been recently opened from Westminster Abbey to Vauxhall Bridge Road, Pimlico, and some extensive ranges of dwelling-houses have been built along part of the line.

Westminster Bridge was erected by Charles Labelye, a native of Switzerland. The first stone was laid January 29th 1738, and the bridge was opened November 18th 1750. It consists of 15 arches, the centre arch being 76 feet span. The entire length is 1223 feet. This bridge has fallen into a very dilapidated condition; and a new bridge is now being constructed under powers granted by Act of Parliament. Mr. Thomas Page is the architect. The bridge is to be in the gothic style, to harmonise with the houses of parliament, and is to consist of 7 principal arches, and 2 of smaller dimensions on the Surrey side. The length of the roadway is 914 feet, and the extreme width of the bridge will be 85 feet. The span of the centre arch is 121 feet. Waterloo Bridge was erected by John Rennie for a company of proprietors. The first stone was laid October 11th 1811, and the bridge was opened June 18th 1817. It consists of 9 elliptical arches of 120 feet span. The entire length of the bridge and abutments is 1380 feet. The approaches have been raised, and the bridge is level. A toll of $\frac{1}{4}$ d. is charged to foot-passengers, and there are other tolls for vehicles. Hungerford Suspension-Bridge was erected by I. K. Brunel. The first stone was laid in 1841, and the bridge was opened April 18th 1845. It consists of three arches, the span of the centre arch being 676 feet, and that of each of the side arches 333 feet. It is only for foot passengers, who are charged a toll of $\frac{1}{4}$ d. each.

The Borough of Marylebone adjoins Westminster on the south, Oxford-street and the Uxbridge-road forming the boundary. The area is 5310 acres. The population in 1841 was 287,465; in 1851 it was 370,957. It returns two members to the House of Commons. This borough contains the Regent's Park, with the Gardens of the Zoological Society, and the Botanical Society; the termini of the Great Western, North-Western, and Great Northern railways; the two exhibitions of the Colosseum and Diorama; University College; the Foundling Hospital; the Middlesex Hospital; and St. Mary's Hospital, Paddington. University College was designed by W. Wilkins, to consist of a centre, and two wings advancing at right angles from its extremities. The centre only has been completed. The first stone was laid April 30th 1827, and the building was opened October 1st 1828. The grand entrance under the portico opens into an octagonal vestibule, which is surmounted by a dome. The interior contains several lecture-rooms, a large general library, a Chinese library, a law library, a museum, &c. The Flaxman Gallery, which is open to the public on Wednesdays and Saturdays, contains the original models of the statues, bas-reliefs, and other works of Flaxman. The number of students in arts and law in 1853 was 236; in medicine 186. The college has been already endowed to a considerable extent by various benefactors. In connection with it is a Junior school, of very high character, which is held in the south end of the building. The number of scholars in 1853 was 290. University College Hospital stands opposite the college, and besides the usual benefits conferred by an hospital affords improved means of instruction in medicine and surgery to the medical students of the college, under the superintendence of its professors.

The Foundling Hospital was founded by Captain Thomas Coram, in 1739. The funds were afterwards increased by a parliamentary grant of 10,000*l.*, and the system of admission was altered. The children are now admitted on application of the mother, who must depose to the abandonment of the father, and non-recognition of the parish authorities. The number of children in the institution is usually about 400. After receiving a moderate education the boys are apprenticed to trades, and the girls either apprenticed or put to service.

The Borough of Finsbury adjoins Westminster and Marylebone on the west, and the western part of the city of London on the south.

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The area is 4670 acres. The population in 1841 was 265,043; in 1851 it was 323,772. It returns two members to the House of Commons. This borough contains the British Museum, Lincoln's Inn, Gray's Inn, the College of Surgeons, the Mechanics Institute; the Free and the Lying-in Hospitals, and St. Luke's Asylum for Lunatics; the Charter House, and Sadlers Wells Theatre. The British Museum owes its origin to the purchase by government for 20,000*l.* of Sir Hans Sloane's collection of books and specimens of natural history. The purchase was made in 1753, the Harleian collection of manuscripts was added to it, and Montague House was bought as the place of deposit. Large additions have since been made by gifts and parliamentary grants. A new museum was commenced in 1823 by Sir Robert Smirke, and has been recently completed. The library of printed books is said to consist of about 500,000 volumes; there is also a very large collection of manuscripts. The Print Room contains prints, drawings, &c. of the first masters. The zoological department is supplied with a vast collection of stuffed beasts, birds, reptiles, fishes, insects, and shells. The collections of mineralogy and geology are very large. The specimens of fine art consist of Egyptian antiquities, sculptures from Nineveh, the Elgin marbles, Phigaleian marbles, Lycian marbles, and Townley marbles.

Lincoln's Inn is so called after Henry de Lacy, earl of Lincoln, who died in 1312, and whose town-residence occupied a considerable part of the present site of Lincoln's Inn. He assigned the grounds to certain professors of the law, who built on them an inn of court for the study of the laws of England. Lincoln's Inn Old Hall, in which the Court of Chancery sits during vacation, has been repeatedly altered and modernised. It is a fine room, but not very large. Lincoln's Inn New Hall and Library were built by Philip Hardwick, R.A. They form a very handsome structure of Tudor architecture on the west side of Lincoln's Inn New Square. The building, which is of brick, with stone quoins and dressings, was commenced April 20th 1843, and was opened by the Queen, October 30th 1845. The hall is 120 feet long, 45 feet wide, and 62 feet high, and has a roof of carved oak. The library is 80 feet long, 40 feet wide, and 44 feet high. The hall forms the south end of the structure, the library the north end, and they are connected by a vestibule.

Gray's Inn derives its name from Edmund lord Gray of Wilton, who, in 1605, sold the manor of Portpoole, four messuages, four gardens, and other premises and grounds, to Hugh Dunny, Esq., from whom they passed into the possession of the prior and convent of East Sheen, in Surrey, by whom they were leased to certain students of the law. The hall was completed in 1560. It is a handsome apartment, little inferior to the Middle Temple Hall.

Eight Inns of Chancery are nominally attached to the four Inns of Court. To the Inner Temple are attached Clifford's Inn, near St. Dunstan's church, Fleet-street, Clement's Inn, near St. Clement-Danes, Strand, and Lyon's Inn, at the bottom of Newcastle-street, Strand. To the Middle Temple is attached New Inn, Wych-street, Drury-lane. To Lincoln's Inn are attached Furnival's Inn, on the north side of Holborn, and Thavies Inn, nearly opposite, on the south side. To Gray's Inn are attached Staple Inn, near Holborn Bars, and Barnard's Inn, in Holborn, adjoining Fetter-lane.

The College of Surgeons is in Lincoln's Inn Fields, and contains an excellent collection of anatomical specimens, and a museum of comparative anatomy. The Mechanics Institute was founded in 1823.

The Charterhouse, which name is a corruption of Chartreuse, is an asylum for about 80 decayed householders upwards of 50 years of age, and has also a Free school in which about 40 boys are educated, some of whom are sent to the university, and others are apprenticed. The total number of scholars in 1851-52 was about 180.

The Borough of the Tower Hamlets adjoins the City of London and the Borough of Finsbury on the west. The area is 8988 acres. The population in 1841 was 419,730; in 1851 it was 539,111. It returns two members to the House of Commons. The public buildings in this borough are not of sufficient importance to require special notice; but it includes the Victoria Park; the East and West India, the London, and the St. Katherine's docks; the terminus of the Eastern Counties railway; the London Hospital, the Jew's Hospital, Bancroft's almshouses, and numerous others; the Tower Hamlets' cemetery; and the extensive Union workhouse for the City of London.

The Borough of Southwark is bounded by the river on the north, by the borough of Lambeth on the south and west, and by the borough of Greenwich on the south-east. The area is 590 acres. The population in 1841 was 142,620; in 1851 it was 172,863. It returns two members to the House of Commons. It contains St. Thomas's Hospital, Guy's Hospital, Bethlehem Hospital, the School for the Indigent Blind, the Magdalen Asylum, St. Patrick's Hospital; the Surrey Theatre; the fine old church of St. Saviour; the modern gothic Roman Catholic Cathedral; the terminus of the South-Eastern and Brighton railways; and the Queen's Prison. St. Saviour's church, formerly St. Mary-Overy, though it has been much injured, is still, next to Westminster Abbey, the largest and handsomest of the old gothic churches of the metropolis. The Lady chapel was restored in 1832, in accordance with the original architecture.

The Borough of Lambeth adjoins that of Southwark on the east and north. The area is 8840 acres. The population in 1841 was 197,412; in 1851 it was 251,845. It returns two members to the House of

Commons. It contains Lambeth Palace, the Orphan Asylum, Licensed Victuallers' school; the Surrey county jail; the terminus of the South-Western railway; the Victoria Theatre, Astley's Amphitheatre, the Vauxhall Gardens, and the Surrey Zoological Gardens. Lambeth Palace, situated near Westminster Bridge, has for several centuries been the chief residence of the archbishops of Canterbury. The various buildings of which it consists are erected round two courts. The outer court is on the western side near the Thames, and the inner court on the eastern side of the Hall. The outer court is entered by a lofty arched gatehouse flanked by two embattled towers. The Lollard's Tower, which was erected in 1484, and was used as a prison for heretics till the Reformation, is in the outer court: it is of stone. The prison was at the top of the tower. The palace was much injured by the Puritans, but has since been repaired, and some parts have recently been rebuilt.

The Metropolis.—The City and Liberties of London have a municipal government already described, and a limited jurisdiction in Southwark. The City of Westminster has a limited jurisdiction under a high steward and deputy, a high constable, and 16 burgesses, and the Tower is a fortress under a constable, an office which was held by the Duke of Wellington at the period of his death, and is now held by General Viscount Combermere. With these exceptions the whole of the local government of the metropolis is under the management of the parishes, by vestries and other public meetings, and by parish officers. The parishes of Westminster have been already enumerated. Chelsea is noticed separately. [CHLSEA.] Then follow, on the north side of the river, proceeding from west to east, the parishes of Kensington, Paddington, Marylebone, St. Giles-in-the-Fields, and St. George, Bloomsbury (St. Giles's and St. George's, Bloomsbury, are for many purposes united), St. George the Martyr, St. James, Clerkenwell, St. Luke, Old-street, St. Mary, Islington, Hackney, Shoreditch, Bethnal Green, Spitalfields, Whitechapel, Wapping, St. George's-in-the-East, Shadwell, Stepney, Limehouse, and Poplar. On the south side of the river, proceeding from west to east, are the parishes of Lambeth, Newington, Camberwell, Christ Church, Surrey, the five parishes in the ward of Southwark, of St. Saviour, St. Olave, St. John (Horsley-down), St. George, and St. Thomas, and then follow the parishes of Bermondsey, Rotherhithe, Deptford, Greenwich, and Lewisham.

Greatly as the metropolis had increased in extent in the reign of Elizabeth, the map of London at that period shows it to have been a mere dwarf in comparison with its present gigantic dimensions. All to the north and west of the Strand was open fields and country, as well as nearly all the south bank of the river. London Bridge was then the only structure of its kind which the metropolis possessed. Insignificant as the increase of buildings in Elizabeth's reign may now appear, it was regarded with so much apprehension as well as wonder at the time, that the queen issued a proclamation, in 1580, forbidding the erection of any but houses of the highest class within 8 miles of the city. The same was done by her successor, but in neither case had the prohibition much effect; so that by 1686 many new districts and parishes had been added to the suburbs. Terrible as was the calamity which during that year befel the city itself, when upwards of 18,000 houses and other buildings, including St. Paul's cathedral, were destroyed, it has been attended with much improvement in the construction of the streets and houses in the city.

Within the course of the next hundred years from this date the metropolis extended itself considerably to the west and north-west, where it became more fashionable to reside; and no doubt the fire of London had a great share in this change, for their mansions in the city having been destroyed by it, the nobility removed from that seat of bustle and traffic much earlier than they otherwise might have done. In 1700 Old Bond-street was partly built, but its situation was then almost rural, all to the north being fields, lanes, and uncovered ground; and many mansions which are now surrounded by buildings and streets for a considerable distance, then stood, if not quite solitary, with only a few straggling houses in their neighbourhood; such were Montague House, which occupied the site of the British Museum, and Burlington House, Piccadilly.

It was not till the beginning of the reign of George III., when the present system of paving and lighting the streets was introduced, that the metropolis began to put on a civilised appearance, by the safety and convenience of the public being attended to. Signs, posts, water-spouts, and all similar nuisances and obstructions were removed; foot-paths were laid down, and lamps were lit at night. Covent Garden Theatre, the first production of Sir R. Smirke, and almost the first specimen of the Grecian Doric style in the metropolis, may also be considered as the beginning of a new era in its architecture; or rather it has so happened that it has been followed by numerous other structures and improvements, which have given (at least as far as they extend) quite a different aspect to the town. The first of these improvements was the formation of Regent-street and the Regent's Park. These were followed by other improvements, not only in the street-architecture of the west end of the town, but in the reconstruction of several parts of the city. The alterations occasioned by the building of New London Bridge, and forming approaches to it, have already greatly changed that part of the city; and a spacious and handsome line of street just opened, called Cannon-street West, connects the east end of King William-street with the south side of St. Paul's

Churchyard. The range of buildings in Princes-street, which was previously a narrow lane, has an imposing air of noble simplicity. Moorgate-street, which extends from Princes-street to Finsbury-circus, displays a considerable regularity of design, and yet does not offend by too great sameness and monotony, the elevations being broken into sufficiently distinct masses. The Excise Office, in Broad-street, once the Gresham College, has been replaced by a handsome range of buildings for mercantile purposes. Warehouses of very large extent and of massive appearance have been recently constructed in Gresham-street, in Cannon-street, and on the south side of St. Paul's Churchyard.

The squares of the metropolis are chiefly at the west end of the town. The largest is Lincoln's Inn Fields, which comprises an area of 12 acres. Russell-square and Belgrave-square occupy 10 acres each. The rest occupy from about 7 to 8 acres each.

The metropolis is now liberally supplied with parks, and the number is increasing. At the west end are—St. James's Park, the Green Park, and Hyde Park, with Kensington Gardens. On the north-west side are the Regent's Park and Primrose Hill; on the north-east the Victoria Park; on the south Kennington Park has recently been opened to the public, and Battersea Park is in preparation. Cemeteries also have been formed at Kensall Green, at Highgate, in Fulham-road, Brompton, at Stoke Newington, at Mile End, at Stepney, at Bow, and at Nunhead and Norwood in Surrey.

That London is not commonly considered as a manufacturing town is owing to the more important aspects under which it presents itself, and not because of the absence of manufacturing industry. Manufactures of almost every kind are in fact carried on in the metropolis, and upon a scale of great magnitude. The largest breweries, distilleries, and sugar-refineries in the kingdom are in the metropolis. The manufacture of metals in almost every branch is carried on to a vast extent. Almost every kind of machinery, from the smallest wheels required by the watchmaker to the most powerful steam-engines, are made in London. The making of gold and silver articles, of optical and surgical and other instruments, tools of the best quality, and musical instruments, gives employment to numerous hands. Ship-building and its accessory occupations, rope-making, mast-making, block-making, anchor-making, &c., have always been actively prosecuted. There are also numerous chemical works on a large scale, tanneries, soap-manufactories, potteries, and dye-houses. Clothing of all descriptions is made, not merely for the use of the inhabitants of the metropolis, but for the supply of wealthy persons in various parts of the kingdom, and for exportation to the British colonies. The metropolis is also the great workshop of literature, science, and the arts. The number of books printed and published in all other parts of the united kingdom is trifling in comparison with what is produced in London. The periodical literature is of corresponding rank and magnitude.

It is not possible to state with any pretensions to accuracy the amount of consumption in London. A considerable part of the foreign and colonial merchandise that passes every year through the custom-house of the port is forwarded into the interior of the country; and the same remark applies, though in a less degree, to the produce of London breweries, distilleries, tanneries, &c. A tolerably good test of the consumption of butchers' meat was formerly supplied by the returns of sheep and cattle sold in Smithfield market, though this would at all times be somewhat below the actual amount, on account of the number of animals sold to butchers by the drovers on their road to the market; but since the improvement of turnpike roads, and the consequent acceleration of travelling, and more especially since the adoption of steam-navigation and railways, a great and continually-increasing quantity of cattle and slaughtered meat is brought for sale, of which no account is taken. The quantity of wheat brought into the port affords no evidence of the quantity consumed in the metropolis, much of it being sent into the country. The quantity of coals brought into London during 1851 was above 8,500,000 tons.

Until comparatively a recent period the police of the metropolis was very defective; but in 1829 the metropolitan police was formed, and subsequently the police of the city of London. The city police has jurisdiction only within the city and liberties. The metropolitan police extends 10 or 12 miles from St. Paul's to the surrounding villages. It is under the management of two commissioners, and is formed into 18 divisions, each of which is distinguished by a letter, A, B, &c.

For the ordinary administration of justice, there are 11 metropolitan police-courts, besides the two magisterial courts of the city. At Bow-street police-court there are three magistrates, at each of the others two, except at Greenwich and Woolwich, where there are two magistrates for the two courts, and so at Hammersmith and Wandsworth.

Besides the prisons of the city, namely, Newgate, Whitecross-street Prison, and Bridewell House of Correction, there are belonging to the metropolis—the Queen's Prison, which includes the offenders formerly confined in the Fleet Prison and the Marshalsea; the Pentonville Prison; the Coldbath-Fields House of Correction; the Tothill-Fields Prison; the Horsemonger-lane or Surrey County Jail; the Millbank Penitentiary; the Clerkenwell House of Detention; the new City Prison, Holloway; the Brixton House of Correction; and the Hulks, or ship prisons, some of which are moored adjoining the dockyards of Woolwich, and others at Portsmouth.

According to the Returns of the Census of 1851 it appears that

there were then in the metropolis 1097 places of worship, affording sittings for 691,723 persons. Of these places of worship 458 belonged to the Established Church, 161 to Independents, 154 to six sections of Methodists, 130 to five sections of Baptists, 85 to Roman Catholics, 23 to Presbyterians, 20 to Mormons, 11 to Jews, 9 to Quakers, 9 to Unitarians, 8 to the Countess of Huntingdon's Connexion, 6 to Lutherans, 6 to Irvingites, 3 to Welsh Calvinistic Methodists, 3 to Swedenborgians, 3 to Plymouth Brethren, 2 to Moravians, 2 to the Greek Church, and 1 each to Sandemanians, French Protestants, German Catholics, Italian Reformers, German Protestant Reformers, and the Reformed Church of the Netherlands. The returns include 48 'isolated congregations.' The number of Sunday schools was 701, with 188,600 scholars on the books, of whom 96,671 attended Sunday schools on March 30th 1851; the respective numbers of the sexes being 45,488 males and 51,188 females. Of day schools there were 863 public, with 167,298 scholars, and 8698 private, with 86,941 scholars. Of evening schools for adults there were 100, attended by 2878 scholars on March 29th 1851.

The hospitals and other charitable institutions are very numerous. Baths and wash-houses, chiefly for the use of the poorer classes, have recently been established in several parts of the metropolis. In 1853 there were about 80 savings banks in London, which will be found enumerated in the articles *KENT*, *MIDDLESEX*, and *SURREY*.

The metropolis is now well lighted with gas, which is supplied by 18 companies. They have about 20 gas-making establishments in different parts of the town and suburbs, and supply daily about 15,000,000 cubic feet.

The sewers of the metropolis, except those of the city and liberties, which are under a distinct commission appointed by the corporation, were, by an Act of 1848, all placed under a general board, styled the 'Metropolitan Commissioners of Sewers,' whose jurisdiction extends "to all such places or parts in the counties of Middlesex, Surrey, Essex, and Kent, or any of them, not more than 12 miles distant in a straight line from St. Paul's Cathedral, in the city of London, but not being within the city of London or the liberties thereof." By an Act of Parliament passed in August 1854, the powers of this commission were continued till August 31st 1855, in order to afford time for the re-construction of the board.

As the parish fire-engines of the metropolis were found insufficient for the repression of the fires which occurred, the fire-insurance companies maintained each their own firemen and engines. In 1833, however, the fire-offices of the metropolis united, and formed a fire-brigade for the purpose of extinguishing fires, which is supported at the expense of the various companies in proportions agreed upon. The London Fire Engine Establishment has 17 stations, where engines are kept and firemen are on duty at all hours of the day and night, besides two floating engines on the Thames. The whole establishment is under one superintendent, and is divided into a certain number of foremen, engineers, sub-engineers, senior firemen, junior firemen, and extramens.

The yearly value of the house property of the metropolis has been estimated at about 8,000,000*l.*, and the amount of poor-rates at about 650,000*l.*

The metropolitan post-office consists of two districts, one of a circle of three miles round the general post-office, the other of districts beyond that circle, but within a circle of 12 miles from the post-office, which have fewer and later deliveries of letters than the inner circle. Besides the General Post-Office in St. Martin's le Grand, there are branch-offices at Lombard-street, Charing-cross, Old Cavendish-street, and Blackman-street in Southwark. In each of the principal streets, and in every district, at convenient distances, receiving-houses are kept by shop-keepers. The amount of postage paid by the metropolis is about 900,000*l.* per annum.

The metropolis is supplied with water by nine companies; the total supply per day during 1853 averaged 60,614,323 gallons, of which the New River Company supplied upwards of 17,500,000 gallons, and the East London Company about 12,000,000 gallons.

Eight lines of railway connect the metropolis with all parts of the United Kingdom—the Great Western; the North-Western; the Great Northern; the Eastern Counties; the Blackwall; the Greenwich and North Kent; the Croydon, Epping, and Brighton; and the South-Western. There are besides, the Grand Junction Canal and Paddington branch, which joins the Regent's Canal, and then passing quite round the northern and eastern sides of the metropolis is connected with the Thames between the London Docks and West India Docks. On all the main lines of railway the electric telegraph is placed, while wires are carried under the pavement of the streets in pipes from the respective termini to the central and western offices of the Electric Telegraph Company in Lothbury and at Charing Cross, to the General Post-Office, to the Admiralty, and to other public departments. There are seven or eight small canals, which are of comparatively little importance.

LONDON. [CANADA.]

LONDON, NEW. [CONNECTICUT.]

LONDONDERRY, a maritime county of the province of Ulster, in Ireland, is bounded N. by the Atlantic Ocean, E. by the county of Antrim and a portion of Lough Neagh, S. by the county of Tyrone, and W. by the county of Donegal. It lies between 54° 38' and 55° 22'

N. lat., 6° 28' and 7° 24' W. long. In form it is an irregular triangle. Its greatest length from north to south is 40½ miles; from east to west, 34 miles. The area is 810 square miles, or 518,595 acres, of which 318,282 acres are arable, 180,709 acres uncultivated, 7718 acres in plantations, 1559 acres in towns, and 10,327 acres under water. The population in 1831 was 222,012; in 1841 it was 227,174; in 1851 it was 191,868.

Coast-line and Surface.—On a low rocky peninsula, at the extreme north-east of the county, is the thriving town of Portrush; and nearer the Bann, on an exposed strand running down between low headlands of basalt is Port Stewart, a well-built and fashionable watering-place, but quite unprovided with shelter for any craft above the size of a fishing-boat. West of the sand-banks which occur at the embouchure of the Bann the coast has a bolder outline, rising in precipitous cliffs from the sandy beach.

The most remarkable feature of the coast-line is the tract which extends from the western extremity of the cliffs to the low point of Magilligan, and southward to the mouth of the Roe, which has been noticed in the article *FOYLE, LOUGH*. The north-eastern liberties of Coleraine occupy an irregular semicircle of about 4 miles in radius, surrounding Coleraine town, on the eastern side of the Bann. In this district the elevations are inconsiderable, and the general aspect of the country is tame and bleak. From the Lower Bann, nearly the whole length of its course, the surface gradually rises westward for about 10 miles, forming a chain of elevations which bound the valley of that river. Of these heights, which slope with a gentle declivity eastward and northward, but present steep and often precipitous escarpments towards the west, the most prominent are Benyevanagh, at the northern extremity of the range, which rises abruptly over the sandy flat of Magilligan to a height of 1260 feet; Donald's Hill, 9 miles farther south, 1318 feet; Benbradagh, 3 miles S. from Donald's Hill, 1581 feet; and, separated from Benbradagh by the bold amphitheatrical valley of Glenshane, the upper or eastern boundary of which is formed by Carntogher Mountain, 1521 feet high, is Craignashock, 1773 feet, with its subordinate heights of Altglish, 1261 feet, and Tammarin, 1272 feet. West of the valley of Ballynascreen commences a mountain chain which, with little interruption, extends to the valley of the river Foyle, forming the boundary between the counties of Tyrone and Londonderry. The highest of the group is Sawell, which rises to a height of 2236 feet, about midway between Slieve Gallion and the western extremity of the chain. The district included between these mountains and Lough Foyle, constituting the western division of the county, is divided by a central tract of high land into the valleys of the rivers Roe and Faughan. The valley of the Roe, especially towards the mouth of the river, forms a rich and open country, which under the name of Moyroe, or the plain of the Roe, extends westward along the southern shore of Lough Foyle by Muff, and at the lower extremity of the lough opens into the valley of the Faughan. To the south of this comparatively level tract the district between these two valleys is considerably encumbered with moor and mountain. Legavannon, the principal eminence, which occupies nearly the centre of the district, has an elevation of 1269 feet.

Between the Lower Faughan and the Foyle is a range of undulating ground crossed by a valley through which the high road from Dungiven is carried. The city of Londonderry occupies a boldly rising ground on the bank of the Foyle, along which the county embraces an irregular tract, extending from about 4 miles above the city to a mile below Culmore, where the river expands into Lough Foyle. The length of this outlying portion of the county is 10 miles, and its breadth from 1 to 3¼ miles. It is all arable, and in a good state of improvement.

Hydrography and Communications.—The principal rivers are the Foyle, the Faughan, the Roe, and the Lower Bann. The *Foyle*, a spacious river when it enters the county, flows nearly north-east about 4 miles to the city of Londonderry, and 5 miles below it expands into the Lough. It is a tidal river, and is navigable for ships of 800 tons to the bridge of Londonderry, and for vessels of considerable burden about 8 miles higher, where by a canal the traffic is continued to Strabane. The *Faughan* River, which springs from the northern declivities of Sawell, receives numerous rills and streams from the surrounding heights, and after skirting the bases of the several mountains which extend westward and northward to within two miles of the Foyle, makes a sharp turn to the north-north-east, and runs through a highly-improved open valley to Lough Foyle. The *Roe*, rising in the upper part of Glenshane, is joined by the Owenreagh and Owenbeg rivers at the entrance of that valley, from which it pursues a northern course to Lough Foyle, which it enters by a sharp turn to the west, immediately under the base of Benyevanagh. The *Lower Bann*, from Lough Neagh to the sea, a distance of upwards of 30 miles, has a fall of only 48 feet. The sea flows up to the Cutts above Coleraine, a distance of 6 miles, between low banks which are incumbered towards the mouth of the river with extensive tracts of sand. The river is navigable to Coleraine for vessels of 200 tons.

Of the rivers which drain the valley of the Bann the most considerable are the Macosquin, which has its sources in the 'slack' (as mountain passes are here provincially termed) between the mountains of Benyevanagh and Keady; and the Agivey, which unites the waters of several streams descending from the range of Donald's Hill and

Benbradagh. The Clady joins the Bann at Portglenone. South of this the drainage of the county is towards Lough Neagh, through the rivers Mayola and Ballinderry, the latter of which forms part of the county boundary on this side.

The roads throughout the county are in general excellent. The immediate valley of the Bann, and the district of Lough Neagh in particular, are closely intersected with lines of communication. The western district is not so well opened. The chief lines here are those connecting Newtownlimavady, by the southern shore of Lough Foyle and the valley of the Lower Faughan, with Londonderry, and that which runs by the Upper Faughan from Dungiven to the same place. The valley of the Roe is well provided with roads, which extend southward by Banagher to Clady, giving ample means of communication to the country between the heads of the rivers Roe and Faughan. The communication southward is chiefly by the valley of the Foyle on one side, and by the head of the valley of Ballynascreen on the other. Besides these there are several passes from Tyrone into Londonderry among the mountain groups which lie between these points. A line of railway connects Londonderry city with Coleraine. The railway from the city of Londonderry to Enniskillen runs along the left bank of the Foyle till it crosses the river a little beyond the boundary of the county.

Geology.—The basaltic tract corresponds in all respects to the remainder of the field on the opposite side of the Bann [ANTRIM], except that the dip of the strata is reversed; the surface, and the masses which compose it, on the Londonderry side of the Bann dipping towards the north-east, whereas their direction on the Antrim side is nearly to the south-west. The basalt, as in Antrim, attains its greatest thickness at the northern extremity of the field, the cap of Benyevagh measuring upwards of 900 feet. Chalk, lias, limestone, and red-sandstone, succeed in descending order (one or more of the members being frequently absent), and constitute the remainder of the system, which throughout reposes immediately on the primitive rock. The geological structure of the district may thus be described as a floor of primitive rock overlaid in part by a field of secondary formations, capped by basalt. The boundary-line is marked by the abrupt declivities forming the eastern limit of the valley of the Roe; from the southern extremity of this range it passes across the Mayola River to the east of Slieve Gallion, and so to Lough Neagh, on the opposite side of which it re-appears at the mouth of the Glenavy River. The main constituent of the rest of the county is mica-slate. This rock covers about 450 square statute miles of the surface of Londonderry. In general the line of demarcation between it and the red-sandstone, which is the most prominent member of the secondary field, is well defined. One mass however, that of Coolcoocrahan Mountain, which rises nearly 1300 feet above the level of the sea, is wholly composed of this rock, although almost surrounded by the advanced basaltic heights of Craignashock and Benbradagh. Upwards of two-thirds of the mica-slate of this district belong to the talcose variety. Primitive limestone is of frequent occurrence throughout this field. At a height of 800 feet above the sea, on the north-west side of Carntogether Mountain, it is found with veins of coloured spar, quartz, and green chlorite. It also occurs near Dungiven and Claudy. On the east side of Slieve Gallion there is a granular limestone, which contains quantities of crystallised hornblende. Hornblende slate is found at several places in the valley of the Roe; a bed, 400 yards in extent, occurs near the old church of Dungiven, where it runs parallel to the bed of primitive limestone above mentioned. The structure of the south-eastern extremity of the county is more complex. Slieve Gallion, besides having a cap of basalt, with the usual underlying formations, exhibits towards its base beds of sienite in connection with porphyry. On the north-west side the sienite verges into greenstone. Several masses of greenstone, unconnected with the tabular basalt of the summit, also crop out on the east side of the mountain. All along the western verge of the basaltic region the red-sandstone, which forms the lowest member of the field, projects beyond the superior strata in a belt varying from one to two miles in breadth. This is the surface rock of the eastern valley of the Roe, from the head of which it sweeps across the opening of the valley of Ballinderry, and so between Slieve Gallion and the line of basalt into Tyrone. A detached patch of stratified limestone occurs near the outer edge of the sandstone field at Desartmartin. There are no mines worked in this county.

Climate, Soil, and Produce.—The climate is comparatively moist and cold. The soil of that part of the valley of the Bann where the subsoil is hard basalt, consists for the most part of a rusty loose grit, without sufficient strength or cohesion for wheat crops. Numerous tracts of bog, interspersed with shallow pools, and frequently separated by craggy knolls of basalt, are scattered over this part of the county. There are however tracts of good land along the banks of the several rivers which traverse the district, and especially at their junctions. A tract of rich open country, which extends southward into Tyrone, is the most extensive tract of good ground in the county. Beyond the eastern terrace which bounds the valley above Newtownlimavady commences a tract of red-clay, arising from the decomposition of the sandstone, which at this side forms the surface-rock up to the immediate acclivities of the mountains. This clay contains extensive beds of marl, and with good treatment bears excellent grain crops. The schistose district, lying between the valleys of the Roe and Faughan,

is to a great extent moory and mountainous. The valleys of Faughan Vale and Muff Glen, running southward from the open tract along the margin of Lough Foyle into the schistose region, have good tracts of fertile land. In the main valley of the Faughan River are gravel terraces reaching back to the schistose region at each side. These are well cultivated. The best improved portions of the county are the district of Lough Neagh, the valley of the Roe, the valley of the Faughan, including the coast of Lough Foyle, between the embouchures of these rivers, and the immediate vicinity of Londonderry on both sides of the Foyle.

The progress of agriculture in this county has been materially forwarded by the establishment of an agricultural school near Muff by the Company of Grocers of London, who here hold large estates under the crown. There are 172 acres of land attached to the school for experimental farming; a classical school is likewise connected with the establishment. In 1853 there were under crops in the county 174,887 acres, of which 2163 acres grew wheat; 88,176 oats; 2290 barley, bere, rye, peas and beans; 29,749 potatoes; 12,231 turnips; 1735 mangel-wurzel, carrots, vetches, and other green crops; 19,219 flax; and 19,324 acres meadow and clover. The plantations in 1841 covered 11,291 acres, yielding oak, ash, elm, birch, pine, &c. In 1852 on 17,487 holdings, there were 19,640 horses; 400 mules and asses; 92,132 cattle; 23,343 sheep; 22,421 pigs; 2518 goats; and 229,801 poultry. The total value of the live stock here enumerated was estimated at 817,108*l*.

The manufacture and bleaching of linen is the staple trade of the county. The most extensive bleach-works lie along the rivers Roe and Faughan: on the Faughan there is abundant water-power, and numerous sites are admirably calculated for this branch of the manufacture. The export and import trade of the county is carried on at the ports of Londonderry city and Portrush, the latter being the sea-port of Coleraine. The county is chiefly in the diocese of Derry, with portions in the dioceses of Armagh and Connor. It is divided into four baronies—Coleraine, Kennaght, Loughinsholin, and Tirkeeran—and two liberties, Londonderry and Coleraine, which include the city and town of these names. The principal towns are—LONDONDERRY CITY, COLERAINE, NEWTOWNLIMAVADY, and MAGHERAFELT, which are noticed under their respective titles. The other more important places are the following, with the population of each in 1851:—

Castle-Dawson, population 663, situated on the Mayola River, contains some good dwelling-houses, a chapel of ease, and a Presbyterian meeting-house. The inhabitants are employed in the linen manufacture. A monthly market is held on Saturday; fairs are held four times in the year. The mansion and demesne of Castle-Dawson, the property of the Right Hon. G. R. Dawson, are on the opposite side of the river.

Dungiven, population 917, a market- and post-town, situated on the river Roe, 15 miles E.S.E. from Londonderry, consists principally of a long straggling street built on a ridge of red-sandstone, and contains a church, a Roman Catholic chapel, a Presbyterian meeting-house, and a dispensary. At the head of the town are the remains of a castle and bawn built in 1618 by the Skinners' Company, to whom the place belongs. On the right bank of the river, on a rock rising 200 feet from the stream, are the picturesque ruins of the abbey-church, supposed to have been founded in 1100, and containing a richly-sculptured altar-tomb of a chief of the O'Kanes. The village is chiefly remarkable for its romantic site, being surrounded by some of the principal heights of the county, with Benbradagh as chief. Fairs are held on May 25th and October 25th. A market is held on Saturday.

Garvagh, population 785, a market- and post-town, distant 11 miles S. from Coleraine, is a neat little town, containing a parish church, a Roman Catholic chapel, a Presbyterian meeting-house, several schools, and a district dispensary. A market is held on Friday, and fairs are held on May 23rd, July 26th, and November 6th.

Kilrea, population 993, a market- and post-town, is situated near the river Bann on its left bank, distant 11½ miles from Coleraine. The place has been much improved by its proprietors, the Mercers' Company, who have built a market-house, a public school, a police barrack, and a hotel, and have also constructed new roads. Linen-weaving employs some of the inhabitants. A fair is held on October 10th.

Maghera, population 1162, a market- and post-town, distant 2½ miles S.E. by E. from Londonderry, contains a parish church, two Presbyterian meeting-houses, a district dispensary, and a petty sessions house, in which a court is held every alternate Saturday. The market is held on Tuesday, and fairs are held on the last Tuesday of every month. In the town are some interesting ruins of the old parish church.

Moneymore, population 781, a market- and post-town, about 39 miles S.E. from Londonderry, is distinguished by an appearance of neatness and comfort, and contains various places of worship, a court house, market-house, linen-hall, a district dispensary, and numerous handsome dwelling-houses. The Drapers' Company of London, to whom it belongs, have liberally aided in the improvement of the town and neighbourhood. There is a considerable trade in linen. A corn-market is held weekly on Monday, and a fair on the 21st of every month.

Port Stewart, a small town on the coast, about 25 miles N.E. from

Londonderry, contains a church, a Presbyterian meeting-house, a district dispensary, and several handsome dwelling-houses. There is a harbour with accommodation for small craft. Pleasantly situated on the coast, the town is a favourite resort in summer, and is steadily improving.

History and Antiquities.—At the most remote period the county appears to have been possessed by the sept of O'Loughlin and O'Neill, to whom the tribe of O'Cahan, who held the eastern and central districts, was tributary. After the arrival of the English in 1197, John de Courcy invaded the country of O'Cahan, and seized Derry, but was compelled by Hugh O'Neill to abandon his conquest. An English garrison was established at Coleraine, and grants appear to have been made and inquiries to have been taken in Derry in the regular manner; and in the patent roll of the 20th Edward II. is an entry of the appointment of Robert Savage to be sheriff of the county of Coulrath, or Coleraine, as O'Cahan's country was then called. After the great revolt of the O'Neills in 1333, the native Irish held possession of the county until the middle of the 16th century. In 1600 Sir Henry Dockwra, with a force of 4000 foot and 200 horse, arrived in the river Foyle, and made the commencement of a permanent settlement by the construction of three forts. The rebellion of Sir Cahir O'Dogherty in 1603, and the flight of Tyrone and O'Donnell in the preceding year, left the entire of this and five other counties at the disposal of the crown. In 1609 the king granted on certain conditions the forfeited lauds in this county to the corporation of London, who still retain possession of them. For the management of these estates the common council elect a body of twenty-six, consisting of a governor, deputy-governor, and assistants, of whom one-half retire every year.

In 1619 this body was incorporated by royal charter, and their estates erected into one county, to be called the county of Londonderry. The corporation, which is generally known as the Irish Society, still exists as constituted under the charter granted by Charles II. after the restoration. The division of the county took place immediately after the granting of the first charter. The several city companies had portions of the county assigned to their management, and the lands not assigned to the companies still belong to the society. The introduction of the new colony changed the entire face of the country, which up to this period had been one of the most desolate tracts in Ireland. Artisans in the chief branches of trade and manufacture were brought over by the companies, and habits of industry and independence became fixed among the population. The native Irish, returning by degrees, have again increased so far as nearly to equal in number the descendants of the settlers.

There are some remains of a Cyclopean fortress at the Giant's Sconce, on the road from Newtownlimavady to Coleraine. Dungorkin, a circular mount surrounded by a wet ditch, near Claudy, is a remarkable earthen fortress. There are several cromlechs, and other so-called druidical remains, of which the largest is at Slaughter-Manus. Artificial caves and tumuli are frequent. The only military edifices remaining are the castles of Kiloloo, Dungiven, Salterstown, and Muff, erected by the Londoners. The old abbey of Dungiven, which occupies a romantic site on a rock rising 200 feet above the bed of the river Roe, was built in 1100 by O'Cahan, and contains several well-sculptured monuments of that family.

Londonderry is represented in the Imperial Parliament by two members for the county, and one each for Londonderry city and the borough of Coleraine. The assizes are held at Londonderry: quarter sessions there and at Coleraine, Magherafelt, and Newtownlimavady: in all which towns there are bridewells. Petty sessions are held in 12 places. The county prison and the county infirmary are in Londonderry, as also the district lunatic asylum for Donegal, Londonderry, and Tyrone counties, to which the county of Londonderry is entitled to send 69 patients. There are fever hospitals at Coleraine and Londonderry, and 23 dispensaries in various parts of the county. Savings banks are established in Londonderry, Coleraine, and Newtownlimavady; the amount owing to depositors on November 20th 1853 was 70,110*l.* 6*s.* The county is within the military district of Belfast; and there are barracks in Londonderry, where also the staff of the county militia is stationed. The head-quarters of the constabulary force, consisting of 106 men, officers included, are at Coleraine; those of the 4 districts, comprising 18 stations, are at Coleraine, Londonderry, Magherafelt, and Newtownlimavady. There are 2 stations of the coast guard, at Down Hill and Port Stewart, and 2 stations of the revenue police, at Draperstown and Learmont. In September, 1852, there were 177 National schools, attended by 6899 male and 6063 female children.

LONDONDERRY, Ireland, the capital of the county of Londonderry, a city and sea-port, a municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the river Foyle, partly in the barony of Tirkeeran, but chiefly in that of Londonderry, in 54° 59' N. lat., 7° 19' W. long., distant 144 miles N.N.W. from Dublin by road. The borough is governed by 6 aldermen and 18 councillors, of whom one is mayor, and returns one member to the Imperial Parliament. The population of the city in 1851 was 19,888, besides 591 inmates of the workhouse. Londonderry Poor-Law Union comprises 22 electoral divisions, with an area of 139,178 acres, and a population in 1851 of 62,241.

The town, anciently called Derry Calgach from an oak grown in

the vicinity, grew up around a monastery founded by St. Columb, in 546. During the first few centuries, its progress was repeatedly checked by fire, and by the ravages of the Danes and the neighbouring Irish chiefs. In 1198 it was taken by the English under De Courcy. After a series of disasters, the place was occupied by a garrison in 1566, during the rebellion of the Earl of Tyrone. Two years later, the greater part of the town and fort was destroyed by the explosion of a powder magazine, when the garrison was withdrawn. Sir Henry Docwra arriving with a large force in 1600, rebuilt the fort. In 1608 Sir Cahir O'Dogherty surprised the fort, put the garrison to the sword, and burned a great part of the town. A few years after the modern city was founded by the London companies, who obtained a grant of the place in 1613. The walls were then built in their present extent, the cathedral and some other public buildings were completed, and the town rapidly advanced till 1637, when their charter was cancelled. The gates of the city were closed against the troops of James II. in December 1688. The famous siege of Derry followed. On the 18th of April 1690, James advanced against the city, and conducted the operations in person during 11 days. On the 1st of August the siege was hastily raised, on the arrival of a victualling ship, which having escaped the fire of the batteries, and broken through the boom drawn across the river, introduced supplies to the famished inhabitants. After this siege the city gradually recovered from all its disasters, and steadily advanced towards its present extent and prosperity.

The town is built on the summit and sides, and around the base of an oval hill, rising 119 feet above high water, on the left bank of the Foyle. The city within the walls (which are still entire and form an agreeable promenade) is traversed by four leading streets which extend at right angles from a square in the centre, called the Diamond, to the four gates. The street between the eastern and western gates stretches above half a mile further to the west with branches on either side. The city is lighted with gas, well paved, and supplied with water from reservoirs on the eastern side of the river.

The cathedral, which is also the parish church of Templemore, stands on the summit of the hill. It is a handsome building with a tower; from which an elegant spire rises to the height of 179 feet. It was completed in 1633, but has been considerably altered by frequent repairs. The bishop's palace, a plain substantial building, occupies the site of an old Augustinian convent. Besides the parish church there are a chapel of ease and a Free church, two Roman Catholic chapels, six Presbyterian, one Independent, and two Methodist meeting-houses. The Endowed schools are—Gwyn's charitable institution, established in 1833, for the support and education of male orphan children of the city and liberties; it has an income of 1870*l.* per annum, and about 120 boys under training; the Diocesan and Free Grammar school, or Foyle college, a spacious and handsome building near the river to the north of the city, with a yearly income of 280*l.* from the Irish Society of London, and 60 scholars in 1852, of whom 6 were free; the Parish or Poor school, founded in 1812 by Bishop Knox, and endowed by Erasmus Smith; an Infant school, and a National school, besides some others aided by the Irish Society. There is a mechanics institute with a library attached. In the centre of the square is the Corporation Hall or Town House, a large building with a circular front and a cupola, occupying the site of that which was destroyed during the siege. Between the cathedral and bishop's palace is the court-house, a very handsome edifice with a façade of 126 feet, consisting of an Ionic portico of four columns, and of wings adorned with Doric pilasters, and surmounted by statues of Peace and Justice. The building was commenced in 1813, and cost above 30,000*l.* Bishop's gate is a triumphal arch, erected in 1789, the centenary of the opening of the gates, at the raising of the siege. Near it on the central western bastion is a monument 90 feet high, consisting of a fluted Doric column, with a statue of the Rev. George Walker, governor of the city during the siege in 1689. To the west of this wall is the county jail, a very spacious and strong building. The crown prison stands a few yards apart. Outside the walls, to the east of the city, and facing the river, is the custom-house, a hollow square of buildings, 170 feet by 130 feet. Among other public buildings are the district lunatic asylum, the county infirmary and fever hospital, and a district dispensary. Among the charitable institutions are:—the mendicity house; the poor shop, established in 1821 to provide the indigent with clothing and bedding at prime cost; and the ladies' penny society for the relief of sick and indigent room-keepers; a charitable loan-fund, and a penitentiary for females. A savings bank has been in operation since 1815.

The river is here crossed by a wooden bridge 1068 feet long by 40 feet broad, connecting the city with the opposite suburb of Waterside. For the upper navigation of the Foyle it is divided by a swing-bridge, the machinery of which, in turning the platform, acts upon the pipes by which water and gas are conveyed across the river. The port formed by the river, which here expands into a spacious estuary, is under the jurisdiction of the Irish Society, who appoint a vice-admiral over it, and the Lough and adjacent coast. It is also in charge of a board of ballast commissioners, under whose control are harbour, pilot, and ballast masters, with 29 pilots. The quays extend northward from the bridge above half a mile. A ship-yard, with a patent slip attached, admits vessels of 800 tons. There is a ship-

building yard on the strand. The greatest depth of water in the port at low water is 31 feet, and 12 to 14 feet at the quays. Vessels of 500 tons can discharge at the quays. The number and tonnage of vessels registered as belonging to the port on December 31st 1853 were:—Sailing vessels, under 50 tons 10, tonnage 256; above 50 tons 14, tonnage 4171; and 7 steam-vessels of 1464 tons. The returns of vessels entered and cleared at the port during 1853 were as follows:—Coasting trade, inwards, sailing-vessels 588, tonnage 39,000; steam-vessels 468, tonnage 148,815: outwards, sailing-vessels 256, tonnage 15,320; steam-vessels 464, tonnage 146,693. In the colonial and foreign trade there entered 173 vessels of 35,791 tons, and cleared 81 vessels of 22,220 tons. The customs duties of the port in 1852 amounted to 116,799*l*.

In the city are two flax spinning-mills and several flour-mills, three distilleries, three breweries, several rope-walks, one foundry, and five tan-yards: near it is an extensive salmon fishery. Assizes for the county, and quarter and petty sessions are held in the city. Fairs are held June 17th, September 4th, and October 17th, and markets daily for provisions; on Wednesday and Saturday for grain, and on Thursday for flax.

LONGFORD, an inland county of the province of Leinster, in Ireland, lies between 53° 29' and 53° 56' N. lat., 7° 19' and 7° 56' W. long., and is bounded N. by the counties of Leitrim and Cavan, E. and S. by the county of Westmeath, and W. by the county of Roscommon. Its greatest length from north to south is 29 miles, from east to west 22 miles. The area comprises 269,409 acres, of which 191,823 are arable, 58,937 acres uncultivated, 4610 acres in plantations, 864 acres in towns, and 13,675 acres under water. The population in 1841 was 115,491, in 1851 it was 83,250.

Surface, Hydrography, and Communications.—The southern half of the county consists of a low table-land, inclining gently on the east and south towards the valley of the Inney, and bordered on the west by the flat and boggy shores of Lough Ree. In this division the only considerable eminence is Slieve Gauldry, which rises about 6 miles south-east of the town of Longford to a height of 650 feet. North of the table-land the county is traversed from east to west by the valley of the Camlin, a well-improved tract, the southern slope of which is diversified by numerous seats and well-planted demesnes. The opposite bank rises on the east into a slightly elevated district, which slopes northward along the shore of Lough Gownagh to the basin of the Erne; on the west it is overlooked by the pastoral hills of the Clonhugh range, which extends about 10 miles in a south-westerly direction, varying from 686 feet, the height of Crott Hill on the north-east to 912 feet, the height of Cairn Clonhugh near the opposite extremity. North of this range the moorish district of Drumlish spreads between Lough Gownagh and the limits of the county. From the western termination of the range to the Shannon there is an open fertile tract bounded towards the river by the plantations of Castle Forbes, the seat of the Earl of Granard.

Except a few streams that fall into Lough Gownagh, the whole drainage of the county is towards the Shannon. That river with its windings forms a boundary-line of about 50 miles. Near its first contact with the county it spreads into Lough Forbes, a small lake three miles long by a mile and a half in its widest part, and is there joined by the Rinn, a considerable stream that flows south out of Leitrim. Two miles below the lough is the confluence of the Camlin, which rises near the eastern boundary, and flows in a westerly direction with a winding course of above 20 miles, passing through Longford town. About half-way in its course along the county the Shannon expands into Lough Ree, an extensive lake, strikingly diversified by deep bays, rugged headlands, and numerous islands. The shores of Lough Ree are subject to extensive inundations in consequence of the rising of its waters in winter to an average height of 7 feet above the summer level. An inlet running 4 miles eastward along the southern limit of the county receives the waters of the Inney, which rises in Cavan, and next to the river Suck is the largest tributary of the Shannon. Many small lakes diversify the surface of the county; but Longford derives its chief advantage from the river Shannon, which connects the county with the important line of navigation extending from Lough Allen to the city of Limerick. This line again has a connection through Longford with the city of Dublin. The Royal Canal enters the county near its southern extremity, and after continuing its course in a westerly direction to the vicinity of Ballymahon passes north by west to the Shannon at Richmond harbour, where on the Cloondara island, which is formed by the two branches of the Camlin, are the canal docks, basins, and warehouses. The county is generally provided with good lines of road.

Geology and Mineralogy.—The southern half of the county consists of the stratified limestone of the central plain of Ireland. The other division is a continuation of the clay-slate of the grauwacke formation of Cavan. These two fields are separated at their western extremity by a belt of yellow-sandstone and conglomerate, which projects from a small tract in the south of Leitrim. A patch of sandstone crosses the bed of the Inney and spreads round Ballymahon. Another forms the mass of Slieve Gauldry, and stretches to the vicinity of the town of Longford. Along the south and south-east border of the county are large quantities of fine calcareous sand and marl. Marly clay in beds from 1 foot to 10 feet thick underlies many of the boggy

tracts, which have an average depth of 30 feet. Marble of a deep gray colour and susceptible of a fine polish is raised in the vicinity of Ballymahon. Excellent ironstone associated with coal-shale and lead-ore has been found in small quantities.

Climate, Soil, and Produce.—The extent of wet and marshy surface renders the climate less genial than that of the midland counties in general. The soil of the boggy district of Lough Ree is inferior, but over the rest of the limestone plain there is a rich vegetable mould, which produces heavy grain crops and the finest pasture. The northern division of the county is chiefly devoted to grazing. The occupations of the county are tillage and grazing, principally the latter. Great quantities of butter are made by the farmers and cottiers. Linens and coarse woollens are manufactured. In 1853 there were under crop 82,644 acres, of which 1166 acres grew wheat, 40,952 acres oats, 967 barley, bere, rye, peas, and beans, 15,576 potatoes, 2510 turnips, 1175 mangel-wurzel, carrots, parsnips, vetches, and other green crops, 781 acres flax, and 19,167 acres meadow and clover. In 1841 the plantations covered 5987 acres, growing oak, ash, elm, beech, fir, fruit-trees, &c. In 1852 on 8269 holdings there were 6523 horses, 3006 mules and asses, 40,495 head of cattle, 19,102 sheep, 12,465 pigs, 8014 goats, and 138,294 head of poultry. The total value of the live stock here enumerated was estimated at 368,802*l*.

Divisions and Towns.—The county of Longford is in the Ardagh diocese, with a small portion in Meath. It is divided into 6 baronies, Ardagh, Granard, Longford, Moydow, Ratholine, and Shrule. The principal towns are LONGFORD, GRANARD, and BALLYMAHON, which are noticed under their respective titles. The following towns and villages, with the population of each in 1851, may be mentioned.

Ardagh, 5½ miles S.E. by E. from Longford, containing a parish church and a Roman Catholic chapel, is remarkable only as giving name to an Episcopalian and a Roman Catholic diocese. An abbey is said to have been founded and the see to have been established by St. Patrick about the year 454. Fairs are held April 5th, and August 26th. The population of Ardagh was returned in 1841 as 165; but in the Returns of the Census of 1851 the place is returned as without inhabitants. *Drumlish*, population 400, situated in a bleak and barren district, about 4½ miles N.E. from Newtown-Forbes, contains an Episcopal and a Roman Catholic chapel. A market is held weekly on Tuesdays from October to March inclusive. *Edgeworthstown*, population 817, a village 6½ miles E. by S. from Longford, the residence of the Edgeworth family, and beautified by the family mansion and its highly improved demesne. It contains a parish church, a Roman Catholic chapel, and a school for the education of the sons of the Established Clergy. There are a National and some other schools, a loan-fund, and a district dispensary. Fairs are held six times a year. *Keenagh*, population 244, a village 9 miles S. from Longford, containing a church and a Methodist chapel, a district dispensary and a loan-fund. A fair is held on October 10th. In the neighbourhood are the mansion-house and well-kept demesne of Mosstown, with the ruins of Mosstown Castle. *Killahee*, population 193, a village 5 miles S.W. from Longford, containing an Episcopal church, and chapels for Roman Catholics and Methodists. It is a station on the Royal Canal, which here sends off a branch of 6 miles to the town of Longford. Large quantities of dairy and agricultural produce from the surrounding country are shipped at the village. There is a loan-fund. Fairs are held four times in the year. *Lanesborough*, population 201, a market- and post-town situated on the left bank of the Shannon, at the head of Lough Ree, 10 miles S.W. from Longford, contains a church, a Roman Catholic chapel, a district dispensary, and a police station. The Dublin road here crosses the Shannon by a bridge of 9 arches, under one of which a lateral cut with a small basin continues the river navigation. There is a considerable corn-market. A fair is held on February 12th. *Newtown-Forbes*, population 331, a small post-town 2½ miles N.N.W. from Longford, contains a church, a Roman Catholic chapel, and a Methodist meeting-house. A court of petty sessions is held every alternate Tuesday. Fairs are held on Easter Tuesday, September 4th, and October 31st.

The county returns two members to the Imperial Parliament. The assizes are held at Longford, where are the county prison and the county infirmary. Quarter sessions are held at Longford, Ballymahon, and Granard; each of these towns is also the seat of a Poor-Law Union. Petty sessions are held in 11 places. The county is within the military district of Dublin. The staff of the county militia is stationed at Newtown-Forbes. The constabulary force, consisting of 202 men and officers, has its head-quarters at Longford. The county is divided into five police districts, comprising 29 stations; the districts are Longford, Killahee, Ballymahon, Drumlish, and Granard. In September 1852 there were 57 National schools in operation, attended by 3983 male and 3111 female children.

History and Antiquities.—The territory at present constituting the county of Longford was originally a portion of the kingdom of Meath, and as such was included in the grant of Meath by king Henry II. to Hugh de Lacy. The district was erected into a separate county in the 11th of Elizabeth. In 1615, a commission was appointed and an inquisition taken, by which it was found that, under a proviso in the grant of Elizabeth, the crown was entitled to take possession of this territory by virtue of the act of absentees. A commission was in consequence issued empowering the Lord Deputy and others to

dispose of the estates, so found to be in the king, to patentees. The plantation did not take effect to any great extent, as in 1641 the entire county appears to have been seized back by the O'Farrells, except Longford Castle and Castle-Forbes. The confiscations which ensued extended over nearly the entire county, and introduced a newly new proprietary.

The remains of the old town of Granard possess considerable interest when taken in connection with the neighbouring rampart of Duncla, which runs from Lough Kinale to Lough Gownagh, a distance of nearly 8 miles. This work is similar to the Dane's Cast. [Down.] On the island of Inch-Clorin, in Lough Ree, are the ruins of seven churches, and the foundation of a round tower. An abbey was founded here, about 540, by St. Dermid. The Lord Richard Tuise, in 1205, built an abbey at Grauard in honour of the Virgin, which was rifled by the Scots, under Edward Bruce, in 1315. The abbey at Longford was one of Patrick's foundations. O'Farrel, prince of Annaly, founded a very fine monastery on the site of this abbey in 1400. The church of the friars is now the parish church. Abbeyshrule was another rich foundation of the same family. In Lough Ree, besides the seven churches of Inch-Clorin, were the monasteries of All Saints, founded by St. Kieran in 544, and Innisbofin, founded by a nephew of Patrick about 530, on islands bearing these names respectively. There are remains of all the preceding, as also of the religious houses of Moydow, Clonebrone, Clone, Derg, and Innismore, a foundation of St. Columba's on an island in Lough Gownagh. A few castles are still partially standing; the principal ones are at Castle-Forbes, Granard, Tenallick, Castlecor, Rathcline, and Ballymahon.

LONGFORD, the capital of the county of Longford, Ireland, a market- and post-town and the seat of a Poor-Law Union, is situated on the river Camlin, in 53° 44' N. lat., 7° 45' W. long., 75 miles W.N.W. from Dublin by road. The population in 1851 was 4144, besides 2096 in the workhouse, 30 in the infirmary, and 117 in the jail. Longford Poor-Law Union comprises 19 electoral divisions, with an area of 109,961 acres, and a population in 1851 of 87,055.

The town, which stands on the left bank of the river, with a small portion on the opposite bank, consists of several regular and well-built streets. The parish church is a spacious and handsome building. The Roman Catholic cathedral, recently erected, is a magnificent structure, with a portico of six Ionic columns, and a tower nearly 200 feet high. There are in the town chapels for Presbyterians and Methodists, the county court-house, the county jail, and the cavalry and artillery barracks. A branch of the Royal Canal comes to Longford from Killashoe. At the Canal basin there is a fine market-house, erected by the late Lord Longford. An extensive corn-trade is carried on, and there are corn-mills and storehouses, tanyards, and a brewery. The assizes for the county and quarter-sessions are held in Longford. Markets are held on Wednesday and Saturday, and fairs on June 10th and October 22nd.

LONG ISLAND. [BAHAMAS; NEW YORK.]

LONGNOR. [STAFFORDSHIRE.]

LONGOBUCO. [CALABRIA.]

LONGTON. [STAFFORDSHIRE.]

LONGTOWN, Cumberland, a market-town and the seat of a Poor-Law Union, in the parish of Arthuret, is situated near the border of Scotland, in 55° 1' N. lat., 2° 56' W. long., distant 9 miles N. by W. from Carlisle, and 309 miles N.N.W. from London. The population of the town in 1851 was 9142. The living is a rectory in the archdeaconry and diocese of Carlisle. Longtown Poor-Law Union contains 14 parishes and townships, with an area of 94,520 acres, and a population in 1851 of 9696. The streets of Longtown are regular and spacious. There are a chapel in connection with the Established Church of Scotland, a chapel of the United Presbyterian Church, an old Endowed school, and a public room for the Independent United Order of Mechanics. A bobbin-mill gives some employment, and a little handloom weaving is carried on. The corn-market is on Thursday; on Monday a market is held for bacon and butter. Fairs are held at Whiteutide and at Martinmas. Netherby Hall, the seat of Sir James Graham, Bart., is pleasantly situated on the banks of the Esk, about two miles from Longtown.

(Communication from Longtown.)

LONGWY. [MOSELLE.]

LONS-LE-SAULNIER. [JURA.]

LOO-CHOO ISLANDS. [LIZOU-KIROU ISLANDS.]

LOOE, EAST and WEST. [CORNWALL.]

LOP NOR, LAKE. [TURKISTAN.]

LORCA. [MURCIA.]

LORETO. [ABRUZZO; MACERATA.]

LORGUES. [VAR.]

LO'RIENT, a sea-port town of France, situated at the confluence of the Scorff and the Blavet in the department of Morbihan, stands in 47° 44' 45" N. lat., 3° 21' 37" W. long., 266 miles W. by S. from Paris, and has 22,561 inhabitants in the commune.

The town is of modern origin. In 1666 Louis XIV. granted permission to the French India Company to establish magazines and docks for building vessels on a part of the Bay of St. Louis, the name given to the mouth of the Blavet. The establishment thus formed, which continued in the possession of the company till 1770, is now in the hands of government. From the company's establishment the place

took the title of Port de L'Orient (Port of the East). In 1720 the building of the town was commenced; in 1738 the inhabitants amounted to 14,000, and in that year the town was incorporated. The India Company had previously established here their annual sale of Chinese and Indian commodities. In 1744 the town was fortified. The English landed and made a sudden attack upon the town in 1746; but it was bravely defended by the Count de Tinténac, a Breton nobleman, who came to the assistance of the bewildered townsfolk with a few hundred men, and the English finally withdrew to their ships. During the long wars of the revolution the commerce and population of the town declined, but since the peace of 1815 commerce has been gradually resuming its former activity.

The town is well laid out, with wide, straight, well-paved, and clean streets; the houses are well built, and there are several pleasant promenades. The bridge over the Scorff, the quays, the theatre, the abattoir, and the covered meat and fish markets, are the public buildings most entitled to notice. The port is on the east side of the town, from which it is walled off: its length is nearly 4000 feet; its breadth nearly 2000 feet. The imperial dockyard is one of the finest in the empire; there are slips for laying down 30 vessels of war at a time. Both steamers and sailing-vessels of the largest size are turned out of the dockyard of Lorient. Among the most remarkable objects connected with the dockyard are—the machinery for fixing the masts; the basin for ships under repair; the block-manufactory, worked by steam; the arsenal; the bagne, in which soldiers are confined for insubordination; the handsome artillery barracks, capable of accommodating 1800 men; the school of naval artillery, with its library, museums, and drawing-hall; the apartments and gardens of the maritime prefect; and the offices of the various departments of the public service. There is an observatory, or signal-tower, built on an eminence south of the harbour, from which vessels can be discerned 30 miles out at sea. The height of the observatory is 194 feet above the sea-level, and 181 feet above its base. The Place-Royale is well built and planted with lime-trees. In the market-place is a granite column surmounted by a statue of a brave French naval officer named Bignon, who was appointed to command a prize taken from Greeks in the Archipelago, and blew it up rather than surrender it to the pirates, who subsequently attacked him in superior force.

Besides the national establishments connected with the imperial dockyard, Lorient has manufactures of hats, linens, braid, and pottery; the trade in wine, brandy, flour, wax, honey, salt, butter, corn, provisions, lead, iron, hardware, and manufactured goods, is still important. The sardine fishery is actively carried on. Vessels sail from Lorient to the principal ports of Europe, America, and the West Indies.

About a mile from the arsenal, on the bank of the Scorff, is a powder-magazine; and a mile west, an exercise-ground for the artillery. An hospital is erected on the island of St. Michel, in the roadstead.

Lorient is the chief town of an arrondissement, the head-quarters of a maritime prefecture, and a fortress of the third class. It has tribunals of first instance and of commerce, an exchange, a naval school, a communal college, a custom-house, and several other government offices. The fortifications of this town are in good condition. The environs are exceedingly well cultivated.

LORIOU. [DRÔME.]

LORRAINE, a province or military government of France before the revolution, situated on the north-eastern frontier, was bounded N. by the duchy of Luxembourg and the electorate of Trèves; N.E. by the duchy of Deux-Ponts, in the Palatinate; E. by Alsace, from which it was separated by the Vosges; S. by Franche-Comté; S.W. by the county of Langres in Champagne; and W. by other districts of Champagne. The length of the province was about 99 miles; its breadth 87 miles. Its area was about 6780 square miles. It was watered in the west by feeders of the Aisne and Marne, belonging to the system of the Seine, and by the Meuse; on the east by the Moselle and its tributaries.

Lorraine, in the extended application of the name, corresponding with the bounds and dimensions given above, comprehended:—1. The Duchy of Lorraine, which contained Lorraine proper, German Lorraine, and the Pays des Vosges, of which the respective chief towns were—Nancy, Sarreguemines, and Épinal; 2. the Duchy of Bar, of which the capital was Bar-le-Duc; and, 3. the Pays-des-Trois-Évêchés, which had Metz, Toul, and Verdun for chief towns.

A small portion of German Lorraine was ceded by France to Prussia by the treaty of Vienna, 1815. The remainder constitutes the departments of MEURTHE, MEUSE, MOSELLE, and VOSGES.

At the time of the Roman conquest of Gaul, Lorraine was inhabited by the Treviri, the Mediomatrici, the Verodunenses, and the Leuci. It formed part of the province of Belgica Prima, and was included in the earlier conquests of Clovis. In the division of the Frankish empire under the sons of Clovis, Lorraine formed part of the kingdom of Austrasia. In the division of the empire among the descendants of Charlemagne the country between the Rhine and the Meuse was assigned to Lothaire, son of the emperor Lothaire, from whom it took the Latin name of Lotharingia, in German Lothringen, and in French Lothierregne and Lorraine. This kingdom existed for a long period, and was united with the imperial crown, so that eastern France became a portion of the empire.

The duchy of Lorraine, which consisted of a large part of the kingdom of Lorraine, was established in the 10th century, and was afterwards divided into two parts, Lower Lorraine, or Brabant, and Upper Lorraine, which has retained its designation to modern times. The duchy of Upper Lorraine was in the 11th century conferred by the emperor on Gérard, a noble of Alsace. From this Gérard descended the long line of the dukes of Lorraine who governed the country till towards the middle of the 18th century. The county, afterwards duchy of Bar, was separated from the duchy of Lorraine in the 11th century. The connection of the dukes of Lorraine with France involved them in the disputes of that kingdom. Raoul, duke of Lorraine, was one of those who fell in the battle of Créci, 1346, fighting against the English; and Jean, his son and successor, a mere boy, was taken prisoner after distinguishing himself by his valour at the battle of Poitiers, 1346. He was again taken prisoner, 1364, at the battle of Auray in Bretagne, in which Charles de Blois was defeated and slain by Jean de Montfort, his rival claimant for that duchy. The duke Jean of Lorraine was also present at the battle of Rosbecque, in which Charles VI. of France defeated the Flemings (1382): he died in 1390.

On the death of Charles le Hardi, the successor of Jean in the duchy of Lorraine, the succession was disputed by René I., duke of Bar and of Anjou, and Antoine de Vaudemont, nephew of Charles. In the war that ensued René was defeated and taken prisoner (1431) by his rival; but he obtained his liberty in 1436, and set out for Naples, the crown of which had fallen to him during his captivity. Lorraine had been confirmed to him by the decision both of the Emperor Sigismund and of the council of Bâle. He resigned the duchy of Lorraine to his eldest son Jean, duke of Calabria, in 1453. Jean was succeeded by his son Nicholas, on whose death (1473) Lorraine came to René II., grandson, on his mother's side, of René I., and on his father's side, of Antoine, duke of Bar, who had been René's competitor. René II. was seized by Charles le Téméraire, duke of Bourgogne, together with his mother Yolande, almost immediately on his (René's) accession to the duchy, and though released by the interference of Louis XI., was obliged to make an alliance, offensive and defensive, with Charles. Charles soon afterwards again attacked Lorraine, took the capital (Nancy) and other towns, and obtained possession of the whole duchy. After the defeat of Charles by the Swiss at Granson and at Morat in 1476, René returned to Lorraine, and rapidly reconquered it. Charles led an army in the ensuing winter to recapture Nancy, but he was defeated and slain by René (January, 1477). René subsequently obtained of Charles VIII. of France the restoration of the duchy of Bar, which had been seized by Louis XI. He died in 1508.

Antoine, the successor of René II. (1508), seems to have merited, by his care to promote the happiness of his subjects, the title which he received of 'the Good.' His reign is chiefly remarkable for the declaration of Lorraine as a free and independent sovereignty by the Germanic body. He died in 1544, and was succeeded by his son François I. François I. reigned only a year. He was succeeded by his son Charles, who during the long period in which he held the duchy (1545-1608) acquired regal rights over that part of the duchy of Bar which he held as vassal of the king of France. Henri II., François II., and Charles III. (or IV.) successively occupied the ducal throne. Charles III. (or IV.) was involved in hostilities with Louis XIII. of France, by whom the duchy was in great part conquered, but it was restored to Charles by the treaty of the Pyrenees; and subsequent negotiations (in 1661) with Cardinal Mazarin secured also the restitution of the duchy of Bar. Charles agreed that on his death the whole of his states should fall to the crown of France; but soon after renouncing his independent sovereignty, he renewed his allegiance to the emperor. Louis XIV. seized his dominions in 1670. Duke Charles distinguished himself in the imperial service on several occasions, till his death in 1675. He was succeeded by his nephew Charles IV. (or V.), also a distinguished military commander. Finding himself (1677) at the head of an army of 60,000 imperialists, he attempted to regain possession of Lorraine, but was baffled by the skill of the French *Maréchal* Crecqui, who had only 30,000 men. At the treaty of Nimègue, 1678, the restitution of Lorraine was offered to him, but on conditions which he refused to accept. He distinguished himself afterwards at the head of the imperialists in Hungary against the Turks, and aided Sobieski in the deliverance of Vienna (1683). He died in 1690.

Leopold, the successor of Charles, obtained restitution of his states by the treaty of Ryswick, 1697. He observed neutrality in the war of the Spanish succession, and devoted himself to the improvement of his dominions. He died in 1729, and was succeeded by his eldest son François Etienne, who in 1735 acquiesced in a treaty between France and the empire, by which his duchy was ceded to Stanislas Leckzinski, ex-king of Poland, whose daughter had been married to Louis XV. of France. It was further agreed that on the death of Stanislas the duchy should be united to France. François Etienne, who married, the following year, the archduchess Maria Theresa, and was afterwards (1745) elected to the imperial crown, received the reversion of Tuscany in exchange for Lorraine. Stanislas was recognised as Duke of Lorraine and Bar in 1737. After

governing the country with wisdom and beneficence, he died in 1766. On his death Lorraine was incorporated with France.

LOSS ISLANDS. [SIERRA LEONE.]

LOSTWITHIEL, Cornwall, a market-town in the parish of Lostwithiel, is situated on the right bank of the river Fowey, in 50° 25' N. lat., 4° 40' W. long., distant 6 miles S.S.E. from Bodmin, and 234 miles W.S.W. from London. The population of the parish of Lostwithiel in 1851 was 1053. The living is a vicarage in the archdeaconry of Cornwall and diocese of Exeter. The town is governed by 7 capital burgesses, of whom one is mayor, and 17 assistants.

Lostwithiel sent members to parliament from the reign of Edward I. till it was disfranchised by the Reform Act. In the civil war of the time of Charles I., Restormel Castle, about a mile from the town, was taken by Sir Richard Grenville, and the Earl of Essex, who was at Lostwithiel in command of the parliamentary army, had to retire with his forces. The houses in the town are chiefly of stone, and are covered with slate, of which large slabs are quarried in the neighbourhood. The streets are narrow, and roughly paved: they are lighted with gas. The church is of the early English style, and has an octagonal lantern and spire of decorated character. There are in the town one chapel for Independents, two chapels for Methodists, a National school for girls, and a mechanics institute. A grammar school formerly existed here. Near the parish church is an ancient building said to have been a palace of the dukes of Cornwall. The market is on Friday. Four fairs are held in the course of the year. Lime burning, tanning, and wool-stapling employ a few of the population. Some trade is carried on in timber, iron, and coals.

LOT, RIVER. [Lot, Department of.]

LOT, a department of France traversed by the Lot, is bounded N. by the department of Corrèze, E. by those of Cantal and Aveyron, S. by Tarn-et-Garonne, and W. by Lot-et-Garonne and Dordogne. It lies between 44° 13' and 45° 3' N. lat., 1° 1' and 2° 14' E. long. Its greatest length from south-west to north-east is 65 miles; its average breadth is about 35 miles. The area is 2168 square miles. The population in 1841 was 287,739; in 1851 it amounted to 296,224, giving 136.63 inhabitants to a square mile, or 37.95 below the average per square mile for the whole of France.

The department takes its name from the Lot, a river which, rising in the Margeride Mountains, in the department of Lozère, flows in a general western direction across the departments of Lozère, Aveyron, Lot, and Lot-et-Garonne, where it enters the Garonne on the right bank a little above Aiguillon, after a course of 270 miles, 187 miles of which, from Entraigues, where it is joined by the Truyère, in the department of Aveyron, are navigable. The north of the department is drained by the DORDOGNE. The watershed between these two rivers is formed by a prolongation of the Auvergne Mountains, which traverse the department from north-east to west, dividing it into two slopes, the northern one belonging to the basin of the Dordogne, the southern one to the basin of the Garonne. The Selle, which flows along the south-eastern side of this mountain range, and enters the Lot on the right bank near St.-Cirq, is the only other river of importance. Some small feeders of the Garonne rise in the south of the department, the largest of which is the Barguelonne. The eastern districts of the department are covered with low hills which are ramifications of the Cévennes.

The deep soils of the valleys and plains yield fine crops of wheat, maize, barley, and oats; on the lighter soils rye, rape, and buckwheat are grown; and on the strongest soils considerable quantities of hemp and tobacco are raised. The hill-slopes along the rivers are generally laid out in vineyards, which yield annually 13,200,000 gallons of wine, the best kinds being those of Cahors and Grand-Constant. About two-thirds of the whole produce are exported or distilled into brandy. The white mulberry is extensively cultivated for the production of silk. Excellent truffles are found. Plums are grown in large quantities, and when dried form an important article of export. Turkeys, geese, game, and poultry generally are very plentiful. Horses, cows, and sheep are of inferior breeds; goats are numerous; and large numbers of pigs are fattened for the supply of the neighbouring departments. Wild boars are now rarely met with. Hares and rabbits are very numerous, and of large size. Fish is abundant in all the rivers, among which the Cère, a feeder of the Dordogne, is famous for eels, and the Lot for carp of enormous size.

The south-west of the department is occupied by the chalk formation; the southern and central parts by the strata which intervene between the chalk and the new red-sandstone; the eastern side by the formations from the new red-sandstone (inclusive) to those which repose on the primitive rocks; and the north-east of the department, along the bank of the Cère, by the primitive rocks. Among the mineral productions are coal and iron. The hills afford granite, marble of various colours, limestone, calamine, alabaster, calcareous spar, and stone for mill-stones and lithography. Crucible-clay and fullers'-earth are found in the valleys. There are several mineral-springs, and one or two remarkable caverns in the department: one of these near the bank of the Selle contains the fossil bones of animals not now found in Europe.

Of industrial activity there is little: a little bar- and cast-iron, coarse cotton- and woollen-stuffs, brandy, and paper are manufactured. The corn-mills, which are 922 in number, are the only important

manufacturing establishments in the department. The commerce is composed of the articles already indicated, and of hides, salt, oak-staves, groceries, small wares, broadcloth, &c. About 680 fairs and markets are held in the year. Roadway accommodation is afforded by 4 state, 11 departmental, and 37 parish roads.

The department presents great differences of temperature and climate. Among the granitic highlands of the east the winters are long and rude, generally lasting from November to April, during which time snow and rain, each accompanied by cold winds, alternately succeed each other. The calcareous slopes of the Auvergne range have a drier and less rigorous climate, and a much shorter winter. In the plains and the valleys of the Dordogne and the Lot the climate is genial, except during the spring, when the night-frosts are often very harsh and biting.

The department contains 1,388,187 acres. Of this area 574,622 acres are under tillage, 62,483 acres consist of grass-land, 144,876 acres are under vines, 215,620 acres are covered with woods and forests, 176,153 acres with heaths and moors, and 89,520 acres are occupied with orchards, plantations, and nurseries.

The department is divided into 3 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Cahors . . .	11	125	118,515
2. Figeac . . .	7	112	94,345
3. Gourdon . . .	9	73	83,364
Total . . .	27	310	296,224

1. Of the first arrondissement, and of the whole department, CAHORS is the capital. *Castelnau-de-Montratier* occupies the summit of a steep hill, 14 miles S. from Cahors, and has 4133 inhabitants. Its position, its ramparts and strong castle, of which there are still some vestiges, rendered it formerly a town of considerable importance. *Montcuq*, situated on a conical hill between two valleys, 14 miles S.W. from Cahors, has 2314 inhabitants. It was formerly one of the most important fortresses of Quercy; in accordance with the treaty of Meaux, its formidable defences were demolished, with the exception of a single square tower 109 feet high, which still stands in the highest part of the town. *Puy-l'Évêque* is situated on a peninsula formed by the Lot, on its right bank, 15 miles W. by N. from Cahors, and has 2505 inhabitants.

2. In the second arrondissement the chief town, *Figeac*, is situated in a pretty valley surrounded by hills, which are covered with woods, vineyards, and orchards, on the right bank of the Selle, 32 miles N.E. from Cahors, and has a tribunal of first instance, a college, and 6171 inhabitants. This town was formerly surrounded by ramparts and ditches, part of which still remains. The streets are narrow and ill laid out; the houses ill built, many of them remarkable for antiquity of style. The most important buildings are the *Château-de-Baleine*, a part of the old fortifications of which now serves for a court-house; the abbey-church of *St-Sauveur*; and the church of *Notre-Dame-du-Puy*. Two obelisks, called *Aiguilles*, one south the other west of the town, are remarkable for their structure and antiquity; they were used in former times as fire-beacons to guide travellers by night through the surrounding countries, which were then covered with dense forests. *Figeac* originated in a monastery founded A.D. 755. It was governed by consuls, had the right of coining money, and enjoyed several other immunities. All these it lost for voluntarily submitting to the English in the reign of King Jean; by the efforts and sacrifices they made to shake off the yoke of the foreigners their privileges were afterwards restored. The English seized the town again in the reign of Charles V., and levied heavy contributions as a condition of evacuating it. *Cajarc*, a town of 2055 inhabitants, is situated in a very fertile district, on the right bank of the Lot, 12 miles S.W. from Figeac. *St-Céré*, 18 miles N. by W. from Figeac, is built on an island formed by the Bave, a feeder of the Dordogne, and has 3902 inhabitants, who manufacture great quantities of hats. To the north of the town are the remains of a fortified camp, said to be Roman, in which however several ecclesiastical structures seem to have been erected; of these two lofty isolated towers are still standing.

3. The third arrondissement takes its name from its chief town, *Gourdon*, which is situated on a hill in the west of the department, 22 miles N. from Figeac, and has a tribunal of first instance, a college, and 5325 inhabitants, who manufacture woollen stuffs, linen, and hats. The town, which is tolerably well built, and has a handsome church, was formerly surrounded by strong ramparts. *Gramat*, situated in a romantic valley, 16 miles N.E. from Gourdon, on the right bank of the Alzon, a feeder of the Dordogne, has mineral springs and 3560 inhabitants, who trade in corn and wool. *Martel*, 11 miles N. by W. from Gramat, has a college and 3070 inhabitants. It owes its origin and name to Charles Martel, who erected here the church of *St-Maur*, which was rebuilt on a large scale in the year 1300, and is lighted through stained-glass windows remarkable for beauty of colouring and correctness of design; the subjects represented are the principal incidents of our Saviour's passion. *Souillac*, a well-built town, with a tribunal of commerce and 3087 inhabitants, is situated in a fertile

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valley, 12 miles N. by E. from Gourdon, on the right bank of the Dordogne, which is here spanned by a stone bridge of seven arches. The town was taken by the English in 1362, and by the Calvinists in 1562. Coarse woollens, agricultural implements, bar-iron, leather, and iron-ware are manufactured; there is also some trade in wine, tobacco, hides, salt, groceries, oak-staves, cattle, &c.

The department forms the see of the Bishop of Cahors; it is included in the jurisdiction of the High Court of Agen, within the limits of the University-Academy of Toulouse, and belongs to the 12th Military Division, of which Toulouse is head-quarters. It returns two members to the Legislative Body of the French empire. There are a diocesan seminary, an endowed college, and a normal school at Cahors; and communal colleges at Figeac and Martel, besides the ordinary communal schools.

(*Dictionnaire de la France; Statistique de la France; Annuaire pour l'An 1853; Official Papers.*)

LOT-ET-GARONNE, a department in France, is bounded N. by the department of Dordogne, E. by those of Lot and Tarn-et-Garonne, S. by that of Gers, and W. by those of Landes and Gironde. It lies between 43° 58' and 44° 45' N. lat., 1° 5' E. and 0° 8' W. long. Its greatest length from north-east to south-west is 63 miles; from south-east to north-west, 55 miles. The area is 2067 square miles, and the population in 1841 was 347,073; in 1851 it amounted only to 341,345, which gives 165.14 to the square mile, or 9.44 below the average per square mile for all France. The department takes its name from the two principal rivers which traverse it—the Lot, from north-east to west, and the Garonne from south-east to north-west; and is formed out of the old district of Agénois, part of the diocese of Condom, and small portions of those of Bazas, Lectoure, and Cahors.

The surface of the department presents a high plain, furrowed to different depths by river-valleys, but diversified in the south by some low swells, the last declivities of the Pyrenees northward; the whole inclining towards the north-west and belonging to the basin of the Garonne. Nothing can exceed the beauty and fertility of the valleys of the Lot and the Garonne; the slopes that inclose them are covered with vines and other fruit-trees, especially the fig and the plum, and the low-lands yield abundantly wheat, maize, rye, hemp, tobacco, &c. The valley of the Baise, in the south, and that of the Dropt, in the north of the department, are also very fertile. With these exceptions, the department presents an arid, treeless surface, with a barren stony soil, especially in the eastern districts at a little distance from the Lot and the Garonne. In the upper part of Agénois, the soil is a stiff iron-coloured clay that ill repays the labour of the husbandman; and in the Landes, which extend over the south-west of the department along the Avenche, the ground is covered with arid sands, unhealthy marshes, and in some places with a scanty soil, which can with difficulty be made to produce a few ears of corn. In this last district there are also some hungry pastures and forests of pine and cork; the cork-woods along the left bank of the Gelise, a feeder of the Losse, in the south of the department, are the largest in France. On the northern borders there are fine chestnut woods. The quantity of wine annually produced is 14,014,000 gallons, half of which goes for the home consumption; part of the surplus is distilled into brandy, and the remainder is exported to Bordeaux. A considerable number of cattle, horses, mules, and sheep are reared. Immense numbers of geese also are reared, and form an important article of export. Game and fresh-water fish are plentiful. The climate of the department is in general very healthy; but long alternations of drought and rain are not uncommon.

The principal rivers are the LOT, the GARONNE, and the GERS. The *Baise*, which enters the Garonne on the left bank nearly opposite the mouth of the Lot, rises near the village of Lannemezan, in the department of Hautes-Pyrénées, whence it flows northward through the department of Gers, passing Mirande (below which it is joined on the right bank by the Baise-Devant) and Condom, to which town we believe it has recently been made navigable. At a short distance below Condom it enters the department of Lot-et-Garonne, and passing Nérac (where the navigation formerly began) it joins the Garonne opposite Aiguillon after a course of nearly 100 miles. The *Dropt* rises in the department of Dordogne to the east of Montpazier. It flows westward along the southern base of a western offset from the mountains of Cantal, and in its course crosses the boundary between Lot-et-Garonne and Dordogne more than once. Below Eymet in the south of the latter department it finally leaves Dordogne, and crossing the north-western angle of Lot-et-Garonne it runs north-west to Monseigneur in the department of Gironde, and thence west by south to its mouth in the Garonne below La-Réole. Its whole length is about 85 miles. The *Dropt* runs through a pretty valley; it is crossed by many mill-dams, but has been rendered navigable by canalisation and by lifting apparatus up as far we believe as Eymet. Steamers ply up the Garonne between Bordeaux and Agen. [AGEN; GARONNE.]

The projected railway from Bordeaux to Cette enters the department on the north-west between La-Réole and Marmande, where it crosses from the left to the right bank of the Garonne. From Marmande it is to run up the right bank of the Garonne through Tonneins to Agen, thence through Moissac to Montauban, and then to the Garonne at Toulouse. Roadway communication is afforded by 6 state and 16 departmental roads.

The department is occupied wholly by the supracretaceous strata. Iron-mines are worked; good building stone, calcareous spar, gypsum, and marl are found. The chief manufactures are cork, sailcloth, linen, swanikins, pottery, linen- and cotton-yarn, iron, glass, paper, lime, ropes, leather, tobacco. The commerce is composed of the various industrial and agricultural articles enumerated, and of pitch and tar made from the pines of the Landes. About 675 fairs and markets are held annually. The department possesses 1138 wind- and water-mills, 9 iron forges and furnaces, and 239 factories of different kinds.

The department contains 1,323,062 acres. Of this area 706,996 acres are arable land; 104,584 acres are grass land; 171,371 acres are under vineyards; 169,617 acres are covered with woods; 97,936 acres consist of barren heaths and moors; 28,752 acres are occupied with roads, buildings, &c.; 12,689 acres with rivers; and 19,020 acres are laid out in orchards and fruit plantations of various kinds.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Agen	9	72	84,092
2. Marmande	9	96	101,044
3. Villeneuve	10	82	95,391
4. Nérac	7	62	60,818
Total	35	312	341,345

1. In the first arrondissement the chief town, *Agen*, which is also the capital of the department, and of the former district of Agénois, is the subject of a separate article [AGEN]. Of the following places the population is that of the commune. *Astaffort*, on the right bank of the Gers, 10 miles S. from Agen, is surrounded by old turreted half-ruined walls, and has 2414 inhabitants. A large cross, erected at a short distance from the rear of the parish church, marks the spot, still called *Champ des Huguenots*, on which the Prince of Condé was defeated in the religious wars. *Port-Sainte-Marie*, 12 miles W. from Agen, is built at the foot of a high hill, on the right bank of the Garonne, which is here crossed by a fine suspension-bridge and forms a commodious harbour for river craft. The high road to Bordeaux passes under an arcade surmounted by a lofty tower, the whole built with small square stones, and supposed to be of Roman erection. The population of the town is 3025.

2. In the second arrondissement the chief town, *Marmande*, is situated in the west of the department, on a hill above the Garonne, which is here crossed by a bridge of a single arch. *Marmande* is an ancient place, but its origin is unknown. The Goths are said to have occupied it. The Saracens destroyed it in the 8th century. It was rebuilt however, and the fortifications it is said were raised by the English *Cœur-de-Lion*. In 1212 it was taken from the English by Simon de Montfort, and again in 1219 by Amaury de Montfort, whose troops massacred all the townsfolk they could lay hands upon. In 1424 the English attacked it without success; but took it in 1427, and held it for a short time. Henri IV. besieged it without success in 1577. In 1814 the town, garrisoned by a small force, held out for a month against an English division. It has an old-fashioned look; many of the houses are timber-framed. The most important buildings are the town-hall, the court-house, the college, and the hospital. *Marmande* is the seat of a tribunal of first instance, and has 8257 inhabitants, who manufacture hats, woollen stuffs, brandy, ropes, and leather. It has also a considerable trade in corn, flour, wine, brandy, plums, hemp, tobacco, &c. Steam-boats ply several times a day to Bordeaux. *Clairac*, a clean well-built town, stands in a pretty situation on the right bank of the Lot, has 4842 inhabitants, who trade in white wine, plums, flour, tobacco, &c. *Castel-Moron*, formerly a fortified town, which was taken in 1315 by the English, stands on the Lot, and has 2379 inhabitants. *Le-Mas-d'Agénois*, a small but ancient town, is situated 8 miles from *Marmande*, on the left bank of the Garonne, and has 2414 inhabitants. *Tonneins*, a few miles E. of *Le-Mas-d'Agénois*, on the right bank of the Garonne, which is here crossed by a suspension-bridge, is a cheerful, well-built town, situated on the sides of a hill, from whence there is a delightful view. The town-hall, the theatre, and the public baths are the most conspicuous buildings. *Tonneins* has a population of 6973, who manufacture great quantities of ropes, leather, and tobacco, and trade in these articles, as also in hemp, plums, wine, corn, brandy, &c.

3. The third arrondissement takes its name from *Villeneuve d'Agén*, a town of 12,337 inhabitants, 14 miles N. from Agen, situated on the Lot, which divides it into two unequal parts, united by an ancient bridge of remarkable structure. *Villeneuve* occupies the site of *Gajac*, a town which was destroyed in the early part of the 13th century; it was rebuilt by the brother of St. Louis in 1264, and has been since called *Villeneuve*, or the new town. *Gajac* it is supposed occupied the site of the ancient *Excisum* mentioned in the 'Antonine Itinerary.' By much the greater part of the town is on the right bank of the river, and consists of several wide, straight, well-built streets, that abut in a circus surrounded by arcades. Of the old fortifications, two towers and the castle still remain; the ramparts have been turned into handsome promenades. The buildings of the ancient abbey of

Eysses, situated about three-quarters of a mile north of the town, now form a convict prison for eleven departments. *Villeneuve* has tribunals of first instance and of commerce, and a college. Linen, leather, tiles, hammers for metal foundries, &c., are manufactured; the commerce is composed of flour, plums, wine, cattle, paper, iron, copper, &c. *Fumel*, E. by N. from Villeneuve, on the right bank of the Lot, has paper-mills, and 2577 inhabitants. *Sainte-Livrade*, W. of Villeneuve, and near the left bank of the Lot, has a population of 3209, who manufacture leather, and trade largely in plums. *Monflanquin*, situated on a hill, near the left bank of the Lède, 9 miles N. from Villeneuve, has 5075 inhabitants. The streets are narrow, steep, and ill paved. The neighbourhood is fertile in wine and fruit. *Tournon*, a market-town, 16 miles E. from Villeneuve, situated on a hill on the right bank of the Baudusson, a feeder of the Lot, has 4956 inhabitants.

4. The fourth arrondissement comprises the south-west of the department, and takes its name from the chief town, *Nérac*, which is prettily situated on the Baïse, 15 miles S.W. from Agen, and has tribunals of first instance and of commerce, a college, and 7090 inhabitants, who manufacture coarse woollens, sea-biscuits, corks, leather, and great quantities of flour. The old town, situated on a steep slope, on the right bank of the Baïse, is ill built, with narrow streets of old wooden houses; it is joined by two stone bridges to the new town, which stands on the left bank of the river, and is larger and better built. This town has several pretty and shady walks, one of which is adorned with a statue of Henri IV. The mosaics, the remains of a palace, a temple, an aqueduct, and of baths, found here, mark the place as the site probably of a Roman city, the name of which is lost. The lords of Albret had a castle here which was built on the site of a Benedictine monastery, erected in 1250. The castle consisted of four ranges of buildings surrounding a square, and was built by the different members of the house of Albret after that family had ascended the throne of Navarre. The last addition to the building was made by Jeanne d'Albret who built the fourth range with the materials of demolished churches and monasteries after her conversion to Calvinism. In this part of the building Henri IV. lodged in his youth. In the reign of Louis XIII. *Nérac* aided with the Calvinists, but was forced to capitulate to Mayenne in 1621. In the following year its defences were dismantled. The town trades in linen, hemp, flax, wine, brandy, &c., and is famous for its partridge patties. *Nérac* has an important corn-market. *Castel-Jaloux*, 18 miles N.W. from *Nérac*, on the left bank of the *Avance*, is a pretty well-built town, not far from the commencement of the 'landes,' and has 2585 inhabitants, who manufacture coarse cloth, paper, glass, leather, &c. It has also iron-forges, copper-foundries, smelting-furnaces, hydraulic saw-mills, and a considerable trade in corn, wine, pitch, and tar, oak-bark, chestnuts, and leeches. *Mézin*, 7 miles S. from *Nérac*, on the right bank of the *Gelise*, a feeder of the *Baïse*, is an ill-built town, with 3042 inhabitants, who manufacture corks, pottery, flour, paper, and leather.

The department forms the see of the Bishop of Agen, is included in the jurisdiction of the High Court of Agen, within the limits of the University-Academy of Bordeaux, and belongs to the 14th Military Division, of which Bordeaux is head-quarters. It returns 3 members to the Legislative Body of the French empire. There are a diocesan seminary, a secondary ecclesiastical school, and a communal college at Agen. Aiguillon, Marmande, Mézin, and Villeneuve also have communal colleges. The Calvinists have churches at Tonneins, Clairac, Nérac, Lafitte (a village near Clairac), and Castelmonron; and 19 meeting-houses in different towns of the department.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

LOTHARINGIA. [LORRAINE.]

LOTHIANS, THE, a term by which is understood that part of Scotland which stretches along the southern shores of the Firth of Forth, and includes the counties of Haddington, Edinburgh, and Linlithgow, called respectively East Lothian, Mid Lothian, and West Lothian.

LOUDEAC. [CÔTES-DU-NORD.]

LOUDUN. [VIENNE.]

LOUGHBOROUGH, Leicestershire, a market-town and the seat of a Poor-Law Union, in the parish of Loughborough, is situated in 52° 47' N. lat., 1° 13' W. long., distant 13 miles N. by W. from Leicester, 109 miles N.W. by N. from London by road, and 115½ miles by the North-Western and Midland railways. The population of the town of Loughborough in 1851 was 10,900. The sanitary arrangements of the town are under a Local Board of Health. The living is a rectory in the archdeaconry of Leicester and diocese of Peterborough. Loughborough Poor-Law Union contains 24 parishes and townships, with an area of 42,513 acres, and a population in 1851 of 25,268.

Loughborough consists of five principal streets, which radiate from the centre of the town, and several smaller streets. The town is lighted with gas. The old church is a handsome edifice in the perpendicular style with a fine tower. Emmanuel church is of recent erection. The Wesleyan Methodists, Baptists, Independents, Quakers, and Roman Catholics have places of worship. Burton's school, founded in 1493, has an income from endowment of 1742*l.* 16*s.*; with the

foundation there are now connected five distinct schools, in which all the scholars pay a small sum fixed by the trustees. The number of scholars in 1853 was—in the Grammar and Commercial school 87; in the High school 70; in the Low school 120; in two Girls' schools 116. There are also National and Infant schools, a literary and philosophical society, a working men's improvement society, a public library, a savings bank, a dispensary, and barracks for cavalry. A Roman Catholic convent of the Sisters of the Institute of Mercy is in the town. The chief manufacture is that of patent angola hosiery, or fleecy hosiery. Other kinds of hosiery, cotton goods, net lace, and shoes are also made. The Leicester Navigation and the Loughborough Canal communicate with the Soar and unite a little to the north of the town. The Midland Counties railway passes the town on the north-east side. The market-day is Thursday: eight fairs are held in the course of the year. A county-court is held in the town. Public walks have been laid out by the trustees of Burton's charity.

LOUGHOR. [GLAMORGANSHIRE.]

LOUGHREA, county of Galway, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated on the north side of Loughrea Lake, in 53° 12' N. lat., 8° 35' W. long., 23 miles E.S.E. from Galway, and 110 miles W. from Dublin. The population in 1851 was 3651, besides 2661 in the workhouses, and 30 in the bridewell. Loughrea Poor-Law Union comprises 34 electoral divisions, with an area of 198,832 acres, and a population in 1851 of 38,735. The principal street on the Dublin and Galway road contains some good houses. Besides the parish church, a neat building erected in 1821, there is a Roman Catholic chapel with a Carmelite friary and nunnery, to which chapels are attached. The other public buildings are the court-house, a linen- and yarn-hall, a barrack for cavalry and infantry, a bridewell, and the Union workhouses. Brewing and tanning, and the manufacture of narrow linen and coarse diapers are carried on. Quarter and petty sessions are held. The market is on Thursday, and there are four yearly fairs. On the north side of the town, attached to the friary, is part of a Carmelite abbey, with a square tower, founded in 1300.

LOUGHTON. [ESSEX.]

LOUIS, ST. [MISSOURI.]

LOUISBOURG. [CAPE BRETON.]

LOUISIADÉ ISLANDS, an extensive group of islands in the Pacific, lie south-east of Papua, or New Guinea, between 8° and 12° S. lat., 150° and 155° E. long. The group was discovered by Bougainville in 1768. The islands occupy a space of more than 300 miles from north-west to south-east, but none of them appear to be large. The principal among them are named D'Entrecasteaux, Jurien, St. Aignan, and Rossel. So far as a rough conjecture may be formed, there is not one that exceeds 40 miles in length. Some of them rise to a considerable elevation; they generally appear to be very fertile. The inhabitants belong to the Papua race, and are very averse to any intercourse with foreign vessels which visit the dangerous sea that washes the southern coast of these islands. It is supposed that they are cannibals. The inhabitants make large pirogues, or canoes, and use shields as a defensive armour.

(Bougainville; D'Entrecasteaux.)

LOUISIANA, one of the most south-western of the United States of North America, extends between 28° 55' and 33° N. lat., 88° 40' and 94° 25' W. long. It is bounded E. by the state of Mississippi, from which it is divided down to 31° by the river Mississippi; N. by Arkansas; W. by Texas, from which it is separated for 200 miles, or above two-thirds of the distance by the Sabine River; and S. by the Gulf of Mexico, along which its coast-line extends for 400 miles. The area is 41,346 square miles; the total population in 1850 was 517,762, or 1252 to the square mile. The federal representative population in 1850 was 419,838, in which number three-fifths of the slaves are included. This, according to the ratio of representation established by the Census of 1850 (one representative to 93,423), entitles the state to send four representatives to Congress. To the Senate, like each of the other United States, Louisiana sends two members.

The following table shows the population of Louisiana at the decennial censuses from 1810, the first taken after the admission of Louisiana into the Union as a state, with the relative proportions of whites, free-coloured persons, and slaves:—

Date of Census.	Whites.	Free Coloured Persons.	Slaves.	Total.
1810 . . .	34,311	7,585	34,660	76,556
1820 . . .	73,383	10,476	69,064	153,407
1830 . . .	89,441	16,710	109,538	215,739
1840 . . .	138,457	25,502	168,452	352,411
1850 . . .	255,491	17,462	244,809	517,762

Of the white population 126,917 were born in the state, 60,641 in other states of the Union, 67,308 in foreign countries, and of 625 the birthplace was unknown. Of the foreigners 3598 were born in England and Wales, 1196 in Scotland, and 24,266 in Ireland; 17,507 in Germany, and 11,552 in France.

Surface, Hydrography, and Communications.—Along the coast are

several spacious bays and inlets, or, as they are called, lakes, but there are few good harbours. Vessels drawing 8 feet of water can ascend Lake Pontchartrain to Madisonville, but the other inlets are mostly shallow. The roadstead on the west of the Chandeleur Islands, known as Naso Roads, affords secure riding for large vessels. The smaller bays and inlets, many of which penetrate a considerable distance into the country, afford shelter for small craft. Off the eastern coast are several islands, the largest of which are known as the Chandeleur Islands: they are not very fertile, but are regarded as very healthy, and the larger of them are inhabited. On the south coast, and west of the mouths of the Mississippi, are several other islands which lie close to the shore, and are said to possess a soil of remarkable fertility.

Louisiana presents a considerable variety of surface, though it is for the most part a plain country, only in a few places rising into hills of moderate elevation. The southern part of the state for 100 miles from the shore is a low unbroken level. The delta of the Mississippi extends along the shores of the Gulf of Mexico from Atchafalaya Bay on the west (91° 40' W. long.) to the Pass de Marianne (89° 15' W. long.) and Lake Borgne on the east, and includes a coast-line of above 250 miles; and thence up the Mississippi to the great bend above the mouth of the Homochitto River, about 31° 15' N. lat.; comprehending about one-fourth of the state, or more than 10,000 square miles. This vast tract of country, which is in few places elevated more than 10 feet above the level of the sea, is annually inundated by the spring floods, and for six months in the year is either covered with water or a swamp. The swamps extend along the sea, and are called the marshes; the inundated region lies north and west of the marshes. The marshes are nearly on a level with the sea at high tide. They are destitute of trees and shrubs, but covered with grass, which however is quite useless, as the swamps can only be traversed in boats by following the numerous watercourses which intersect them. The cultivated part of this marshy region is confined to the very narrow banks of the watercourses, and even there settlements are only formed on the northern borders of the marshes, on account of the great unhealthiness of this region.

The inundated region comprehends more than two-thirds of the delta. All that part of the delta which is west of the Mississippi and of the Bayou la Fourche, with the exception of a tract west of Baton Rouge, is deeply inundated from February to August, during which period it forms an immense lake. The common depth of the water is 6 feet, but in many parts, especially where the Red River joins the Mississippi, it is much more. During the remainder of the year it is dry and the soil firm. The whole region is covered with high and valuable forest-trees. The country east of the Mississippi and of the Bayou la Fourche, as well as the tract of higher ground west of Baton Rouge, is only inundated to the depth of 3 or 4 feet, and the inundation ceases a month or six weeks sooner. The banks of the rivers also are several feet higher than in the country farther back, so that they are at most only slightly inundated, and numerous settlements have been formed along them. The greatest part of this country is covered with trees. To protect the cultivated ground from the annual inundation a bank of earth, called 'levée,' has been formed on each side of the Mississippi, it begins at Fort St. Philip (29° 25' N. lat.), and extends to the higher grounds of Baton Rouge (30° 30'), a distance of 180 miles. In some places above New Orleans this embankment is 15 feet high and 30 feet wide at the base, but generally it does not exceed 12 feet at the base and 5 feet in height.

The country west of the delta to the Sabine River is likewise bordered by a broad belt of sea marshes, extending from 10 to 30 miles inland, and having in many places clumps of live oak. North of the marshes the country rises considerably, and extends in open prairies, which are generally destitute of trees, but covered with grass. The prairies are traversed by numerous rivers, whose narrow valleys or 'bottoms' are overgrown with trees, and contain fertile tracts. The banks of the river Teche form the western boundary of the inundated country, but they are above the line of the inundation, and contain many rich cultivated tracts. To the west and north-west of the prairies of Opelousas lies an extensive wooded region, which on the Sabine extends to 30° 10', and terminates not far from the marshes. It occupies the country about the northern half of the course of the Calcasieu River, and approaches the inundated country of the delta on the Bayou Boeuf, a branch of the Courtableau. The whole of this extensive tract is covered with pine-forests, and the soil is of very indifferent quality. It is an undulating plain, except at the most north-western angle of Louisiana, between the upper course of the Sabine River and the Red River, where it rises into high hills.

Red River may be considered as the boundary of this wooded region. Where it enters Louisiana, high-grounds covered with pine-trees approach to the margin of the river on both sides, but about 60 miles lower down a remarkable swampy depression of the surface, known as the Rafts, extends from north-north-west to south-south-east, about 60 miles long with a mean width of 8 miles. The whole of this low region is inundated from 1 to 20 feet during the spring, but in summer the lakes and low grounds are nearly dry, and in October and November they become meadows covered with a carpet of green and succulent herbage.

The country extending from Red River on the west to the Mississippi River on the east consists mostly of elevated woodland, especially that portion which lies west of the Washita or Ouachita River. In this region, east of Lake Bistineau, is the highest land of Louisiana. It consists of numerous hills rising from 100 to 200 feet above their base: they are covered with trees, chiefly pine and oak, thinly interspersed with ash, hickory, and dog-wood, and produce a luxuriant herbage in summer and spring. Farther east these hills sink into a sandy plain, which extends to the Washita and river Boeuf, a confluent of the former; it is mostly covered with pine-forest; but the river bottoms are wide, and have a fertile soil. The country on both sides of the Black river, which is formed by the junction of the river Boeuf with the Washita, resembles in every respect the less inundated part of the delta. But between the river Boeuf and the Mississippi, and especially along the banks of the latter, is a low tract traversed by the river Tensas, a confluent of Black river, which is likewise inundated by the water which issues from the Mississippi in the first half of the year. Narrow strips along the river become quite dry in the second half of the year, but the greater part of this tract is a swamp, which produces fine timber-trees, especially cypress. From these forests New Orleans is supplied with lumber and fuel.

Along the east bank of the Mississippi extends an elevated country, broken by numerous streams. Its projections, worn away by the action of the river, are known by the name of Bluffs. They rise more than 100 feet above the alluvial plains near the Mississippi. These hills continue eastward for 15 or 20 miles from the banks, and lie scattered about in wild confusion. They are overgrown by mingled forests of oak, sweet-gum, poplar, tulip-tree, hickory, and some pine, and have an almost uniformly productive soil. By degrees the hills disappear, and are followed by a plain which is considerably elevated above the delta. This plain has a sandy sterile soil, and is entirely overgrown with pitch-pine. On the south it does not extend to the lakes of Maurepas and Pontchartrain, but begins imperceptibly to lower, at a distance of about 10 miles, until it advances to the river Amite and the lakes, where it terminates in narrow swamps, which line the banks of the river and lakes. The soil, though light, is well adapted to the cultivation of cotton, of which there are numerous plantations, and the extensive pine-forests produce abundance of pitch and tar.

The Mississippi becomes the boundary of Louisiana at its most north-eastern corner, 33° N. lat., but receives no accession of water from the right until it has attained 31° N. lat., where it is joined by the united waters of Red and Black rivers, which together probably drain a tract of 100,000 square miles, and bring down an immense body of water during the spring months. From 31° N. lat., the Mississippi, which has formed the boundary of the state for 450 miles, runs wholly in the state of Louisiana; the remainder of its course being about 350 miles. Where it enters the state the Mississippi sends off its first great branch, the Atchafalaya, here called the Chafalio, which, flowing in a southern and south-eastern direction, traverses the lowest part of the delta, enters the south-eastern part of lake Chetimaches, and issuing from it, passes through the marshes into Atchafalaya Bay. Lake Chetimaches, or Grand Lake, is about 40 miles long and from 2 to 5 miles wide; at its southern extremity it is 40 feet deep. It is connected with the Atchafalaya by several natural channels, which traverse the intervening country, and divide it into many islands, making a kind of net-work. From the Atchafalaya the Mississippi flows in a general south-eastern direction, but with many great bends. About 30° 20' N. lat., the river sends off the second great branch, the Iberville, which runs eastward, and joins the Amite river. The united stream falls into Lake Maurepas, a circular sheet of water about 8 miles in diameter. This lake is united to the lake of Pontchartrain by the Pass of Manchac. Lake Pontchartrain is in the form of an ellipse 20 miles by 32 miles, and from 18 to 20 feet deep; it is connected with Lake Borgne by two channels, of which the southern is called Chef Menteur, and the northern the Rigolets. By means of the St. John's Bayou, a small river which falls into its southern shore, and a short canal, cut from the St. John to New Orleans, Lake Pontchartrain has become the medium of communication between a considerable district of the interior and the commercial capital of the state. Lake Borgne, though denominated a lake is really a bay of the Gulf of Mexico, and connected with it by the Pass de Marianne. A few miles below the efflux of the Iberville, the Mississippi sends off another branch to the west, the Plaquemines, which is only 6 miles long, and joins the Atchafalaya. Though it has only water during the high flood, it is important for the internal navigation. Farther down occurs the last great efflux of the Mississippi, the La Fourche (the Fork). It leaves the principal river at Donaldsonville, and flows in a south-eastern direction for 90 miles; it has 9 feet water on its bar, and admits vessels drawing 4 or 5 feet to within 30 miles of its efflux; but the upper part of its course is very shallow from September to March. From the efflux of the La Fourche the Mississippi flows east to the town of New Orleans, and thence to the sea in a south-eastern direction. Shortly before it reaches the Gulf of Mexico it divides into six branches, called the West, South-west, South, East, North-east, and L'Outre Pass. The most frequented is the East Pass, with 12 feet water at ordinary tides; the South-west

Pass is nearly as deep as the East Pass. The other passes have from 5 to 8 feet water, but they are rarely frequented. The depth of the water increases rapidly in the channels, so that it is upwards of 30 feet within a mile from the bars, and still greater farther upwards. [MISSISSIPPI.] In the inundated tract there is a great number of lakes of different sizes. The largest is lake Quacha, or Barataria, south-south-west of New Orleans, which is 22 miles long and 6 miles wide. As these lakes are united, either with one another or with the chief branches of the Mississippi, some of them facilitate the internal navigation, especially Lake Palourde and Lake Verret, which are united with one another and with the Atchafalaya and La Fourche, branches of the Mississippi.

Red River, which rises in the Rocky Mountains, traverses Louisiana with a general south-east course of 200 miles, but by the windings of the river of above 300 miles. Shortly after it enters the state commences the depression mentioned above, and known as the Raft, which consists of a swampy extension of the river, 20 to 30 miles wide, and extending for a length of 70 miles. The water having become obstructed by fallen timber has forced for itself a number of new channels, most of them shallow, which have likewise in their turn become blocked by the trees brought down by floods, so that during certain seasons the whole width of the tract might occasionally be traversed on horseback. The United States government has however recently, at a great expense, caused so much of the raft to be removed as to admit the passage of steam-vessels. The navigation is again interrupted by the rapids in 31° 20' N. lat., where two ledges of rocks extend across the channel about three-quarters of a mile from each other; but when the water is high the rocks form no obstruction to the passing of boats. Its principal affluents are Black river and the Bayou de Bon Dieu.

The other rivers of Louisiana are unimportant as channels of navigation. The Sabine, which divides the country from Texas, rises in the last-mentioned state, and has a generally southern course of 300 miles. Before it enters the sea it flows into a shallow lake 30 miles long, and from 3 to 5 miles wide. In ordinary tides there is not above 3 feet water on its bar. It is navigable throughout Louisiana by steamers of light draught. East of the Sabine is the Calcasieu, which rises in the angle between the Red river and Sabine, flows parallel to the Sabine at a distance of about 35 miles, expands near its mouth likewise into a large but shallow lake, and has also only 3 feet water on its bar. Its course is upwards of 200 miles. The Mermentou, which flows to the east of the Calcasieu, is properly only the channel by which Lake Mermentou discharges its waters into the Gulf of Mexico. This lake is of considerable extent, and receives most of the waters which originate on the prairies of Opelousas, but the different streams unite before they enter the marshes in one river, which receives the name of Mermentou, and soon afterwards falls into the lake. It is not better adapted for navigation than the Sabine and Calcasieu. Sixty miles east of the mouth of the Mermentou are two large bays, Vermilion Bay and Cote Blanche Bay, which are united by several passes with the Gulf of Mexico. The bays have 12 feet of water, but the passes only 5 or 6 feet. Vermilion Bay receives the river of the same name, which rises on the prairies of Opelousas 30° 30' N. lat., and runs in a general southern course about 80 miles. It is navigable for vessels of 5 feet draught to a considerable distance.

The canals in the state are the Orleans Bank Canal, extending from New Orleans to Lake Pontchartrain; the Barataria Canal from New Orleans to Berwick Bay; Lake Veret Canal from Lake Veret to La Fourche River; and a short line from New Orleans to the Bay of St. John's.

Louisiana has been slower than most of the states in adopting railway communication. The only lines in operation in June 1854 were the Clinton and Port Hudson railway, uniting those places, 24 miles long; the Mexican Gulf railway, from New Orleans to Proctorsville, 27 miles; the Milneburg and Lake Pontchartrain, from New Orleans to Milneburg, 6 miles; the New Orleans and Carrollton, uniting the towns so named, 6 miles; and the West Feliciana, 26 miles. A convention was however held some time back at New Orleans, of representatives of the South-Western States, with a view to the adoption of a very extensive system of railways for facilitating intercommunication between those states, and a more ready access to the ports of the Mexican Gulf. In consequence of the resolutions then passed several extensive lines of railway have been projected, some of which are now in course of construction. Of these lines commenced or projected the principal are the New Orleans, Opelousas, and Great Western, 213 miles long; the Vicksburg and Shreve-port, 207 miles; and the New Orleans, Jackson, and Great Northern, 51 miles. It has also been proposed to the general government to improve the navigation of the Mississippi below New Orleans.

Geology, Mineralogy, &c.—The rocks of Louisiana consist almost entirely of Eocene and later deposits. The oldest are the Upper Cretaceous strata, green-sandstone, and marl, outlyers apparently of the great cretaceous formations of Texas, which are said to occur in the north-western and northern parts of the state. Almost the whole of the remainder of the state west of the valley of the Mississippi, with the exception of the lower course of the Red river, appears to consist of Eocene strata, consisting of a white limestone, sandstone, marls, and red and white clays. The middle and upper strata (Miocene and

Pliocene) of the tertiary rocks do not appear to have been identified in Louisiana, but it is believed that these rocks exist. The shores of the Mexican Gulf, the banks of the Mississippi throughout the state, and along Red river up to Natchitoches, or about 31° 45' N. lat., belong to the post-tertiary, post-pliocene, or quaternary rocks, and consist of sandy and clayey deposits, containing vast quantities of various fresh-water shells, of species now living in the beds or on the borders of these rivers; but many of the cliffs or bluffs which contain these shells are raised more than 100 feet above the rivers. The delta of the Mississippi is formed of recent rocks. The river brings down immense quantities of organic and inorganic bodies, which are deposited on the shore of the Gulf of Mexico, and form a vast and constantly increasing delta; and the bar at the mouth of the Mississippi in consequence is continually shifting its position. The bluffs along the Mississippi, Sir Charles Lyell says, have been evidently formed in the same manner and slowly upraised to their present position, the river carving out valleys through the horizontal and unconsolidated strata as they rose, sweeping away the greater portion of them, and leaving mere fragments in the shape of terraces. "The deposits forming the delta and alluvial plain of the Mississippi," he says, "consist of sedimentary matter extending over an area of 30,000 square miles, and known in some parts to be several hundred feet deep." The advance of the delta of the Mississippi into the Mexican Gulf has been estimated at about 50 feet a year, or a mile in a century: the average quantity of sedimentary matter brought down annually by the river is about 1-1700th of the whole weight of the water, or 3,000,000 cubic feet, being about ten times that of the Rhine.

The mineralogical riches of Louisiana are not very considerable. An inferior aluminous brown coal, serviceable for fuel where the true coal is not obtainable, is said to be abundant in the tertiary beds of the northern parts of the state. Iron is found throughout the tertiary beds; the Red river derives its name from the colour of its waters, which is owing to the ferruginous matter contained in the strata through which it flows. Salt-springs occur in several places in the parishes of Natchitoches and Rapides, but are not now worked. Gypsum of good quality abounds, as do also very rich marls and ochre.

Climate, Soil, Productions.—A considerable difference is observed between the climate of the low and high lands of Louisiana. In the low lands it seldom snows, and frost is a rare occurrence, the thermometer commonly not sinking to the freezing-point. In summer the heat is great, and lasts from the beginning of July to the close of September; the thermometer then ranges between 75° and 85°, and sometimes rises to 90° and even 96°. At this time the inundation ceases, and the decomposition of animal and vegetable matter infects the air and produces dangerous diseases, especially fevers. The mean temperature of the year at New Orleans, according to Darby, does not exceed 63°, or about 13 degrees above that of London, which is 21 degrees nearer the pole. On the higher grounds, especially on the open prairies of Opelousas, the climate is much more severe. In 30° 30' N. lat. the snow has fallen to a depth of 11 inches, and remained for several days on the ground. Frost occurs there every winter, and even sometimes in April and September, so that at Natchitoches it does great injury to the cotton and tender plants. In July there are heavy rains and thunder, and in August sometimes hurricanes blow from the south, which cause great damage by forcing the water of the Mississippi into the adjacent level country. In winter the north-western gales, which are very cold, produce great and sudden changes in the temperature.

The alluvial soil along the banks (or as they are here called coasts, from the French 'côtés') of the Mississippi is of extraordinary fertility. This tract, the whole of which is under cultivation, and produces excellent sugar crops, extends for about a mile on each side of the river from about 150 miles above New Orleans to 140 miles below that city. It lies below the flood-tides, from which it is defended by a dyke or levée. Although not so rich as this, all the river bottoms have a very fertile soil. Of the 'inundated lands' about two-thirds are covered with heavy timber and a dense undergrowth of canes and other plants. The cypress swamps have a fertile soil, but the surface is generally depressed, and there is no natural outlet: if drained however they are capable of being converted into excellent rice grounds. The sea marshes are only partially covered with timber; their soil is for the most part a deep clay. The pine lands are always poor and often sterile. The dispersed tracts of elevated prairie are free from timber and generally very fertile.

The staple products are cotton and sugar. The cereals chiefly cultivated are rice and maize. Wheat, rye, barley, and oats are most cultivated towards the north, but nowhere to any great extent. Sugar succeeds well as far north as the head of the delta. Cotton succeeds everywhere, and is of excellent quality. Good tobacco is raised in different places, but its cultivation has decreased. The cultivation of indigo was formerly carried on to some extent, but has been abandoned. The mulberry-tree is indigenous. The vine, peach, and fig flourish; and the orange up to about 30° 30'. The apple cannot be cultivated successfully, and the cherry is wholly unproductive. Vegetables are not extensively cultivated, with the exception of the sweet potato.

By far the greatest part of the surface of Louisiana is covered with forests. The pine-tree, which is most abundant, covers the northern

and western sandy districts, and is extensively used in the manufacture of tar and pitch. On the declivities by which the prairies or wooded regions descend to the inundated grounds the forests mostly consist of oak, sweet-gum, poplar, tulip-tree, and hickory of various species; the same trees occur on the broken country east of the Mississippi: the chincapin grows on the borders of the inundated lands.

Immense herds of cattle are raised on the natural meadows of Opelousas and Attakapas, as likewise horses and mules. The bison, or buffalo, is only met with towards the northern and western border, where also wild horses are found. Deer are only plentiful in the prairies of Opelousas and in the pine-forests. Bears, lynxes, the American panther, and beavers are rare, but wolves are somewhat numerous. Locusts infest the prairies, and numerous serpents the woods and lowlands. The alligator occurs in all the rivers, but is most numerous in the bays and lakes of stagnant water: it is not dangerous, except when attacked or wounded. The Mississippi and its branches abound in fish. The forests swarm with birds, among which are the wild turkey, the paroquet, the pelican, the flamingo, and the humming-bird. Swans, geese, and ducks are very numerous on the lakes and stagnant waters along Red river.

The following are the principal results of the inquiries made at the last Census respecting the agricultural resources of the state:—The number of farms under cultivation in Louisiana on June 1st 1850 was 13,422: the extent of improved land in farms was 1,590,025 acres; of unimproved land, 3,399,018 acres. The cash value of farms was returned at 75,814,398 dollars; of farming implements and machinery at 11,576,938 dollars. Of the chief products of Louisiana the total produce was:—Maize, 10,266,373 bushels (5,952,912 bushels in 1840); rice, 4,425,349 lbs. (3,604,534 lbs. in 1840); ginned cotton, 71,494,800 lbs. (152,255,368 lbs. in 1840, being a decrease of 81,060,568 lbs.); cane-sugar, 226,001,000 lbs. (119,947,720 lbs. in 1840); molasses, 10,931,177 gallons; tobacco, 26,878 lbs. (119,824 lbs. in 1840, being a decrease of 92,946 lbs.). The decrease in the quantity of cotton was mainly due to the destructive floods which swept over the cotton districts in the autumn of 1849; but much of the labour and capital formerly devoted to the production of cotton and tobacco have been diverted to the culture of other crops, and especially sugar, of which Louisiana alone in 1850 produced 91-28 per cent. of the entire quantity produced in the United States. The other more important crops were as follows:—Wheat, 417 bushels; rye, 475 bushels; oats, 89,637 bushels; potatoes, 95,632 bushels; sweet potatoes, 1,428,453 bushels; peas and beans, 161,732 bushels; hay, 25,752 tons; hops, 125 lbs.; of wine, only 15 gallons were made. The value of orchard products was 22,359 dollars; of market-garden produce, 148,329 dollars.

The number of horses in the state in 1850 was 89,514; asses and mules, 44,849; milch cows, 105,576; working oxen, 54,968; other cattle, 414,798; sheep, 110,333; swine, 597,301. The value of live stock was 11,152,275 dollars; of animals slaughtered, 1,458,990 dollars. The products of animals were:—Butter, 683,089 lbs.; cheese, 1957 lbs.; wool, 109,897 lbs.; bees-wax and honey, 96,701 lbs.

Manufactures, Commerce, &c.—Louisiana is mainly an agricultural state, the manufactures being chiefly of articles required for domestic consumption and the supply of a southern planting state. The Census of 1850 does not show the number of free persons employed in agriculture and manufactures very precisely, and the slaves are omitted in the tables of occupations. According to it, in 1850 there were in Louisiana 18,639 free males above 15 years of age employed in agriculture, and 32,879 in commerce, trade, manufactures, and mechanical arts. At the Census of 1840 there were, including slaves, 79,289 persons employed in agriculture, 7565 in manufactures, and 8549 in commerce. The whole number of manufacturing establishments producing to the value of 500 dollars and upwards in 1850 was 1021. Of these 8 were manufactories of iron-castings, employing a capital of 255,000 dollars and 383 persons; 15 were tanneries, employing 66 persons; the remainder were chiefly sugar-refineries, which employed 252 hands; saw- and planing-mills, 898 hands; grist-mills; and other works usual in a southern agricultural state. The home-made manufactures of the year were valued at 189,232 dollars.

Besides the valuable produce of its own soil a large proportion of the production of the other states within the extensive basin of the Mississippi which are destined for a foreign market passes through this state; it has also a very large coasting-trade, and an extremely important internal trade. The whole of this commerce is concentrated at NEW ORLEANS. Louisiana has the largest export trade of any state except New York; its imports are exceeded by those of New York, Massachusetts, and Pennsylvania. The total exports for the year ending June 30th 1852 amounted to 49,058,885 dollars, of which 48,808,169 dollars were American produce, and 250,716 dollars foreign. The imports for the same period amounted to 12,057,724 dollars, of which 9,732,977 dollars were conveyed in American vessels, and 2,324,747 dollars in foreign vessels. The exports for the preceding year amounted to 54,413,963 dollars; the imports to 12,528,460 dollars. Up to 1851, when the largest amount was registered, the exports had been on the whole steadily progressive; but the imports attained their highest amount, 17,519,814 dollars, in 1835. The number and tonnage of the vessels which entered and cleared at the

ports of Louisiana in 1850 were:—Entered, 893 vessels of 350,853 tons, of which 524 vessels of 175,969 tons were American, and 374 vessels of 174,884 tons were foreign; cleared, American 493, of 211,800 tons, and foreign 350, of 158,137 tons. In the coasting-trade, during the year ending June 30th 1851, there entered 1178 vessels of 466,415 tons, and cleared 1227 vessels of 853,173 tons. The total value of the exports coastwise during the year was 27,288,912 dollars. The total quantities of the principal articles exported to foreign and domestic ports during the year ending June 30th 1851 were as follows:—Cotton, 997,458 bales; sugar, 44,147 hogsheads and 8644 barrels; molasses, 686 hogsheads and 67,024 barrels; tobacco, 54,501 hogsheads; corn, 535,382 sacks; flour, 583,418 barrels; pork, 192,737 barrels; bacon, 46,241 hogsheads; lard, 738,956 kegs; beef, 42,415 barrels; whiskey, 67,392 barrels. The receipts, chiefly of these staple exports, from the interior by the Mississippi during the same year were valued at 106,924,088 dollars, in addition to which there is a considerable traffic by Lake Pontchartrain and the new canal. The aggregate of the shipping owned in the state in 1850 amounted to 250,090 tons, the whole of which, except 1881 tons owned in the sub-district of Teche, belonged to the district of New Orleans. Of the above, 83,668 tons were registered; 160,630 tons enrolled and licensed; 5789 tons were of vessels under 20 tons burden; three-fifths of the tonnage, 151,613 tons were propelled by steam. During the year ending June 30th 1852, 1 brig, 11 schooners, and 4 steamers, in the aggregate 1284 tons, were built in the state.

Divisions, Towns, &c.—Louisiana is divided into two districts; the eastern district having 21 parishes, and the western district 26 parishes. Baton Rouge is the political capital; but NEW ORLEANS is the commercial metropolis, and one of the chief commercial cities in the United States. All the other towns are of small size; but several of them are places of considerable business as shipping stations, or otherwise. New Orleans is noticed in a separate article; the other more important towns are noticed below; the population is that of 1850:—

Baton Rouge, the capital, stands partly on elevated ground on the left bank, and 245 miles above the mouth of the Mississippi, 1120 miles S.W. from Washington: population, 3905, of whom 2562 are whites. The public buildings are the state house, penitentiary, county house, United States barracks, churches, a college, schools, &c. Some trade is carried on, the business part of the town lying at the foot of the bluff. Two newspapers are published here weekly.

Carrollton, on the right bank of the Mississippi, 6 miles from New Orleans, population 1470, is a place of a good deal of trade, but contains no buildings of any note. *Donaldsonville*, the capital of Ascension parish, and formerly the capital of the state, is pleasantly situated on the right bank of the Mississippi, 27 miles S.E. by S. from Baton Rouge: population, 1498. It contains a court-house, arsenal, United States land-office, churches, a college, schools, &c.; and carries on a considerable trade. *Lafayette* [NEW ORLEANS]. *Natchitoches*, the capital of Natchitoches parish, stands on the right bank of the Red River, 145 miles N.W. from Baton Rouge, population 1261, of whom 474 are slaves. This is one of the oldest towns in the state, having been founded by the French in 1717, and a large proportion of the population is of French and Spanish descent. It contains a court-house, United States land-office, jail, churches, and schools; possesses considerable trade, and supports a weekly newspaper. *Opelousas*, the capital of Landry parish, is situated near the source of Vermilion River, 55 miles W. by N. from Baton Rouge: the population is not given in the Census Return. It is the centre of a fertile district, and a place of considerable trade; contains a court-house, United States land-office, four churches, schools, Franklin college, two banks, several extensive stores, and supports a daily and a semi-weekly newspaper. *Point Coupée*, on the right bank of the Mississippi, 86 miles N.N.W. from Baton Rouge: the population, which is chiefly of French descent, is not given. It contains a court-house, jail, churches, schools, &c.; is the depôt for a very important planting district; and supports a daily newspaper. The levee extends along the Mississippi from this place downwards. *Shreveport*, the capital of Caddo parish, on the right bank of the Red River, 1 mile from Soda Lake, and about 200 miles N.W. from Baton Rouge, population 1728, of whom 595 were slaves. It contains a court-house, jail, churches, &c., and is a place of much business. There are several other business towns, as Alexandria on the Red River, Jackson on Thompson's Creek, Iberville and St. Francisville on the Mississippi, Thibodeauxville on the La Fourche, &c.; but they all have a very small white population.

Government, Judicature, &c.—The first state constitution was adopted in 1812, and superseded by a new one in 1845. The present constitution of Louisiana was adopted in 1852. By it the right of voting in all state elections is vested in every white male citizen 21 years of age, who shall have resided in the state 12 months, and in the parish in which he offers to vote 6 months next preceding the election; but persons in the army or navy, paupers, and persons interdicted or convicted of any crime punishable with hard labour, are not entitled to vote. The legislative body consists of a Senate of 32 members elected for 4 years, one-half being elected biennially; and a House of Representatives of not less than 70 nor more than 100 members (at present 97), elected biennially. The Senate confirms or rejects the appointments of officers made by the governor. The election of United States

senators is made by a joint ballot of both houses. Members may address either house in the English or French language. The governor is elected for 4 years, but is incapable of re-election for a consecutive term. He has a veto on acts of the legislature; but a bill becomes law, notwithstanding his veto, if it be again passed by a vote of two-thirds of both houses. His salary is 6000 dollars.

The legislature may grant aid to companies for internal improvements in proportion to one-fifth of their paid-up capital; but the total amount of debt incurred in this way must not exceed 8,000,000 dollars; and the state shall not subscribe for the stock of any banking corporation, nor make any loan to, nor pledge its faith for, any such corporation. No law can be passed sanctioning the suspension of specie payments. Lotteries, and the buying and selling of lottery-tickets, are prohibited. No divorce can be granted by the legislature. No principal or second in a duel, and no one who sends or accepts a challenge, shall hold any office or enjoy the rights of suffrage. Propositions to alter or amend the constitution must be carried by a vote of two-thirds of all the members of each house; the vote must then be published throughout the state three months before the next general election; and then, if it be ratified by a majority of voters at such election, it shall become a part of the constitution.

The total public debt of the state on January 1st, 1853, was 11,766,407 dollars; but of this the sum of 9,612,088 dollars was for liabilities incurred on account of property banks, the proper state debt being only 2,154,319 dollars. The entire revenue for the year ending December 31, 1852 (including a balance left in 1851 of 308,886 dollars), was 1,455,456 dollars; the expenditure for the same year was 1,100,934 dollars. The state-militia consists of 42,823 men, of whom 1392 are commissioned officers. The judicature consists of a supreme court, having appellate jurisdiction, and district courts. The supreme court is presided over by a chief justice having a salary of 6000 dollars, and four associate justices with salaries of 5500 dollars each: these judges are all elected by the people for a term of ten years. There are 6 district courts of New Orleans each presided over by a judge with a salary of 3500 dollars, and 18 other district courts: all the judges of these and the inferior courts are also elected by the people.

A superintendent of education is directed by the constitution to be elected every two years. It also directs that free public schools shall be established throughout the state; and that the proceeds of the lands granted for the purpose, or escheated to the state, shall be held as a permanent fund, on which 6 per cent. interest shall be paid by the state for the support of those schools. In 1850 the number of public schools was 664, having 822 teachers and 25,016 pupils; colleges and academies 143, having 354 teachers and 5323 pupils. The total number of children attending school in 1850 was returned at 32,838 whites and 1219 free coloured children; total, 34,057. The number of white children in the state between the ages of 5 and 15 was 61,165; of free coloured children, 4463. The number of adults in the state in 1850 who cannot read and write was 21,221 whites and 8889 free coloured; total, 24,610, of whom 18,339 were natives of the United States and 6271 foreigners. The principal colleges in the state are the following:—Centenary (Methodist) College, at Jackson, founded in 1839, which on January 1st 1853 had 7 instructors, 102 students, and a library of 5000 volumes; St. Charles (Roman Catholic) College, at Grand Coteau, founded in 1838, which had 21 instructors, 103 students, and a library of 4000 volumes; Baton Rouge College, founded in 1838, which had four instructors, 45 students, and a library of 300 volumes; Franklin College, at Opelousas, founded in 1839, which had 4 instructors and 70 students; and the University of Louisiana, founded in 1849, which had 7 professors in the department of Arts, and connected with it law and medical schools.

Of the various religious denominations the Roman Catholics, and next to them the Methodists, are the most numerous. In 1850 the Roman Catholics had 55 churches, affording accommodation for 37,780 persons; the Methodists 125 churches, affording accommodation for 33,180 persons; the Baptists 77 churches, with accommodation for 16,660 persons; the Presbyterians 18 churches, with accommodation for 9510 persons; the Episcopalians 14 churches, with accommodation for 5210 persons. Including all sects there were 306 churches in the state with accommodation for 109,615 persons. The state institutions for the relief of the unfortunate are—a deaf and dumb asylum at Baton Rouge; and the charity hospital at New Orleans, in which, during 1852, there were admitted 18,035 patients, discharged 15,057; died 2098. Of the patients admitted 1709 were natives of the United States, 16,144 natives of foreign countries, and 181 of unknown birth. The number of newspapers and periodicals published in the state in 1850 was 54, with an aggregate annual circulation of 12,269,824 copies. Of these 11 were published daily, 6 tri-weekly, and 37 weekly: 13 were literary and miscellaneous; 6 neutral and independent, 33 political, 1 religious, and 1 scientific.

The Mississippi river was discovered by land. The Spaniards navigated the Gulf of Mexico for two centuries without being aware that one of the largest rivers of the globe falls into it. This fact may be explained from the circumstance that a low, flat, and dangerous coast extends on both sides of its mouth to a great distance. The French, after their establishment in Canada, got some information as to the river about 1660, but did not discover its mouth before 1699, when M. de Iberville founded the first colony. The city of New Orleans

was built in 1717, about which time the colony began to be of some importance, and it soon after acquired universal notoriety from having been granted to the company formed by John Law at Paris in 1716, and incorporated as the Mississippi Company. When the Mississippi bubble burst the land was resumed by the crown, and the commerce of the Mississippi declared free. The French remained in possession of Louisiana up to 1762, when they ceded it to Spain. The colony was much neglected by the Spaniards, and improved very slowly, notwithstanding its numerous natural advantages. In 1800 Bonaparte succeeded in inducing the Spanish government to re-cede Louisiana to France. It was held for a time nominally as a French colony, but only long enough to enable Napoleon I. to complete a sale of it to the government of the United States, which he succeeded in doing in 1803 for the sum of 60,000,000 francs (2,400,000*l.*). At the time of the sale the inhabitants were chiefly French and descendants of French; the whole population did not exceed 90,000 inhabitants, of whom about 40,000 were slaves. Louisiana comprehended all the country included in the present state of Louisiana, except the tract which extends north of the river Amite, and the lakes of Maurepas and Pontchartrain; and in addition, the immense tract of country included between the Mississippi River and the Rocky Mountains. The country was then divided into several territories, of which Louisiana first rose to a state. Louisiana was formed into a state in 1812.

(Darby, *Geographical Description of the State of Louisiana*; De Bow, *Industrial Resources, &c., of the Southern and Western States*; Fisher, *Statistical Gazetteer of the United States*; *Seventh Census of the United States*; *American Almanac*, 1854; Maroon, *Geological Map of the United States*; Lyell, *Manual, and Principles of Geology, &c.*)

LOUISVILLE. [KENTUCKY.]

LOUTH, Lincolnshire, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Louth, is pleasantly situated at the eastern foot of the Wolds, on the bank of the little river Ludd, in 53° 22' N. lat., 0° 1' W. long., distant 25 miles N.E. by E. from Lincoln, 143 miles N. from London by road, and 140½ miles by the Great Northern and East Lincolnshire railways. The population of the borough in 1851 was 10,467. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor. The lighting, paving, and sewerage of the town are under the management of commissioners appointed in terms of an Act of Parliament passed in 1826. The living is a vicarage in the archdeaconry and diocese of Lincoln. Louth Poor-Law Union contains 88 parishes and townships, with an area of 145,512 acres, and a population in 1851 of 83,388.

Louth was incorporated by Edward VI. The town is well built, and the streets are paved and lighted. In the town are a modern guildhall, an assembly room, a public subscription library and news room, a small theatre, a sessions house, and a house of correction for the division. A county court is held. The parish church is a beautiful edifice of the latter part of the 14th century, and consists of a nave and chancel, and a tower surmounted with a rich octangular crocketed spire, 300 feet high. The church of the Holy Trinity is a mean brick structure, erected in 1834. There are chapels for Wesleyan Methodists, Baptists, Independents, Primitive Methodists, and Roman Catholics. King Edward VI.'s Free Grammar school has an income from endowment of 620*l.* a year; it has 6 teachers; the number of scholars in 1851 was 71. Dr. Mapletoft's Endowed Commercial school, with which has been recently conjoined Hardies' foundation, contains about 50 boys. There are National, British, and Infant schools; a mechanics institute, with a library of upwards of 2000 volumes; a savings bank; a dispensary, supported by public subscription; and 12 beds-houses, on the same foundation as the grammar-school, in which 12 poor women reside and have an annual allowance. There are several iron foundries and tanneries, a large carpet manufactory, and other establishments. On the canal from Tetney Haven to Louth, an extensive traffic in corn and coals is carried on. Wednesday is the principal market-day; another market is held on Saturday. Fairs are held in April, September, and November. In the neighbourhood of the town are some remains of Louth Abbey, founded by Alexander bishop of Lincoln, in 1139, for Cistercian monks.

LOUTH, a maritime county in the province of Leinster, Ireland, is bounded N. by the county of Armagh and the Bay of Carlingford, which separates it from the county of Down; E. by the Irish Channel; S. by the county of Meath; and W. by the counties of Meath and Monaghan. It lies between 53° 43' and 54° 7' N. lat., 6° 6' and 6° 41' W. long. Its greatest length from north to south is 25 miles, from east to west 15 miles. Louth is the smallest county in Ireland, having an area of 315 square miles, or 201,434 acres, of which 178,972 acres are arable, 15,603 acres uncultivated, 5318 acres in plantations, 723 acres in towns, and 813 acres under water. The population in 1841 was 111,979; in 1851 it was 90,812.

Coast-line and Surface.—From the Boyne to the harbour of Dundalk, about 17 miles, the coast is low and comparatively level. The flat and sandy beach extends in some places to a breadth of 3 miles at low water. In a small bay south of Dunany Head are some reefs which are covered at high water, but left at a considerable distance by the ebb-tide. The only striking elevation is Clogher Head, a promontory 181 feet high, about 3 miles north from the Boyne. This headland is the termination of a range of hills stretching across the

county from the north-east border of Meath. The highest summit is Belpatrick in the west, 788 feet. With the exception of this range the county consists of extensive flats and tracts gently undulating. From the head of Dundalk Bay a margin of level land sweeps round the peninsula, which projects to the south-east between that bay and Carlingford Lough. This open tract is several miles wide at the extremity of the peninsula, but is contracted to a narrow strip along the shore of Carlingford Bay and the valley of the Newry River. Within this low coast-line the land rises into a group of mountains ranging from 904 feet, the height of Durlargy on the west, to 1935 feet, the height of Carlingford Mountain, which overhangs the lough. This group is opened by a considerable valley towards the south-east, and on the west it is separated from the Slieve Gullion and Forkhill groups of Armagh by a ravine traversing it from north to south, and forming a direct line of communication between Dundalk and Newry. Through this defile the great northern road is carried at a considerable height above the bed of a mountain stream.

Hydrography and Communications.—By the river Boyne the county is connected with the inland navigation to Navan, while the harbour of Drogheda affords a convenient outlet for the produce of the southern districts. At its first contact with the county the Boyne is joined by the river Mattock, which forms the boundary-line for some miles after flowing southward by Mellifont Abbey, from its rise on the west of Tullysker Hill. The Dee rises in the north-east of Meath, and passing through the town of Ardee proceeds in an easterly direction until within 4 miles of the sea, where it receives the White River. The Glyde, formed by the junction of the Lagan, which rises in Meath, with a stream descending from the Monaghan border, crosses the county through a succession of rich demesnes and low marshy lands to Castle-Bellingham, and then winding southward along the coast, unites with the Dee before reaching the sea at the small port of Anagassan. The Fane, which rises in Monaghan, runs in a direction nearly parallel to the course of the Glyde, and falls into Dundalk Bay at the village of Lurganreen. The Castletown or Dundalk River, formed by the junction of several streams which come in from Monaghan, flows eastward, and receiving the Kilcurry River from the north-west, a short distance above the bridge of Dundalk, enters the bay at the harbour of Dundalk. The Big and Little rivers fall into the bay from the valley on the south-east of the peninsula. Carlingford Lough connects the county by the Newry River and Canal with the inland navigation of Ulster. Besides Drogheda, Dundalk, and Carlingford harbours, there are some small fishing ports on the coast. The county is intersected in all directions by excellent roads. The two leading lines are the Great Northern road from Dublin to Belfast, and the road from Drogheda to Castle-Blaney by Ardee. The Dublin and Belfast junction railway traverses the county nearly its whole length. The Dundalk and Enniskillen railway connects Dundalk and Castle-Blaney, and on the south Drogheda is connected with Navan by a branch of the Dublin and Drogheda railway.

Geology.—The level portion of the county south of Dundalk belongs to the northern clay-slate formation of Ireland. A considerable patch of carboniferous limestone, skirted with a narrow belt of yellow sandstone and conglomerate, occurs to the west of Ardee, and minor deposits of the same rock are found along the western border of the clay-slate division. This formation also occupies the level space between the mountains and the shore, from the town of Carlingford round to the valley of the Castletown River, as far as its junction with the Kilcurry. The structure of the mountainous region is similar to that of the group of Mourne, consisting of a nucleus of granite supporting the clay-slate and limestone on its flanks.

Climate, Soil, and Produce.—The prevalent direction of the wind, which for nine months in the year is off shore, and the excellent drainage of the county by its numerous streams, render the climate comparatively mild and dry. The soil of the southern division of the county is well calculated for every kind of grain-crop. The tract north of the Bay of Dundalk, between the mountains and the sea, also produces heavy wheat crops. Farming in general is carried on in a superior manner. In the mountain district the condition of the people is much inferior. Spade cultivation is here very general, and the old slide car without wheels is still in use.

The chief occupations are agricultural. The linen manufacture and bleaching are carried on to some extent at Ravensdale, Collon, and Drogheda. There is a large export of produce from Drogheda, Dundalk, and Carlingford, and along the coast the fishery gives employment to many families. In 1853 there were 109,889 acres under crop, of which 4201 acres grew wheat; 40,801 acres oats; 23,904 acres barley, bere, rye, peas, and beans; 9123 acres potatoes; 9741 acres turnips, mangel-wurzel, carrots, parsnips, and cabbage; 3134 acres vetches and other green crops; 2091 acres flax; and 17,094 acres meadow and clover. Of plantations, in 1841 there were 6885 acres growing oak, ash, elm, beech, fir, fruit, &c. In 1851, on 7693 holdings, there were 11,314 horses, 1786 mules and asses, 27,733 cattle, 24,805 sheep, 15,823 pigs, 5231 goats, 143,751 head of poultry. The estimated value of the live stock here enumerated was 326,990*l.* The fishery district of Dundalk extends the whole line of coast from Ballagan Point to Maiden Tower, comprising 40 miles of maritime boundary, which in 1853 had 115 registered fishing-vessels, employing 558 men and boys.

Divisions and Towns.—The county of Louth is chiefly in the diocese of Armagh, with a small portion in that of Meath. It is divided into six baronies:—Ardee, Drogheda, Lower and Upper Dundalk, Ferrard, and Louth. The principal towns are DUNDALK, ARDEE, and part of DROGHEDA, which are noticed under their respective titles. The following are some of the other towns and more important villages, with the population of each in 1851:—

Carlingford, population 887, a market-town and sea-port on the southern shore of Carlingford Lough, 11½ miles E.N.E. from Dundalk, is a poor and decayed place, chiefly inhabited by fishermen. It contains a church, a Roman Catholic chapel, a Presbyterian meeting-house, National schools, and a district dispensary. There is a quay for coasting vessels, with convenient shelter for fishing-boats. The chief employment is the oyster-fishery in the bay. A fair is held on October 10th and on the first Saturday in each month. Near the town are the ruins of a castle, said to have been built by King John, and those of a monastery, founded in 1305 by Richard de Burgh, earl of Ulster. *Castle-Bellingham*, population 538, a neat village on the Dublin and Belfast road, 7½ miles S. from Dundalk, contains a handsome church, a Presbyterian meeting-house, the district dispensary, and a loan fund. Linen-weaving is carried on, and there is an extensive brewery. Fairs are held five times a year. *Clogher*, population 895, an increasing town on the coast, visited in summer for sea-bathing. It is situated near Clogher Head, about 7½ miles N.N.E. from Drogheda. *Collon*, population 761, a market- and post-town, on the road from Drogheda to Ardee, about 18 miles S. by W. from Dundalk, a well-built place, much improved by the late Lord Oriel. The market-house forms three sides of a square. The church was erected in 1813, at a cost of more than 6000*l.* There are a handsome glebe-house, and chapels for Roman Catholics and Methodists. The district dispensary is in the town. A cotton-factory and a bleaching-green, stocking-making, and linen-weaving are the chief sources of employment. Fairs are held five times a year. Petty sessions are held in the village. *Dunleer*, population 505, about 9 miles N. by W. from Drogheda, is situated in a sheltered valley, through which the White River flows, is a principal coach-station on the road between Drogheda and Dundalk. In the town are an Episcopal church and a chapel for Roman Catholics. *Louth*, population 585, an ancient town, now a poor decayed place, is situated on the road from Ardee to Castle Blayney, 5½ miles S.W. from Dundalk. It contains a church, a Roman Catholic chapel, two National schools, and a district dispensary. In the outskirts of the town are the ruins of a priory, erected in 1148. The town was plundered in the 9th century by the Danes. *Termonfeckan*, population 329, a pleasant village and sea-bathing place, situated at the mouth of the Termonfeckan rivulet, about 17 miles S. by W. from Dundalk, was formerly one of the residences of the archbishops of Armagh, of whom the celebrated Usher last dwelt in the village. The church, a neat building with a spire, stands on a rising ground overlooking the stream. Its chancel is the burial-place of several archbishops. The village contains a Roman Catholic chapel, a National school, and a district dispensary. Petty sessions are held here.

Louth returns three members to the Imperial Parliament, two for the county and one for Dundalk borough. The assizes are held in Dundalk, and quarter sessions there and at Ardee. Petty sessions are held in ten places. The county court house and county jail are at Dundalk. The District Lunatic Asylum, to which the county is entitled to send 23 patients, is at Dublin. The county infirmary is at Dundalk. At Drogheda is a fever hospital, and there are nine dispensaries in various parts of the county. Savings banks are established at Dundalk, Drogheda, and Ardee; the amount owing to depositors on November 20th 1853 was 70,396*l.* 0*s.* 9*d.* The county is partly within the Military District of Dublin and partly in that of Belfast. There are cavalry barracks in Dundalk, and the staff of the county militia is stationed at Dunleer. The police force, consisting of 192 men and officers, is distributed over 5 districts, comprising 27 stations, of which the head-quarters are at Dundalk. The coast-guard, which numbers 50 men and 4 officers, is distributed over 9 stations. In September 1852 there were 78 National schools in operation, attended by 5607 male and 5985 female children.

History and Antiquities.—Louth, at the coming of the English, formed a portion of the territory of Orgial or Oriel, by which name it was afterwards distinguished from the more western parts of the territory. Having been conquered by De Courcy between 1179 and 1180, Louth was erected into a county by King John in 1210. Being at the time accounted a portion of Ulster, it formed part of the grant to De Courcy, and after his time to De Lacey, by whom it was divided among inferior barons. Louth was not considered a portion of Leinster until the reign of Elizabeth. The forfeitures consequent on the rebellion of 1641, and the ensuing civil wars, extended over nearly the entire county.

The numerous antiquities which occur throughout Louth have been made the subject of a volume entitled 'Louthiana,' published at Dublin in 1758. Earthen mounds and entrenchments are of very frequent occurrence. The most remarkable in the county is that of Castle Guard at Ardee. The mound and building called Fahs na ain Eigha, or 'the one night's work,' near Dundalk, is a curious combination of the earthen rath with the stone cashiel. Stone circles and

other primeval remains are numerous. The most remarkable are at Ballirekan and Ballinahatry near Dundalk. At Ballymascanlan is a cromlech, the covering stone of which measures 12 feet by 6 feet, and weighs upwards of 30 tons. Round towers formerly stood at Louth and Drogheda, and two are still remaining at Dromiakin and Monasterboyce. In the churchyard near the tower at Monasterboyce, stand two beautifully sculptured stone crosses. The larger, called St. Boyne's Cross, is 18 feet high. The arms of these crosses are inclosed in circles, and the entire surface of each is covered with rich tracery and allegorical sculpture. The ruins of the abbey of Mellifont, founded in the 17th century, occupy a beautiful site on the bank of the Mattock River, near the Boyne. They consist of a gate-tower, part of a chapel, and the lower story of an octagonal chapter-house. The ornamental part of the doorways and arches of the two latter buildings are formed of blue marble, and have been highly gilt. Of the various feudal buildings throughout the county the chief are the castle of Carlingford, erected by King John, Rohe's Castle, north-west of Dundalk, and Torfeckan or Termonfeckan Castle.

LOUVAIN (Löven, Löwen, Leuven), an ancient town in Belgium, in the province of South Brabant, is situated on the Dyle, in 50° 54' N. lat., 4° 39' E. long., 15 miles S.E. from Malines, 49 miles N.W. from Liège, and has about 24,000 inhabitants. It is a first-class station on the Brussels-Liège-Cologne railway. The origin of the town is unknown. Some attribute its foundation to Cæsar, and the old castle, a portion of which still remains outside the Malines Gate, is still called Château de Cæsar; it is known however that this was built in 890 as a barrier against the Northmen. An earthen rampart, 80 to 100 feet high, within a deep dry fosse, incloses the town on the west and north-west, except where it is cut through by the roads to Malines and Brussels. The bastions and casemates now in ruins were probably erected by the Spaniards. The ground-plan of the city within the walls is nearly a circle. Louvain was surrounded with walls in 1156, and was for a long time the residence of the dukes of Brabant. In those times it was the largest, the richest, and the most commercial city in the country. Its principal trade consisted in woollen manufactures, which are said to have been prosecuted to such an extent at the beginning of the 14th century as to give employment to 150,000 workmen; but this number appears to be exaggerated. The weavers in 1382 revolted against the Duke of Brabant, and for a time desolated the province, but were speedily reduced to obedience; and the ring-leaders being exiled, the greater part of them came to England, where they introduced the manufacture of broadcloth. The English Edward III. resided for nearly a year in the castle of Louvain, and the emperor Charles V. was brought up in it. The walls of Louvain were nearly seven miles in circumference; they are now partly turned into boulevards. A great part of the space inclosed is no longer occupied by houses, which have been succeeded by gardens and vineyards. It is said that the town was never taken till 1792, when General Kleber, at the head of a French revolutionary force, made himself master of it.

The manufacture of woollens and lace is now carried on in Louvain to a small extent. There are several breweries in the town, and the beer of Louvain enjoys a high reputation, and has a great sale in other parts of Belgium. There is also a considerable trade in corn, hops, and other agricultural produce.

The town is in general not well built, but it contains several fine buildings and numerous masterpieces of art. The University of Louvain was established in 1426 by John, the fourth duke of Brabant, and long enjoyed a high celebrity. In the 16th century it was frequented by 6000 students, and was then as now a distinguished school of Catholic theology. There were formerly 43 colleges, of which 20 still remain; many of them are fine buildings. The university was suppressed by the French in 1793, but was restored in 1817, and is again a flourishing institution with 60 professors and 600 students: it has a botanic garden and zoological and mineralogical museums.

The town-hall, which is one of the most beautiful gothic buildings in the world, was erected in 1448-1469; it has been recently restored at the joint expense of the town and the government. Every part of the exterior is decorated with delicately-chiselled masonry and sculpture; the interior contains some good paintings. The cathedral church of St. Pierre, situated near the town-hall, is one of the finest religious edifices in Belgium. It was founded in 1040, but the present structure dates from 1358. The interior consists of nave, choir, and aisles running all round the building. The rood-screen, separating the nave from the choir, is richly ornamented in the flamboyant gothic style. The tabernacle of sculptured stone; the admirably-carved pulpit (representing St. Peter standing on a rock, and the conversion of St. Paul); the font at the west end of the nave; and the paintings which adorn the side-chapels (including masterpieces of Memling and Quintin Matsys), are among the attractive decorations of this church. The tower, which fell down in 1604, is said to have been 533 feet high. St. Gertrude's church, which was originally the chapel of the dukes of Brabant, is celebrated for its carved oaken stalls recently restored.

LOUVIERS. [EURE.]

LOUVIGNÉ-DU-DESERT. [ILLE-ET-VILAINE.]

LOW COUNTRIES, or NETHERLANDS, a name given to that portion of Northern Europe which is surrounded by Hanover, Prussia,

France, and the North Sea, and which now comprises the kingdoms of Holland and Belgium, and grand-duchy of Luxemburg. All this territory was united to form the kingdom of the Netherlands from 1815 to 1830, when Belgium shook off the yoke of the Dutch. The king of Holland, whose territories comprise only the northern part of the Low Countries, is still sometimes styled King of the Netherlands. [NETHERLANDS; HOLLAND; BELGIUM.]

LOWELL. [MASSACHUSETTS.]

LOWESTOFT, colloquially LAYSTOFF, Suffolk, a market-town in the parish of Lowestoft, is situated on the east coast in 52° 29' N. lat., 1° 44' E. long., distant 45 miles N.E. from Ipswich, 114 miles N.E. from London by road, and 149½ miles by the Eastern Counties railway. The population in 1851 was 6580. The living is a vicarage in the archdeaconry of Suffolk and diocese of Norwich.

The town stands on the top of a cliff facing the sea, from which it is separated by a beach in some parts nearly half a mile wide. It consists of a principal street nearly a mile long, well paved, and of some smaller streets. The parish church, a handsome edifice of perpendicular architecture, nearly half a mile west of the town, is 182 feet long, 57 feet broad, and 43 feet high; it has a tower and spire 120 feet high. In the town are a chapel of ease; chapels for Wesleyan Methodists, Independents, and Baptists; Wyld's Free school, which educates about 60 boys; Annot's Endowed school, which has been made a National school, and has 90 scholars; a Girls' school, and an Infant school. There are a town-hall, a theatre, and a bathing-house. On the cliff is the upper lighthouse, and on the beach are the lower lighthouse and a battery at the south end of the town. Off the shore are the North and South roads, sheltered to sea-ward by the Corton and Newcome sands. South of the town is the cut communicating between lake Lothing and the sea, forming part of the line of the Norwich and Lowestoft navigation. The tide-lock will admit vessels 84 feet long and 21 feet in beam. A principal branch of industry at Lowestoft is the fishery. Great quantities of mackerel and soles are caught, and sent to the London and Norwich markets; and large numbers of herrings are taken and cured. There are rope and twine manufactories. The market is on Wednesday, and there are two yearly fairs. Lowestoft is also frequented as a bathing-place. Communication by steam-vessel is maintained during the season between Lowestoft and Tönningen, on the Eyder, being the nearest point of communication with Denmark.

LOWTHER. [WESTMORELAND.]

LOWTHERSTOWN, or IRVINESTOWN, Fermanagh, Ireland, a post-town and the seat of a Poor-Law Union in the barony of Lurg, is situated in 54° 28' N. lat., 7° 39' W. long., 10½ miles N. from Enniskillen, and 111½ miles N.W. by N. from Dublin. The population in 1851 was 1008. Lowtherstown Poor-Law Union comprises 11 electoral divisions, with an area of 75,916 acres, and a population in 1851 of 25,673. The town consists principally of one street, forming part of the post-road from Enniskillen to Pettigo, and contains a chapel of ease, a chapel for Methodists, a National school, the district dispensary, and the union workhouse. Fairs are held on the 8th of each month.

LOXA, or LOJA. [GRANADA.]

LOZÈRE, a department in the south of France, is bounded N. by the departments of Cantal and Haute-Loire, E. by Ardèche, S. by Gard, and W. by Aveyron. The department lies between 44° 7' and 44° 58' N. lat., 3° and 4° E. long. Its greatest length from north-west to south-east is about 65 miles, its greatest breadth is about 44 miles. The area of the department is 1995 square miles. The population in 1841 was 140,788; in 1851 it was 144,705, giving 72.53 inhabitants to a square mile, or 102.05 below the average population per square mile for the whole of France. The department is named from one of its principal mountains, and is formed out of a subdivision of Languedoc called Gévaudan.

The department is altogether of a mountainous character. The Cévennes cross it in the south-eastern part; Mont Lozère, one of the loftiest mountains of this range, is 4887 feet high, and gives name to the department. The Margeride Chain which branches off from the Cévennes at Mont Lozère, and unites that mountain range with the volcanic group of Auvergne, extends through the department in the direction of its length, covering all the east of the department; and the mountains of Aubrac overspread the western part, and extend into the adjacent department of Aveyron. The mountain ranges of the Cévennes and La-Margeride determine the watershed of the department, which they divide between three of the great river-basins of France. A small portion on the south-east, separated by the crest of the Cévennes, belongs to the basin of the Rhône; the rest of the department is divided by the mountains of La-Margeride, between the basin of the Loire in the north and that of the Garonne in the west. The part comprehended in the basin of the Garonne is considerably larger than either of the others, it comprises many high plains (called Caussées), some of which are of great fertility; but others of them, as the Caussée de Sauveterre, which is traversed by the road from Mende to Florac, is a calcareous table-land, bare, arid, and totally uninhabited. This Caussée is about 8000 feet above the level of the sea, and about 7 miles broad: the cold felt upon it in winter is intense; it is then deeply covered with snow, and exposed to violent hurricanes.

The department is chiefly occupied by the primitive rocks which constitute the mass of the Cévennes and the connected mountains.

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On the south-eastern slope of the Cévennes, towards the basin of the Rhône, the granites and other primitive rocks are covered with the strata of later formation which intervene between the chalk and the saliferous sandstone. The same strata overspread a considerable portion of the western side of the department on the banks of the Tarn and the Lot, and in the country between them. One or two extinct volcanoes have been observed within the limits of this department; but they are not so numerous as in the adjacent departments of Haute-Loire and Cantal.

The mineral wealth of the department is not great: lead, silver, antimony, copper, and iron-ore are procured. Marble, freestone, porphyry, granite, basalt, and gypsum are quarried. There are some mineral springs, of which the most frequented are those of Bagnols les Bains near Mende.

The melting of the snow that lies on the mountains of the department for several months in the year, gives rise to a great number of rivers which drain the three slopes formed by the mountain masses above named. The rivers are all small in that part of their course which lies within the department. To the basin of the Rhône belong the Cèze, which rises in Mont Lozère, and brings down particles of gold; the Gardon d'Alais, the Gardon de Mialet, and the Gardon d'Anduze, which unite their streams to form the river Gard [GARD], in the adjacent department of Gard, on the eastern border of which all these rivers join the Rhône. The Chassezac rises on the east side of the department, and flows by the Ardèche into the Rhône [ARDECHE.] The Borne, a small feeder of the Chassezac, forms part of the eastern boundary. To the basin of the Loire belong the Allier, which rises in the north-eastern slopes of La-Margeride, and for some distance separates this department from those of Ardèche and Haute-Loire; the Chapeauroux and the Ance, which also rise on the same slope and flow northward into the Allier [ALLIER.] To the basin of the Garonne belong the Lot and the Tarn. The Lot rises in the south-western slope of La-Margeride, not far from Mont Lozère, and flows west by Mende and Chanac into the department of Aveyron: nearly 40 miles of its course belong to this department. It receives the Coulanges and some other small streams. [LOT.] The Truyère, a more important tributary, rises in the slope of La-Margeride, and flows north-west; it does not join the Lot till far beyond the boundary of this department. The Bèze, a tributary of the Truyère, forms the boundary between the departments of Lozère and Cantal; it rises in that of Lozère. [CANTAL.] The Tarn rises on the western side of Mont Lozère and flows westward to Sainte-Enimie, and then south-west into the department of Aveyron. It receives the Tarnon, which has a northerly course below Florac, the Jonte (which separates the department of Lozère from that of Aveyron), and several smaller streams. None of the rivers named is navigable in this department. Many of them flow through gloomy ravines and dark glens, screened by lofty cavernous rocks. There are a few small tarns in the mountains of Aubrac.

The department is entirely destitute of inland navigation, and very indifferently provided with roads. There are 5 state and 21 departmental roads, but in general they are in a bad state of repair. The principal road is that from Paris by Moulins and Clermont to Narbonne and Perpignan. Goods are conveyed for the most part on mule-back.

The climate is variable and cold: winter lasts about four months in the southern part of the Cévennes, and is prolonged to six months in the north of the department; the spring is very rainy, and violent storms are frequent in summer, during which season the heat is great in the lower grounds of the department.

The nature of the soil presents great obstacles to the labours of the farmer; yet in most instances the land everywhere that it is capable of cultivation is well tilled. The chief crops raised in the north of the department are rye, some barley, oats, and hay; in the Caussées wheat, barley, oats, fruits, &c. are grown; and in the Cévennes, the chestnut and the potato are the chief support of the population. The vine is cultivated in some favourable situations; but the quantity of wine produced does not suffice for the consumption, and the same may be said for the cereal productions of the department. In the basin of the Tarn the mulberry is extensively grown for the production of silk: here also bees are kept by every householder. The mountain pastures are extensive, and of excellent quality; great numbers of well-woolled sheep are reared. Horses are not numerous; but mules and horned cattle are. Amongst the wild animals are wolves, badgers, great numbers of hares and rabbits. Medicinal plants, and plants used in tanning and dyeing, are abundant. The forest timber is composed of oak, beech, fir, chestnut, &c. The base of Mont Lozère is surrounded with large forests, the upper part of the mountain is covered with pastures, on which vast flocks of sheep, numbering together above 200,000, feed during the summer months. The Cévennes also about the sources of the Tarn and its feeders abound with forests, and are scored by numerous wild glens and defiles, in the sides of which are many extensive caverns, the retreats of the persecuted Calvinists in the beginning of the 18th century.

The manufactures are unimportant; some woollen yarn, serge, blankets, druggot, and cotton-cloth, nearly all for home use, are the chief products. In the arrondissement of Florac there are some cotton-spinning and silk-throwing establishments. Paper, leather, felt hats, parchment, tiles, and earthenware are also made. About 40

fairs are held in the year. The commerce of the department, owing to the want of water communication and good roadways, is confined to articles of mere necessity, and is altogether insignificant.

The department contains 1,276,756 acres. Of this area, 515,629 acres are arable; 110,185 acres are covered with woods and forests; 448,278 acres consist of natural pastures, heaths, and moors; and 72,806 acres are under different kinds of culture.

The department is divided into 3 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Mende	7	68	49,361
2. Florac	7	52	41,426
3. Marvejols . . .	10	79	53,918
Total	24	194	144,705

1. The first arrondissement is named from its chief town, *Mende*, which is situated in a valley surrounded by high hills, on the right bank of the Lot, in 44° 31' 4" N. lat., 3° 30' 4" E. long., 2426 feet above the level of the sea, and has a tribunal of first instance, ecclesiastical and communal colleges, a public library, and 6345 inhabitants in the commune. The town is surrounded by ramparts, which form a pretty walk; the streets, many of which are supplied with fountains, are narrow and crooked. Mende is the seat of a bishop; the cathedral, a gothic structure surmounted by two towers, one of which is greatly admired for its graceful elegance; and the former episcopal palace, which is now the residence of the prefect of Lozère, are the most remarkable buildings. The manufactures consist of coarse woollen cloths and paper. On Mont Mimat, one of the hills above the town, is the hermitage of St. Privat, who suffered martyrdom here at the hands of the Vandals. The town was first surrounded with walls by Adalbert bishop of Gévaudan, in 1151. In the religious wars of the 16th century the town was taken no less than seven times. The citadel was demolished in 1597 after the reduction of the town by the forces of Henri IV. About 10 miles from Mende in the valley of the Lot is *Bagnols-les-Bains*, a small village famous for its medicinal springs and baths. *Ispagnac*, a pretty town situated in a valley on the right bank of the Tarn and on the south side of the *Causée-de-Sauveterre*, has a mineral spring and 1800 inhabitants. *Langogne*, a small town, with an ecclesiastical school, and 2803 inhabitants, is situated on a high plateau on the left bank of the Allier, on the eastern border of the department. It has an ancient church which belonged to a monastery founded in the 10th century. A few miles west of Langogne between the source of the Allier and the right bank of the *Chapeauroux* is *Château-neuf-le-Randon*, whilst besieging the castle of which the chivalrous constable Duguesclin died. The commander of the fortress had agreed to surrender the place in a fortnight in case no succour arrived; the time having expired without bringing the expected aid he brought the keys of the fortress and laid them on the dead warrior's coffin. The road from Langogne to Mende crosses the *Margeride* mountains near the ruins of the old castle just named by a high pass, often blocked up with snow. *Villefort*, a small place of under 2000 inhabitants, situated at the foot of Mont Lozère, is important for its lead- and copper-mines.

2. In the second arrondissement the chief town, *Florac*, is situated in 44° 19' 29" N. lat., 3° 35' 44" E. long., 1960 feet above the sea, on the left bank of the Tarnon, a feeder of the Tarn, and has a tribunal of first instance, and 2286 inhabitants in the commune. Near Florac is *Oriaac*, a mountain village, the birth-place of Pope Urban V. *Sainte-Etienne*, an ancient town which originated in a monastery founded in the 7th century by a daughter of Clothaire II., is situated amongst savage mountains with lofty precipitous sides, on the right bank of the Tarn, and has 1200 inhabitants. The Tarn, which runs in a deep rocky bed in all this part of its course, is famous for its excellent trout. *Barre*, a small market-town of about 700 inhabitants, is situated in the Cévennes mountains about 9 miles S.S.E. from Florac. *St. Germain-de-Calberte*, S.E. of Florac, is situated in a district almost entirely covered with mulberry plantations, and has 2025 inhabitants, who raise a considerable quantity of raw silk. *Meyruis*, near the southern border of the department, on the right bank of the Jonte, a feeder of the Tarn, has hydraulic saw-mills, manufactures of hats, cheese, lace, wire for cards, and knitting needles. The population is 2005. *Vialas*, 15 miles E. from Florac, on the southern slope of Mont Lozère, has lead-mines and 2126 inhabitants.

3. In the third arrondissement the chief town is *Marvejols*, which is situated in a valley planted with fruit-trees, on the right bank of the Cologne (a feeder of the Lot), 12 miles W. from Mende, and has a tribunal of first instance, a college, an ecclesiastical school, and 4142 inhabitants, who manufacture woollen cloth and yarn, leather, bricks, &c. It stands about 2900 feet above the level of the sea, in 44° 38' 17" N. lat., 3° 17' 28" E. long. The town is regularly built, wall paved, and ornamented with fountains. A canal from the Cologne supplies the dye-houses of the town with water, and drives the machinery of several factories. *St. Alban*, 16 miles N.N.E. from Marvejols, on the right bank of the Truyère, has 2138 inhabitants, and an old baronial castle now converted into a female lunatic asylum. *La-Canourgue*,

7 miles S. from Marvejols, is situated in the fertile valley of the Urugue and near the junction of the small stream with the Lot. Some antiquities supposed to be Celtic exist in the town. The population of the commune numbers about 2000. The town has been always famous for the manufacture of serge and druggat. *St. Chély*, on the great road from Clermont to Narbonne, is situated in a mountainous country north from Marvejols, and has about 1600 inhabitants. *Chirac*, 3 miles S. from Marvejols, on the right bank of the Cologne, and near its mouth in the Lot, has 1644 inhabitants in the commune. *Malsieu*, 5 miles N. from St-Alban, and on the right bank of the Truyère, has 1200 inhabitants, who manufacture coarse woollen stuffs, leather, and blankets.

The department forms the see of the Bishop of Mende, is included in the jurisdiction of the High Court of Nimes, within the limits of the University Academy of Montpellier, and belongs to the 10th Military Division, of which Montpellier is head-quarters. It returns one member to the Legislative Body of the French empire. There are in Mende a diocesan seminary, a preparatory ecclesiastical school, a communal college, and a normal school. The Calvinists have churches in Meyruis, Florac, Vialas, Barre, and St-Germain-de-Calberte, besides 8 meeting-houses in other districts of the department. (*Dictionnaire de la France; Annuaire pour l'An 1853*).

LÜBECK, a free city in the north of Germany, is situated in 53° 51' N. lat., 10° 50' E. long., on a long eminence between the rivers Trave and Wakenitz. It is the capital of a republic whose territory, consisting of a continuous tract along the Trave, is bounded E. by Mecklenburg Strelitz, W. by Oldenburg and Holstein, S. by Lauenburg, and N. by the Baltic. The city also possesses, in common with Hamburg, the *Vierlande* district, a rich fertile tract inclosed by arms of the Elbe, from the floods of which it is protected by dykes. This district, which is inhabited by the descendants of a Dutch colony settled here in the 13th century, forms the bailiwick of Bergedorf, so named from its chief town at the entrance of the Bille into the northern arm of the Elbe. The total area of the possessions of the republic is 110 square miles (of which 16 square miles are in the Vierlande), and the total population, according to the census of 1851, amounted to 54,166. The population is thus distributed:—City of Lübeck, 26,098; county parts, 16,587; bailiwick of Bergedorf, 11,481.

Adolphus II., count of Holstein, founded the present city of Lübeck on the banks of the Trave in 1140. In 1158 Adolphus ceded it and its territory to Henry the Lion, who rebuilt the town, surrounded it with walls, gave it magistrates of its own, granted it several privileges, allowed the northern nations a free trade to it, and gave it the celebrated code of laws called 'Das Lübsche Recht'. In 1163 the see of the bishopric of Oldenburg was transferred to Lübeck. The churches of St. Mary and St. Peter were already built, and the cathedral was founded by Bishop Gerold in 1170. Henry the Lion being put under the ban of the empire, Lübeck was forced to submit to the emperor Frederick I., during whose absence in the Holy Land Henry returned from England and recovered it, but had held it only three years when it was taken by Adolphus III., count of Holstein (1192). Ten years later it was taken by Woldemar, brother of Canute, king of Denmark. The citizens expelled the Danish garrison in 1226, and placed themselves under the protection of the emperor Frederick II., who confirmed all their privileges, and made Lübeck a free imperial city.

The wealth and power of Lübeck increased, and it joined the Hanseatic League, of which it became the head, about 1260. The city was the seat of government of the League, the repository of its archives, and the station of its fleet, to the command of which Lübeck was entitled to appoint one of her own citizens. For four centuries the city maintained her flourishing condition, and possessed it is said at one time a population of 200,000 souls. From the dissolution of the League in 1630 Lübeck has considerably diminished in importance, her commerce has greatly decayed, and her streets that were once crowded with the bustle of busy commerce are now partially overgrown with grass. The occupation of the city by Blücher after his retreat from the battle of Jena led to the plunder of the town during three days by about 75,000 French troops, who after expelling the Prussians took up their quarters in the town. Lübeck, like Hamburg, was incorporated with the French empire in 1810, and so remained till it recovered its freedom after the battle of Leipzig in 1813. The most important recent event in the history of the town is its connection by a branch railway with the Hamburg-Berlin line at Buchen.

Lübeck, in its present state, is no longer a fortified town; the old ramparts are converted into public walks, and the city, being on a moderate eminence between the Trave and the Wakenitz, is very pleasantly situated, very clean and cheerful. The interior is more regular than in most of the old German towns, it being intersected by several broad and straight streets. The houses are built of stone. A great number of the houses are in the old-fashioned style, with the gable-ends towards the street, and many of them are richly decorated. The dom, or cathedral, erected between 1170 and 1341, is a large red-brick structure surmounted by two spires. In the choir and side-chapels are many tombs of the bishops and leading families of Lübeck. The screen which separates the choir from the nave is a masterpiece of wood-carving of the early German school. But the great treasure of this church is a painting by Memling, in one of the side-chapels, representing the chief incidents in the Passion of our

Lord; it is inclosed in double shutters, on which are pictures of the Annunciation and of various saints. The baptismal font is a rich specimen of admirably-sculptured gothic work, which dates from 1455. The Marien-Kirche, also a red-brick structure, is celebrated as one of the finest pointed gothic churches in northern Germany. It is 340 feet long; the nave is 152 feet high and 45 feet wide. The interior is lighted through painted glass windows, and is very imposing for its elegant architecture; a brass screen surrounds the choir. This church contains valuable paintings by Holbein, Vandyck, Perugino, Overbeck, and other masters; a curious astronomical clock; a 'Dance of Death'; a fine organ; and a remarkable altar by Guilius of Antwerp. The other churches, four in number, are much inferior to the Marien-Kirche; but the Katherine-Kirche, though now used as a gallery, retains its altars, pictures, and rood. The Raath-haus, in which deputies from the 85 cities of the Hanseatic League held their sittings, stands near the Marien-Kirche, fronting the market-place. It is an imposing gothic structure, erected between 1442 and 1517. The beautiful Hall of the Hansa, in which the council used to meet, is now divided into small apartments. The Senate of Lübeck still assembles in the lower story of the building. Other remarkable architectural objects in Lübeck are—the Burg and Holstein gates, and the Hospital of the Holy Ghost. The city has an exchange and several insurance companies. A splendid avenue of lime-trees extends for a considerable distance along the road to Travemünde. Lübeck is celebrated for its charitable institutions, which are numerous and admirably conducted. The other public establishments and buildings are—the gymnasium, the commercial institution, the Roman Catholic chapel, the Calvinistic church, and many others.

The commerce of Lübeck is still important. Its geographical position gives it a considerable share in the transit trade with Russia, Finland, Sweden, and Denmark. The corn of Mecklenburg and part of Holstein is shipped at Lübeck. Northern produce is forwarded by the Trave and the Stecknitz Canal to the Elbe and Hamburg. Besides the railway before-mentioned Lübeck is connected with Hamburg by means of two good turnpike-roads. Regular communication is kept up with Copenhagen, Stockholm, and St. Petersburg by large steamers. Vessels drawing about 9 feet water can go up the Trave to Lübeck, where they lie in a spacious dock lined with quays, and supplied with every convenience for loading and unloading. Vessels of greater draught stop at Travemünde (where there is secure anchorage for ships of any burthen), and load and discharge by means of large lighters. The chief exports of Lübeck are corn, cattle, wool, fish, quills, iron, timber, &c.: the imports consist of zinc, silk and cotton goods, hardware, and other manufactures, colonial products, dye-stuffs, &c. Pit-coal and salt are important articles of transport by the Stecknitz Canal. The forests belonging to the city supply excellent timber for ship-building, which is in a flourishing state at Lübeck. Large fairs are held for the sale of wool (in June), cattle, and horses. Tobacco, soap, paper, playing-cards, linen and cotton goods, iron, copper and brass wares, &c., are manufactured. The arrivals at the port of Lübeck in 1849 numbered 918; the departures 922, exclusive of steamers and coasters: in 1852 the arrivals were 1022, carrying 63,569 lasts (of 4120 Lübeck pounds each), the departures 1064, with 68,293 lasts. The official return states the weight of imports in 1851 to have been—by land (including the river and canal traffic) 50,463,308 Lübeck pounds; by sea 214,192,119 Lübeck pounds.

Lübeck is governed, according to the constitution of April 8, 1848, by a senate of 20 (which every two years elects two of its members as burgomasters for the two following years), and by a body of delegates named for six years, and numbering 120. The senators are named for life, and all citizens above 30 years of age are eligible. Vacancies are filled up by the senate, and a commission named by the people. For electoral purposes the city is divided into 11 districts, one-third of the delegates returned by each of which resign their seats every two years. A delegate may be re-elected.

The revenue of the republic, raised chiefly on state property and direct and indirect taxes, amounted to 899,157 marcs (16 to the pound sterling) in 1853; the expenditure to 1,014,690 marcs. The state debt at the end of 1852 amounted to 12,200,000 marcs, of which 8,000,000 marcs were borrowed in 1850 for making railways.

Lübeck is the seat of the supreme court of appeal for the four free towns (Hamburg, Lübeck, Bremen, and Frankfurt-am-Mayn). The court consists of six members, one of whom is chosen by each of the free towns; Frankfurt and Bremen name the fifth: the sixth is named alternately by Lübeck and Hamburg, but with this difference, that Hamburg has the appointment twice for Lübeck's once. The president of the court is named by the senates of the four towns from year to year.

Twenty foreign consuls reside at Lübeck.

The Trave, before it enters the Baltic, forms a large shore-lake called the *Binnen-wasser*, or *Binnen-see*, the eastern part of which belongs to Mecklenburg. On the western shore of the embouchure is *Travemünde*, the port of Lübeck, 10 miles N.N.E. from that city, with a lighthouse, and a population of about 1500. It is slightly fortified, and is much frequented in summer as a watering-place. Large steamers and all vessels in the Lübeck trade drawing above 10 feet water anchor at Travemünde. Small steamers ply up the river to Lübeck, with which Travemünde is also connected by an excellent turnpike road and a ferry.

LÜBLIN, the capital of the government of Lublin in Poland, is situated in about 51° 16' N. lat., 22° 30' E. long., 94 miles S.E. from Warsaw, and has about 16,000 inhabitants, including the garrison. It is situated on an eminence above the left bank of Bystricza, a feeder of the Wieprz, and is surrounded with walls, ditches, and lakes; it is divided into the upper and lower town, of which the latter is chiefly inhabited by Jews. It has a dilapidated castle on a hill, and is the seat of a bishop and court of appeal. The most considerable buildings are the town-hall, the Sobieski palace, 18 churches, of which the cathedral, dedicated to St. Michael, and the churches formerly belonging to the Jesuits, those of the Visitandines, the Dominicans, and the Carmelites, are worthy of notice; there are several monasteries, a Piarist college, a synagogue, a gymnasium, an academy of sciences, and several hospitals and charitable institutions. The town has three annual fairs, each lasting a month, which are frequented by great numbers of foreign merchants: the chief articles sold are cotton manufactures, woollen-cloths, corn, and Hungarian wines. Lublin is one of the principal centres of the cotton manufactures in Poland; large spinning-mills have been recently established in the town. It has been long famous for the manufacture of coarse woollens.

LUBLIN, GOVERNMENT OF. [POLAND.]

LUCANIA. [DUBLIN, County of.]

LUCANIA, a province of ancient Italy, bounded N. by the Silarus, the Apennines, and the Bradanus, which separate it from Campania, Samnium and Apulia respectively; E. by the Gulf of Tarentum, along which it extended to the mouth of the Crathis; S. by Brutium; and W. by the Tyrrhene Sea, between the mouths of the Laus and Silarus. The territory of Lucania is now comprised chiefly in the modern province of Basilicata; portions of it are included in Calabria and Principato Citra. Under these heads the physical geography of the country is given, and many particulars respecting its ancient towns. The rivers that fall into the Gulf of Tarentum between the Bradanus and the Crathis were—proceeding from the north, the Casuentus, the Acalandrus, the Aciris, the Siris, and the Sybaris. These rivers rise in the mountains that cover all the interior of the province, and run generally in the direction of east by south across a very fertile plain, which skirts the shore of the Tarentine Bay. Along this shore were several celebrated cities founded by early Greek colonies: Metapontum, between the mouths of the Bradanus and the Casuentus; Heracleia, near the mouth of the Aciris and on its right bank; a little higher up the right bank was Pandosia; Siris, near the mouth of the Siris and on its left bank; Sybaris, near the mouth of the Sybaris; and Thurii, a few miles higher up, in the plain between the Crathis and the Sybaris. On the coast of the Tyrrhene Sea were Paestum, a few miles south of the Silarus, and Elea, or Velia, further south, on the Bay of Elea, and a few miles north of the promontory of Palinurus.

Heracleia, founded about B.C. 432 by the inhabitants of Thurii and Siris, was the place of meeting of the Italian Greeks till its capture by Alexander, king of Epirus, who transferred the meetings to Thurii. The city early rose to prosperity, and was in close alliance with Tarentum against the Lucanians and Messapians. The first engagement between Pyrrhus and the Romans took place in the plain between Heracleia and Siris B.C. 280, and ended in the total defeat of the latter. Two years afterwards the Heracleiots entered into alliance with Rome, and it continued to be a flourishing city under Roman sway till the time of the empire. The date of its final extinction is unknown. Its site is marked by mounds of rubbish and the foundations of ancient buildings near the farm of Policoro, which is marked on some maps near the mouth and on the right bank of the Agri. Many coins, bronzes, and other antiquities have been found on the site, and at a short distance were discovered the two very interesting bronze tables called *Tabulæ Heracleenses*, which contain a Latin inscription relating to the municipal regulations of the city. On the back is a long Greek inscription of earlier date and of much less interest. The coins of Heracleia are beautiful masterpieces of ancient art. Zeuxis the painter, it is said, was a native of Heracleia. [BASILICATA; CALABRIA; PRINCIPATO CITRA; PASTUM, &c.]

LUCAYOS. [BAHAMAS.]

LUCCA, a small duchy in Italy, which now forms a province of Tuscany, between the Apennines and the sea, is bounded N. by the territories of Modena, E. and S. by the grand-duchy of Tuscany, and west by the Mediterranean. It is watered by the river Serchio, which rises in the Apennines of Garfagnana and enters the Mediterranean a few miles north of the Arno. Its area is 512 square miles. Its population in 1852 amounted to 260,745. Lucca is one of the most densely inhabited parts of Italy.

The territory of Lucca is naturally divided into three regions: 1st, the mountainous districts among the Apennines, including the valley of the Lima, an affluent of the Serchio; 2nd, the valley of the Serchio, including the fine plain of Lucca, which is cultivated like a garden; 3rd, the flats near the sea, which are in part marshy, but produce good pasture for cattle. The people are very industrious; many of them emigrate to foreign countries, where they work as plasterers and image-makers, and others from the mountainous districts repair every winter to the maremme of Tuscany and other neighbouring states to work in the fields, whence they return home

in the summer. There is a lyceum in the city of Lucca and numerous grammar and elementary schools. In spiritual matters the Lucchesi are subject to the archbishop of Lucca.

The country is divided for administrative purposes into 21 communes. At the head of each commune is a political officer called *Gonfaloniere*, and likewise a judge called *Commissario Giudicente*. In the town of Lucca are the civil, criminal, and commercial tribunals for the whole duchy.

The climate of Lucca is sharp and cold in the Apennines, hot in the plain, and moist and unhealthy near the coast, along which it extends about 7 miles. The soil in the centre and south is rich and fertile; in the north stony, and in the west marshy. Agriculture is carried to high perfection, but such is the density of the population that born has to be imported. The fields are bordered with elms, plane-trees, and mulberry-trees, linked together by vines. Olive, orange, citron, mulberry, and sweet chestnut trees flourish in the plain; they are cultivated in plantations, and serve as supports to vines, which are grown in the intervals between the trees. The Apennines of Lucca are covered in part with chestnut, larch, and pine-trees up to their summits. The chief products of Lucca are corn, pulse, almonds, figs, citrons, oranges, chestnuts, wine, oil, and silk. Horned cattle are numerous; bees are generally kept. Marble, alabaster, building-stone, and potter's-clay are the only minerals. Agriculture is almost exclusively the occupation of the people; the only important factories are those for the preparation of oil and the reeling of silk. Oil and raw silk are the chief exports. The coast fisheries are actively worked.

The chief town is *Lucca*, which forms the subject of the next article.

Viareggio, with 6000 inhabitants, is, next to Lucca, the principal town of the duchy; it has a roadstead which is frequented by coasting-vessels, both native and foreign, which take away cargoes of oil, timber, silks, beans, statuary marble, and other minor articles. The manufactures of the country consist of some silks, woollens, paper, glass, iron and copper vessels, linen and cotton cloths, and hats. In the valley of the *Serchio*, about 10 miles N. from the city of Lucca, are the celebrated baths of Lucca, a much frequented watering-place. Near the city are the so-called baths of *Nero*.

The province comprises the territory of the old republic of Lucca, which (as stated in the next article) existed from the middle of the 14th century to 1805, when it was erected into a principality in favour of one of Napoleon I.'s sisters. By act of the Congress of Vienna it was given to the Infanta Maria Luisa, duchess of Parma, in lieu of the duchy of Parma, which was then conferred upon Maria Louisa, ex-empress of France. Upon the death of the latter in 1847 Lucca was, in accordance with the same treaty, united to Tuscany, and the duke of Lucca entered into possession of Parma.

LUCCA, the capital, formerly of the duchy, now of the province, of Lucca, is situated in a rich plain watered by the *Serchio*, and surrounded by mountains; it is 12 miles from the sea, and about 10 miles N.E. from Pisa, and contains 24,000 inhabitants. Lucca is surrounded by ramparts, which are planted with trees, and form a very pleasant promenade. The town is well built, and well supplied with water, brought by means of an aqueduct (which is supported on 459 arches), from Monte Pisano. The streets are well paved and clean. Lucca, like most other Italian cities, is rich in churches: the cathedral, which belongs to the 11th century, is adorned with good paintings, and with statues and monuments by the native sculptor *Civitali*. The archiepiscopal archives and those of the chapter contain a vast mass of historical documents, parchments, and manuscripts, some as old as the 7th century. The other remarkable churches of Lucca are those of *San Frediano*, *San Francesco*, and *San Michele*. The former ducal palace is a vast building; it contained previous to 1847 a gallery of valuable paintings by the great masters, and a library of 25,000 volumes. The other remarkable structures are the town-house, the aqueduct, the public library, and several of the mansions of the nobles. The Academy of Letters and Sciences in Lucca, instituted in 1817, which consists of 36 members, holds its meetings once a month, and has published several volumes of *Memoirs*. Lucca (Luca) is mentioned in ancient history as a town belonging to the Etruscans after they had conquered the country between the *Arno* and the *Macra* and taken it from the *Ligurians*. It afterwards became a Roman colony. There are still remains of a Roman theatre and an amphitheatre. Lucca is connected by railways with Pisa, Leghorn, and Florence.

Lucca in the middle ages was a republic, often at war with Pisa and Florence. It was at one time with Pisa at the head of the *Ghibeline* party; it afterwards fell under the yoke of the *Visconti* of Milan, was restored to liberty by the emperor *Charles IV.* in 1370, was subject successively to several tyrants, and at last settled gradually into a narrow aristocracy. One of its citizens, *Burlamacchi*, about 1546, being made *gonfaloniere*, attempted a revolution for the purpose of restoring the popular government, not only at Lucca, but in all the other Tuscan cities. Being discovered, he was arrested and given up to the imperial governor of Milan, who put him to death. In 1556 a law was passed at Lucca, on the proposal of the *gonfaloniere* *Martino Bernardini*, by which only a certain number of families were eligible to office: this law, called '*Martinian*,' from its author, established a close aristocracy like that of *Venice*. In 1600 the privileged families were 160; in 1797 they were reduced to 88, the others having become extinct. From among these families was elected a '*signoria*,' or executive of 9

'*anziani*,' or elders, and a *gonfaloniere*, a senate of 36 members, and a great council of 90. In this manner Lucca was administered for more than two centuries in peaceable obscurity. In 1799 the French, under *General Serrurier*, entered Lucca, placed a garrison in it, emptied the arsenal, carried away all the brass cannon from the ramparts, and exacted two millions of francs, besides supplies of provisions, professing all the time to have the greatest regard for the ancient republic of Lucca. Meantime the democratic party, supported by the French, demanded a change in the form of government; the *Martinian* law was abolished, and a constitution after the then prevalent fashion, with two consuls and a directory, was proclaimed. In 1805 Napoleon, having reestablished monarchy both in France and Italy, gave Lucca to his sister *Eliza* as a principality, with new constitutional laws.

LUCENA. [CORDOVA.]

LUCENTUM. [ALICANTE.]

LUCERA. [CAPITANATA.]

LUCERN. [LUZERN.]

LUCIA, SAINT, Island of, one of the Lesser Antilles, is situated in 13° 50' N. lat., 60° 58' W. long., about 40 miles N. from *St. Vincent*. Its extreme length from north to south is 32 miles, and its extreme breadth about 12 miles. The island is of volcanic origin, and several of the mountains terminate at their summits in craters of extinct volcanoes. One of these called *La Souffrière*, at the south-west side of the island, has the appearance of a vast lime-pit, and some severe earthquakes, which are still remembered, are attributed to the convulsions within this mountain. *Saint Lucia* comprises two districts: of one of these, *Basseterre*, the lowest part is well cultivated, but abounds in swamps and marshes; the other district, called *Capisterre*, consists of a succession of abrupt fantastically-shaped mountains, covered to their summits with forest-trees and underwood, and intersected by numerous ravines containing stagnant water and masses of vegetable matter in every stage of decomposition; the island is consequently unhealthy, but, according to the governor's reports, its character in this respect has been much improved of late years.

The chief productions of the island are sugar, molasses, and rum. In 1852 the quantity of sugar exported was 63,517 cwt., valued at 44,462*l.* The total imports amounted to 5753*l.* The inward tonnage of the shipping was 11,856; the outward, 11,832. On December 31st 1853 the number of vessels registered as belonging to *Saint Lucia* was 14, of which number 12 had an aggregate tonnage of 332; the two other vessels were together 335 tons burden. The total population of the island on June 25th 1851 was 24,318, of whom only 512 were Protestants. There are 3 Protestant churches and 10 Roman Catholic chapels in the island. A Board of Education has been recently appointed, which appropriated upwards of 1000*l.* in aid of schools during the year 1852. There are eight public schools, a Free school, and two Infant schools; seven of these schools are supported in part from an endowment founded by *Lady Mico*.

Castries, the chief town on the island, lies at the bottom of a long winding bay, in a low marshy spot, surrounded by an amphitheatre of hills. It has a church, and convenient wharfs; and is supplied with water by water-works constructed within the last few years, and defrayed by a parochial rate. *Souffrière* and *Vieuxport* are the names of two other towns, but they are both small and of little importance.

St. Lucia is so called from having been first discovered on *St. Lucia's* day: this was about the year 1635, when a settlement was attempted by a party of English, who were soon after driven off by the *Caribs*. About 1650 the French effected a settlement; from that time till 1804 it was taken, retaken and transferred between the English and French no less than eleven times: since 1804 it has remained subject to the British crown. The colonial revenue was 13,746*l.* in 1852, and the colonial expenditure 12,520*l.*; the military expenditure defrayed by Great Britain was 12,706*l.* The government is administered by a lieutenant-governor and an executive council. The French code of law in relation to the rights of property has continued in use.

LUCKENWALDE. [BRANDENBURGH.]

LUCKNOW. [HINDUSTAN.]

LUCKPUT BÜNDER. [CUTCH.]

LUÇON. [VENDÉE.]

LUÇON. [PHILIPPINE ISLANDS.]

LUCRINE LAKE. [AVERNO.]

LUDGERSHALL. [WILTSHIRE.]

LUDLOW, Shropshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river *Teme*, in 52° 22' N. lat., 2° 44' W. long., distant 25 miles S. by E. from *Shrewsbury*, and 143 miles W.N.W. from *London*. The *Shrewsbury* and *Hereford* railway connects Ludlow with the North-Western and the Great Western lines. The population of the municipal borough was 4691 in 1851; that of the parliamentary borough was 5376. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a rectory in the archdeaconry of *Salop* and diocese of *Hereford*. Ludlow Poor-Law Union contains 32 parishes and townships, with an area of 82,736 acres, and a population in 1851 of 17,051.

Ludlow has returned two members to parliament continuously from the reign of *Edward IV.* The streets are broad, well paved, and lighted with gas; the houses are generally well built; and there is a

good supply of water. Over the Teme is a handsome stone bridge of three arches. The parish church is of the reign of Edward III. There are chapels for Wesleyan and Primitive Methodists, Independents, and Plymouth Brethren; a Free school, founded by Edward VI., which has an income from endowment of 350*l.* a year, besides 150*l.* for exhibitions, and had 42 scholars in 1852; two National schools, an Infant school, a mechanics institute, a Natural History society, with a museum particularly rich in geological specimens; a savings bank, a dispensary, a society for the relief of lying-in-women, a winter clothing charity, and a district visiting society. The Ludlow public buildings, including accommodation for museum, library, news-room, ball-room, and savings bank, with magistrates' and other offices, were erected in 1839. The borough jail was erected in 1764. The principal market-day is Monday; markets are held also on Wednesday and Saturday. Nine fairs are held in the year for cattle, wool, and hops.

The castle of Ludlow was one of the most extensive fortresses on the Welsh border, and its ruins are perhaps the most perfect of any of them yet remaining. In the reign of Henry VI. it was possessed by Richard, duke of York, who on the advance of the king's army in 1459, abandoned the castle and town, which were given up to plunder. Edward IV. repaired the castle, and made it the court of his son the Prince of Wales. In the reign of Henry VII. the castle again became a royal residence; and Arthur, the king's eldest son, held a court here to celebrate his marriage with Katharine of Aragon. The prince died here the following year. During the reigns of Henry VIII. and Elizabeth, the lord-presidents of the marches held their courts here. Sir Henry Sidney, who held the office of president, made this castle his favourite residence, and put it into repair. In 1616 it was visited by Prince Charles, afterwards Charles I. Milton's masque of 'Comus' was first performed here in 1634, during the presidency of the Earl of Bridgewater. In the reign of Charles I. this castle was kept as a garrison for the king; but in June, 1646, it was delivered up to the parliamentary forces. After the dissolution of the court of the lords-marchers, in the reign of William III., the castle was suffered to fall into decay, and it is now a magnificent ruin.

(Communication from Ludlow.)

LUGANO. [TICINO.]

LUGO. [FERRARA; GALICIA, Spanish.]

LULEA-ELF. [BOTHNIA.]

LUMLEY, GREAT. [DURHAM.]

LUND, a town in Sweden, is situated in 55° 40' N. lat., 13° 10' E. long., about 7 miles from the eastern shore of the Sound, and has about 5000 inhabitants. It is situated in the extensive and fertile plain of Scania, 30 miles S.S.E. from Helsingfors. The streets are straight and wide, and the houses commonly of two stories, and many of them surrounded by orchards and gardens. In the centre of the town is the cathedral, a large irregular structure of hewn stone, and dating from the 12th century. Lund is the seat of a bishop, and has a celebrated university. Between the cathedral and the university buildings is a space planted with lime-trees, and kept in good order. The university buildings, erected in 1668, consist at present of two extensive edifices, the old and new one. The former, which is the larger, is three stories high, and has a tower, which is used as an observatory. Besides museums and lecture-rooms, it contains a library of nearly 40,000 volumes, and a few valuable manuscripts. The new university building contains the meeting-rooms of the senate and of the four faculties, and likewise the archives; in the second floor are the collections of natural history. The chemical laboratory is in a separate building. There is a botanical garden belonging to the university. The university was founded with the permission of the Pope by Christian I. of Denmark, in 1479, after his return from Rome. It has the usual four faculties of theology, law, medicine, and philosophy. The number of students is between 400 and 500. An active commerce in the produce of the adjacent country is carried on between Lund and Malmö, a port which lies 11 miles S.W. from Lund.

Before the introduction of Christianity, Lund was a large and wealthy city, with a considerable commerce, and 80,000 inhabitants who lived chiefly by trade and piracy. In after times it gave title to an archbishop, who was considered primate of the North. On a hill about half a mile from the town, the Scandinavian monarchs were installed as sovereigns of Scania. Before the Reformation there were no less than 21 churches (including 6 churches of as many religious houses); there are now only two besides the cathedral. There are several woollen-manufactories in the town.

LUNDY ISLAND. [DEVONSHIRE.]

LÜNEBURG is an ancient allodium of the house of Brunswick, which, in the year 1235, was raised, together with Brunswick, to the rank of a duchy, but was subsequently separated, and formed a distinct principality. In recent times it lost the bailiwick of Klötze, which was ceded to Prussia, but was indemnified by the addition of that part of Lauenburg which was retained by Hanover. It is now a land-drostei, or province, of the kingdom of Hanover, situated between 52° 15' and 53° 30' N. lat., 9° 16' and 11° 40' E. long. It is bounded N. by the Elbe, which separates it from Holstein, Hamburg, and Lauenburg; N.E. by Mecklenburg-Schwerin and Prussia; E. by Saxony; S.E. and S. by Brunswick and Hildesheim; and W. by Calen-

berg. The area is 4326 square miles, and the population in 1852 was 338,764. The country is an immense sandy plain, broken by chains of low hills. The surface is chiefly covered with heath, extensive turf moors, and forests mostly of fir. Fertile arable land is rare; but on the banks of most of the rivers, especially the Elbe and the Aller, there is some very rich marsh land. The principal river is the Elbe, which runs along the frontier, and receives several small feeders in this province. The Aller, in the south of the province, belongs to the valley of the Weser. The country has a very gradual fall towards the Elbe and the Weser, especially towards the former, against the inundation of which the land is secured by dykes. The highest land between the two rivers is the Lüneburg Heath. This tract has some villages and seats of rich landowners on the small streams that run through it. A breed of small coarse-woolled sheep is kept on this heath. The villagers derive their chief subsistence from tending bees and gathering bilberries, juniper-berries, and cranberries, of which vast quantities are sent to Hamburg and Bremen. The quantity of corn raised is not sufficient for the population. Flax is extensively cultivated. The land produces also hops, potatoes, garden vegetables, and turnips in abundance, but only a little fruit. The breeding of cattle is more profitable than tillage; sheep are very numerous, but their wool is in general indifferent. The breed of horses has been lately improved. The heath is so favourable to the breeding of bees, that many thousand beehives are sent thither from other parts of the kingdom. The forests afford timber for building as well as fuel, for which there is a good sale. Gypsum abounds in many places; and in the vicinity of the gypsum are saline springs. The main common road for commerce between Hamburg and the interior of Germany passes through this principality; it is traversed also by the railroad from Hanover to Hamburg (opposite Hamburg) which passes through Celle, Ulzen, and Lüneburg. The transit trade along this railroad since the improvement of the harbour of Hamburg is very important. The manufactures of the province are chiefly confined to the towns. The country people manufacture most articles required for their domestic use.

Towns.—Lüneburg, the capital of the province, is situated in about 53° 15' N. lat., 10° 17' E. long., 82 miles by railway N.N.E. from Hanover, on the Ilmenau (which is here navigable about 15 miles above its junction with the Elbe), and has about 13,000 inhabitants. It was formerly surrounded with walls, but the fortifications are now dismantled. The principal buildings and public institutions are the royal palace, the gymnasium, St. Michael's church, in the vaults of which are the monuments of the ancient princes of Lüneburg, the convent of St. Michael, the town-hall, the arsenal, &c. The inhabitants carry on a considerable trade in the products of the country, such as linen, salt, wax, honey, woollens, linen thread, flax, horses, of which 70,000 are annually brought hither to market, &c. There are very productive salt-works in a part of the city which is separated from the rest by a wall, and is called the Sulze. Great quantities of lime are burned in the Kalkberg, a hill to the west of the town (350 feet high), and sent to Hamburg and Holland. There are manufactories of soap, breweries, distilleries, a paper-mill, &c. The gymnasium of Lüneburg, called Johanneum, is attended by about 250 pupils.

Of the other towns in the province the most important is *Celle*, or *Zell*, a tolerably well-built town, at the junction of the Fuse and the Aller. Celle is the seat of the supreme court of appeal; it has a gymnasium, a national stud, a large house of correction, six churches (belonging to Lutherans, Calvinists, and Roman Catholics), and 12,000 inhabitants. In the suburbs, which are very extensive, there is a palace with a large garden, in which Matilda, sister of George III., is buried. The industrial products of Celle comprise chicory, linen, hosiery, tobacco, spirits, soap, &c. There is also a considerable transit trade by the Aller and by the railway, by which the town is 27 miles distant from Hanover to the north-east. *Harburg*, the chief port of Hanover, on the left bank of the Elbe opposite to Hamburg is the subject of a separate article. [HARBURG.] *Ulzen*, a first-class station on the railway from Hanover to Harburg, from which towns it is respectively distant 60 and 106 miles, is situated on the Lüneburg Heath and on the Ilmenau, has 3000 inhabitants, who grow flax, and manufacture woollen-cloth, camlets, and starch.

LUNEL-LA-VILLE, [HÉRAULT.]

LUNENBURGH, [NOVA SCOTIA.]

LUNEVILLE, a town in France, capital of the third arrondissement in the department of Meurthe, stands in 48° 35' 35" N. lat., 6° 29' 45" E. long., 180 miles E. from Paris in a straight line, on the Vezouze, a feeder of the Meurthe, and has a tribunal of first instance, a college, and 12,476 inhabitants. The town is a first-class station on the Paris-Strasbourg railway, by which line of communication it is 240 miles distant from Paris. Luneville appears to have been a mere village before the 11th century. It afterwards became a fortified town and the capital of a county. In the war between Charles the Rash, duke of Bourgogne, and René II, duke of Lorraine, it was frequently taken. In the year 1638 it was taken by the French, who demolished the fortifications. Leopold, duke of Lorraine, resided here, and built a palace, which was subsequently much improved by Stanislas, ex-king of Poland. Both of these princes made great improvements in the town, which presents wide, straight, and well-built streets, and some handsome squares. Behind the palace is the parade ground, or Champ de Mars, which covers a space of 500 acres. The other remarkable objects

in Luneville are—the parish church; the immense cavalry barracks, with stabling for 6000 horses; the riding-school, which is considered the finest in France, being large enough for 200 horse soldiers to exercise in; the hospitals; and the Place-Neuve, which is ornamented with handsome buildings. Great bodies of cavalry are frequently collected at Luneville in the autumn for the purpose of manœuvring on a large scale. The town has manufactures of woollen-cloth, calico, hosiery, lace, gloves, earthenware, sheet-iron, and beer; it has also a good trade in wine, corn, brandy, hemp, flax, wood, &c. By the treaty of peace signed at Luneville, February 9, 1801, the Rhine was made the limit between France and Germany.

LURCY-LEVY. [ALIER.]

LURE. [SAÔNE-HAUTE.]

LURGAN, county of Armagh, Ireland, a market and post-town, and the seat of a Poor-Law Union, is situated in 54° 28' N. lat., 6° 21' W. long., 16 miles N.E. from Armagh by the Ulster railway, and 9½ miles N. from Dublin by the Dublin and Belfast junction railway. The population in 1851 was 4211, besides 440 inmates of the workhouse. Lurgan Poor-Law Union comprises 20 electoral divisions, with an area of 79,236 acres, and a population in 1851 of 67,317.

Lurgan was built in the reign of James I. by William Brownlow, Esq., one of the English settlers: it was burned by the insurgents in 1641, and again destroyed by the army of James II. in the war of the revolution. The town consists principally of a wide street extending along the Armagh and Belfast road, and has a clean and neat appearance. Besides the parish church, which is a handsome building with a tower and octagonal spire, there are places of worship for Roman Catholics, Presbyterians, Quakers, and Methodists. The public buildings are—the market-house, a linen-hall, a court-house, a district dispensary, a bridewell, and the Union workhouse. The manufacture of linens, especially of damasks and diapers, for which Lurgan is famed, is extensively carried on. There are a brewery and a distillery. Quarter-sessions and petty sessions are held here. Fairs are held on August 5th, November 22nd, and the second Tuesday of every month. The market-day is Friday. Lurgan Castle, the seat of Lord Lurgan, is a mansion of modern erection in the Elizabethan style.

LURI. [CORRICA.]

LUS. [BELOCHISTAN.]

LUSATIA. [LAUSITZ.]

LUSIGNY. [AUBE.]

LUSITANIA. [PORTUGAL.]

LUSK. [DUBLIN, County of.]

LUSS. [DUMBARTONSHIRE.]

LUTON, Bedfordshire, a market-town, and the seat of a Poor-Law Union, in the parish of Luton, is situated in a depression of the chalk hills, on the right bank of the Lea, in 51° 52' N. lat., 0° 25' W. long., distant 12 miles S. by E. from Bedford, and 31 miles N.N.W. from London. The population in 1851 was 10,648. For sanitary purposes the town is under a Local Board of Health. The living is a vicarage in the archdeaconry of Bedford and diocese of Ely. Luton Poor-Law Union contains 14 parishes and townships, with an area of 39,998 acres, and a population in 1851 of 25,083.

The town has a neat and clean appearance. The streets are lighted with gas and paved. The principal building is the church, a remarkably fine edifice, 174 feet long by 51 feet wide, of the early English, decorated, and perpendicular styles; but it has suffered much from injudicious alterations. In the interior is an almost unique baptistery over the font of decorated character. There are several dissenting places of worship, a National and a British school, and almshouses. A town-hall has been recently erected. In the town are a literary institution and library, a mechanics institute, and a savings bank. Straw-plaiting is extensively carried on, and there are several straw-bonnet manufactories, the Luton plait having a high reputation. Malting and brewing are also carried on. The market is on Monday. Fairs are held on the third Monday in April and October, and a statute fair in September. Petty sessions and a county court are held in the town. Luton Hoo, the seat of the Marquis of Bute, was almost wholly destroyed by fire in 1843.

LUTTERWORTH, Leicestershire, a market-town, and the seat of a Poor-Law Union, in the parish of Lutterworth, is situated on the right bank of the little river Swift, in 52° 27' N. lat., 1° 12' E. long., distant 13 miles S. by W. from Leicester, and 89 miles N.W. from London by road. The population in 1851 was 2446. The living is a rectory in the archdeaconry of Leicester and diocese of Peterborough. Lutterworth Poor-Law Union contains 37 parishes and townships, with an area of 61,090 acres, and a population in 1851 of 16,194.

The town consists of one main street and several smaller ones, and is lighted with gas. A new town-hall was erected in 1836. The parish church, erected about the year 1100, and thoroughly repaired about 1740, is a large handsome building. The chancel is separated from the nave by a beautiful screen. From the pulpit, which is of finely carved oak, Wickliffe, who held the living of Lutterworth, is said to have addressed his flock. Wesleyan and Primitive Methodists, Independents, and Baptists have places of worship. There are two endowed schools—Ryder's school for girls, and Sherrier's and Poole's for boys; a mechanics institute; and a savings bank. A county court is held. The chief manufactures are those of coarse hosiery and silk ribbon. The market is on Thursday. Fairs are held on

April 2nd, Holy Thursday, September 16th, and on the Friday after September 16th.

LUXEMBOURG, or LUXEMBURG, a grand-duchy, the sovereignty of which until lately vested, according to the arrangements of the Congress of Vienna, in the King of the Netherlands, who thus became a member of the Germanic Confederation. After the severance of Belgium from Holland in 1830 the grand-duchy was divided after considerable delay and discussion between these two states, the King of Holland retaining the title of Grand-Duke of Luxembourg. The boundary line between the two states runs a little east of the watershed between the Meuse and the Moselle, Belgian Luxembourg, which lies to the west of the line just indicated, being drained by the Semois or Semoy, the Lesse, and the Ourthe; and Dutch Luxembourg by the Moselle and the Our, which meet a few miles west of Trèves and form the eastern boundary of the grand-duchy. The interior of Dutch Luxembourg is drained also by the Alzette, the Sûre, and many other streams, all feeders of the Our. All these rivers rise in the Ardennes or the Eifel.

Luxembourg is crossed from south-west to north-east by a range of high ground, part of the Ardennes, which separates the valley of the Maas from that of the Moselle. The soil of this elevated region is calcareous, and is principally occupied as pasturage. The lower lands are very productive, and yield abundant harvests of wheat, rye, flax, hemp, mangel-wurzel, &c. Such of the high lands as are tilled rarely yield anything but rye, oats, and potatoes. Luxembourg contains many large forests. Agriculture is in rather a backward state all through Luxembourg. The vine is cultivated on the banks of the Moselle and the Sûre. The quality of the wine is inferior. In Dutch Luxembourg there are a great number of distilleries, and some iron-works. Horses, horned cattle, swine, and sheep are numerous. In Belgian Luxembourg there are iron-works, slate-quarries, potteries, tanneries, cloth, and paper-mills. Iron- and lead-mines are worked; copper is found in Dutch Luxembourg.

Luxembourg is bounded E. by the Prussian Rhenish provinces, N. by Liège, W. by Namur, and S. by the French departments of the Moselle and Ardennes. Its greatest length from east to west is 75 miles, and its greatest breadth is 50 miles.

Dutch Luxembourg, the possession of which gives the King of Holland the title of Grand Duke, and a voice in the German Confederation, lies east of Belgian Luxembourg, and has an area of 848 square miles, with a population in 1852 of 210,275.

Belgian Luxembourg is the larger and more western part of the grand-duchy; it contains also the old duchy of Bouillon, a small territory in the south-west of the province, and has an area of 1703 square miles, with a population (in 1849) of 187,978.

The city of Luxembourg, the capital of Dutch Luxembourg, is a fortress of great strength, situated in 49° 37' N. lat., 6° 9' E. long., on the Alzette, or Elze, 76 miles S.S.E. from Liège, and has about 12,000 inhabitants. The city is surrounded by strong walls and deep ditches, and has a double line of outworks in the form of a heptagon. The upper town is built on a platform of a rock which is joined to the neighbouring country on the west side, and on the other three sides descends precipitously about 200 feet. Similar lofty precipices rise opposite them screening a deep valley watered by the Alzette, along which the lower town is built. The communication between the upper and lower towns is by flights of steps and by zigzag streets which are passable for carriages. The fortifications have been greatly strengthened by the German Confederation since 1830. The Vale of the Alzette is crossed in various directions by the fortifications. A projecting rock, called Le Bouc, which divides the lower town into two quarters, contains casemates for 4000 men hollowed out of the rock, which is perforated with loopholes and embrasures so as to sweep the valley up and down. A new fort has been built outside the Trèves gate. The garrison numbers about 6000 men. In the lower town are several mills and dye-works. The town is small but well-built; it has four churches, a military hospital, and a newly built market-place. Echternach, a walled town on the right bank of the Sûre, 17 miles N.E. from Luxembourg, has a population of about 4000, who are occupied with the manufacture of pottery, damasks, and woollen-cloths.

Of Belgian Luxembourg the chief town is ARLON. The only other towns worth notice are Bastogne, 19 miles N. by W. from Arlon, population 2500; and Bouillon, the capital of the ancient duchy of Bouillon, which stands near the French frontier, on the left bank of the Semois in a gorge of the Ardennes, and has 2600 inhabitants. The old castle of Bouillon, built on a rock high above the town, has been restored and is now used as a prison. A few miles west of Bastogne is the forest of St.-Hubert, which is said to be the original of Shakespeare's 'Forest of Arden.' The scenery still answers to the description of the poet. At St.-Hubert, a poor village, in a clearing in the middle of the forest, is a fine gothic church, which formerly belonged to the abbey of St.-Hubert who was buried here in 825. A railroad is in course of construction from Namur to Arlon.

LUXOR. [THEBES.]

LUXEUIL. [SAÔNE, HAUTE.]

LUZERN (Lucerne), a canton of Switzerland, is bounded N. by Aargau, E. by Schwytz and Zug, S. by Unterwalden, and W. by Bern. Its greatest length from north to south is 33 miles, and its greatest

breadth 27 miles. Its area is 586 square miles; and the population is 132,789, who are all Swiss but 537, and all Catholics but 1563. The declivity of the valleys is towards the north-east and north-west. The southern part of the canton belongs to the basin of the Reuss, which issues out of the Waldstätter Lake at the town of Luzern, and flows north-east into Aargau. Below Luzern the Reuss is joined by the Wald-Emme, which rises at the south-west extremity of the canton. A succession of high grounds, running across the middle of the canton, divides the basin of the Reuss from that of the Aar, to which latter river the northern part of Luzern belongs. North-east of the Sempach Lake, which is in the centre of the canton, is another lake called the Baldeg Lake. The only mountains in the canton are at its southern extremity, on the borders of the Unterwalden and the Bernese Oberland. None of them attain the limits of perpetual snow. The highest is Mount Pilatus, south-west of the town of Luzern, and a conspicuous feature in its landscape. It is a mountain group nearly 30 miles in length, extending along the borders of Luzern and Unterwalden, and having 7 peaks, of which the Tomlishorn (8358 feet) and the Esel (8678 feet) are the highest. The view from these summits is very extensive. The soil of Luzern is fertile; it is one of the very few cantons of Switzerland which produces more corn than it consumes. Fruit-trees are also abundant: the vine is cultivated in some favourable situations. The rearing of cattle is the principal branch of industry in a great part of the canton. In some districts there are manufactories of linen and cotton goods. The trade between Switzerland and Italy by the St. Gothard employs a number of people, and all the goods pass through Luzern and across the Waldstätter Lake.

German is the language spoken. Luzern is in the diocese of the Bishop of Basel, who resides at Soleure. It returns 7 members to the National Council of Switzerland. [SWITZERLAND.]

LUZERN, the capital of the canton, is situated at the western extremity of the Waldstätter Lake, and is divided into two unequal parts by the Reuss, which issues out of the lake. The larger part, which is on the right bank, is built on the slope of a hill; the whole is surrounded by old walls flanked by towers. The interior of the town presents streets narrow, uneven, and ill paved. The remarkable buildings are—the town-house, the college of the Jesuits, the arsenal, and the three covered wooden bridges, which are built on the lake, ornamented with paintings, and form the chief curiosities of Luzern. The parochial church and cemetery are outside of the town, and are well worth visiting. Luzern contained 10,088 inhabitants in 1852. It has two hospitals, a savings bank, a friendly society, and other benevolent institutions. It has also a collection of minerals, and very good elementary and secondary schools. The forces of the Sonderbund were defeated near Luzern by the federal army of the Swiss Diet, under General Dufour, on November 24th, 1847. [SWITZERLAND.]

In a secluded spot in the neighbourhood of Luzern is the monument erected in 1821 to the memory of the Swiss guards who died in the defence of the Tuileries against the mob of Paris on August 10th, 1792. It consists of a wounded and dying lion of colossal size, in alto-rilievo, sculptured on the side of a rock in a kind of niche. The model for it was sent by Thorwaldsen from Rome. The names of the officers, 26 in number, who with 760 soldiers fell on that memorable occasion, as well as those officers, 16 in number, who with about 350 soldiers survived it, are engraved underneath. The lion is represented grasping a shield with a fleur-de-lys on it, and a bundle of broken arms with the Swiss cross are lying on one side.

LUZON. [PHILIPPINE ISLANDS.]

LYCAONIA, a district of Asia Minor, is first mentioned by Xenophon, who describes it as extending eastward from Iconium in Phrygia to the beginning of Cappadocia, a distance of 30 parasangs, about 110 English miles ('Anab.', i. 2. s. 19.) It was united during the Persian monarchy to the satrapy of Cappadocia. (Xen., 'Anab.' vii. 8, s. 25.) But in the time of Strabo the name of Lycaonia was applied to the south-eastern part of Phrygia; and it was bounded S. by Mount Taurus, E. by Cappadocia, and W. by Pisidia.

Lycaonia is described by Strabo as a high table-land, deficient in water (which the inhabitants could procure only by digging deep wells), but well adapted for sheep. Iconium was the principal town of Lycaonia [ΚΟΝΙΥΗΝ]. *Isauria* is mentioned by Strabo as part of Lycaonia; it contained the cities of Laranda, Lystra, and Derbe; the two last of which were visited by Saint Paul, and appear, from the narrative of the 'Acts,' to have been places of considerable importance. (Acts, xiv. 6.)

The northern part of Lycaonia was united, but at what time is uncertain, to Galatia; but the southern part was governed in the time of Cicero ('Fam.' xiii, 78) by an independent prince of the name of Antipater, who resided at Derbe. Antipater however being afterwards conquered by Amyntas, king of Galatia, the whole of Lycaonia fell under the power of the Galatians. At the death of Amyntas B.C. 25, Lycaonia, together with Galatia, became a Roman province. (Dion. Cass., liv., p. 589, 'Stephan.'). In the time of Pliny Lycaonia formed a separate tetrarchy, which contained 14 towns. ('Nat. Hist.', v. 25.)

LYCIA, a province of Asia Minor, was bounded N. by Phrygia, E. by Pamphylia, W. by Caria, and S. by the Mediterranean Sea. The coast is skirted by lofty mountains, which rise in many places to a great height. Mount Solyma (now Takhatlu), to the north of Phaselis, on the borders of Pamphylia, rises to the height of 7800 feet. Accord-

ing to Strabo (xiv. c. iii, vol. iii, p. 213, 'Tauchnitz'), there was a great number of good harbours, notwithstanding the rocky nature of the coast. The length of the coast, from Telmessus on the west to Phaselis on the east, is said by Strabo to be 1720 stadia. The northern part of Lycia is occupied by the mountains which support the high table-land of Phrygia on the south, and which appear to have been known to the ancients under the name of Masicytus. Mount Masicytus is erroneously placed in most maps in the centre of the country, where there are no mountains, according to Mr. Fellowes. The Xanthus, which is also represented as an inconsiderable stream, is in reality a river of considerable length, flowing from the mountains in the north of Lycia; and the whole of the interior, instead of being occupied by mountains, as was commonly thought, is, on the contrary, a fertile plain, surrounded by mountains on every side, and drained through its whole extent by the river Xanthus.

According to Herodotus the Lycians were originally called Milyana, and afterwards Solymi; but again changed their name to that of Termila; after Sarpedon settled in the country, who had been compelled to leave Crete in consequence of dissensions with his brother Minoas. They were, according to the same authority, eventually called Lycians from Lycus, the son of Pandion, who came to Lycia after he had been expelled from Athens by his brother Ægeus. (Herodot. i. 173; Strabo, vol. iii. p. 217, 218.) In the Homeric poems the country is always called Lycia, and the Solymi are mentioned as a warlike people against whom Bellerophon was sent to fight by the king of Lycia ('Il.', vi. 184). In later times the southern part of Phrygia, on the north of Lycia, was always called Milyas; but the people are never called Solymi, though the name still remained in Mount Solyma on the north-eastern coast. That Lycia was early colonised by the Greeks is evident, not only from the account of Herodotus, but also from many other Lycian traditions, as well as from the worship of Apollo, which was spread over the whole country. Xanthus was a Cretan settlement (Steph. Byz.), and 60 stadia below the town was a grove sacred to Læona, near an ancient temple of the Lycian Apollo (Strabo, vol. iii. p. 215; Diod., v. 56). But the chief temple was at Patara, the winter habitation of the god, where he gave oracles through the mouth of a priestess. (Müller, 'Dorians'.)

The Lycians appear to have obtained considerable power in early times. They were almost the only people west of the Helys who were not subdued by Croesus (Herodot., i. 23); and they made an obstinate resistance to Harpagus, the general of Cyrus, but were eventually conquered. (Herodot., i. 176.) They supplied Xerxes with fifty ships in his expedition against Greece. (Herodot., vii. 92.) After the downfall of the Persian empire they continued subject to the Seleucids, till the conquest of Antiochus by the Romans, when their country, as well as Caria, was granted by the conquerors to the Rhodians (Polyb., p. 848, 'Casaubon'); but their freedom was afterwards again secured to them by the Romans (Polyb., p. 925), who allowed them to preserve their own laws and their political constitution, which is greatly praised by Strabo. According to this account (vol. iii., p. 214) the government was a kind of federation consisting of 23 cities, which sent deputies to an assembly, in which a governor was chosen for the whole of Lycia, as well as judges and inferior magistrates. All matters relating to the government of the country were discussed in this assembly. The six principal cities, Xanthus, Patara, Pinara, Olympus, Myra, and Tlos, had three votes each; other cities two votes each; and the remainder only one each. In consequence of dissensions between the different cities, this constitution was abolished by the emperor Claudius (Suet., 'Claud.', c. 25; 'Vespas.', c. 8); and the country united to the province of Pamphylia. (Dion. Cass., lx. p. 777, 'Steph'.)

Lycia contained many cities of considerable importance. Pliny ('Nat. Hist.', v. 28) mentions 36, but says that there were formerly as many as 70. Telmessus, on the borders of Caria, a sea-port with a good harbour, must have been a place of some importance in the time of Croesus (Herodot., i. 78), but afterwards declined in power; it is mentioned by Strabo as a small place. South of Telmessus, on the coast, were the towns of Pynda, Cragus, and Patara; the last of which is described by Strabo as a large city with many temples in it, and is said by Livy (xxvii. 16) to have been the capital of Lycia. According to Pliny, the ancient name of this town was Sataros ('Hist. Nat.', v. 28); but the name was afterwards changed by Ptolemy Philadelphus into Arsinöe. (Strabo, vol. ii., p. 216-16.) To the north of Patara, on the river Xanthus (now Etchen-Chai), was the town of Xanthus, which was taken and destroyed by Harpagus, the general of Cyrus the Great. Five centuries later it was burnt by its own inhabitants, when they could no longer resist Brutus. It was however again restored, as is evident from the Greek inscriptions and the state of the ruins when discovered by Fellowes, whose collection of Lycian sepulchral marbles of various ages, now in the British Museum, was obtained in and near this ancient city. A portion of the very ancient Cyclopean walls of Xanthus still remain. The ruins are in parts covered with inscriptions, many of them in a perfect state but in an unknown language. They consist of walls, temples, tombs, triumphal arches, and a theatre. The tombs and other ruins are covered with sculptures of elegant design and execution, and with poetical bas-reliefs. The walls of the city are extensive and massive, the Cyclopean being mixed with Greek masonry.

Several gateways with their paved roads still exist. In the walls of the acropolis many beautifully sculptured marbles are used as materials. Fellowes thinks that the oldest of the sculptures of Xanthus belong to the 6th or 7th century B.C. The tombs, many of which he examined, extend over several miles of country. In the Xanthian room in the British Museum are fragments also, and casts of some of the marbles of Xanthus, and also those of Tlos, Telmessus, Pinara, Myra, and Cadyanda.

Farther up the Xanthus in the interior was Tlos, where Pinara is marked on most maps, and where Fellowes discovered a highly-finished theatre, and other interesting ruins and rock-tombs. To the east, along the coast, were Myra (mentioned in the Acts, xxvii. 5, as a sea-port, but placed in most maps in the interior), Limyra, and Olympus. Between Myra and Olympus was the sacred promontory, stretching out a considerable distance into the sea, off which were the Chelidonian Islands. On the borders of Pamphylia was the important town of Phaselis, founded by the Dorians. (Herodot. ii. 178.) It had three harbours (Strabo, vol. iii., p. 217), and was one of the most flourishing commercial cities on the southern coast of Asia Minor. It was one of the principal resorts of the Cilician pirates in the later times of the Roman republic, and was destroyed for this reason by Paulus Servilius. (Cic., 'Verr.', vi. 10.) It was afterwards rebuilt, and is mentioned by Lucan (viii. 251); but it never recovered its former importance.

According to Fellowes, Lycia is now well inhabited, chiefly by Turks, many of whom lead a life half settled and half nomadic. Trade is carried on by Armenians and Greeks who live in the coast-towns, and form the greater portion of the population of the inland town of Almali, which is the largest in Lycia, the population being about 25,000. Many of the Turks wander with their herds on the high plateaus, like the Turkomans. Along the coast of Lycia, as well as the adjoining provinces of Caria and Pamphylia, there live a number of Arabs (Syrians?), who are generally seamen, and seem to have settled there many centuries ago. Among the wild animals the 'káplán' (which term is here applied to the leopard), and the 'arslán,' or lion (perhaps the panther), commit great depredations among the herds; great numbers of them are annually killed, and a reward of from 100 to 200 piasters is given by the government for each arslán. They are very frequent in the district of Sidyma, on the coast. The ox is precisely the same as represented on the ancient coins and monuments of Lycia; but there is also a species of dwarf ox, of the size of a large dog, though more stoutly built. There are great numbers of buffaloes and camels. The breeding of horses is carried on to a great extent, and herds of many hundreds are often seen grazing together in the valleys. The only kind is that of which such spirited representations are seen in the ancient marbles; the head is of Arabic cast, the chest is very large, the feet are remarkably fine and thin, and the ears are small, as in the antique. They are not shod. The rivers and lakes abound with large tortoises, and on their banks the trees swarm with the green climbing frog. No part of Asia Minor contains such splendid valleys as those of the Xanthus and the Dolomon Chái. Myrtle, oleander, and pomegranates cover the banks of the rivers; the plains along the rivers are well cultivated, and in many places the fields are inclosed by fences of myrtle and the small prickly oak, mixed with the orange, the wild olive, the pomegranate, the oleander, the elegant green storax, which are most beautifully matted together by vine, clematis, and many other climbers. Fruit-trees are planted in inclosures. The hills are covered with large oaks and planes, which supply excellent timber, of which however only small quantities are shipped from the coast-towns. The oak (*Quercus agrilops*) is a source of wealth from its acorns, the 'valonea' of the Smyrna merchants, which is used in tanning leather, and gives it that agreeable smell which places the Turkish leather even above the Russian 'jucht.' A sort of horse-radish is used as food, and as a substitute for soap. In proportion as the traveller approaches the high upland plains the tender fruit-trees, as well as the olive, the aloes, and other southern plants, disappear, and are replaced by the walnut, apple, and pear trees. The high plain round Almali, which is 4000 feet above the sea, is one of the largest and best cultivated corn tracts in Asia Minor; its chief produce is barley, which is the common food for horses. Maize is chiefly raised in the valleys and on the coast.

(Fellowes, *An Account of Discoveries in Lycia—a Journal written during an Excursion in Asia Minor.*)

LYDD. [KENT.]

LYDFORD, or LIDFORD. DEVONSHIRE.]

LYDIA (*Audia*), a country of Asia Minor. It is difficult to determine its exact boundaries, as they differed at various times; but under the Roman empire it was bounded S. by Caria, from which it was separated by the river Mæander; N. by a range of mountains known under the name of Sardene, which divided it from Mysia; E. by Phrygia; and W. by the Ægean, though the tract of country along the coast was more commonly known by the name of Ionia. Lydia was intersected by mountain ranges running from east to west, of which the principal, called Mésogis by Strabo, is a branch of Taurus, and forms the northern boundary of the valley of the Mæander. Another chain of mountains, known to the ancients under the name of Tmolus, which appears to detach itself from the Mésogis near the borders of Phrygia, runs parallel to the Mésogis through the

centre of Lydia, and terminates on the western coast opposite the island of Chios. A branch of Tmolus, called Sipylus, stretches more to the north-west towards the towns of Cuma and Phocæa. The chain of mountains which separates Mysia from Lydia appears to be a continuation of the northern range known in Bithynia by the name of Olympus, and in Mysia by that of Ida and Temnon. Lydia is thus divided into two principal valleys: the southern, between Mésogis and Tmolus, through which the Caystrus flows, is of moderate extent; but the northern, between Tmolus and Sardene, watered by the Hermus, and its tributaries the Hyllus, Pactolus, and Coganus, forms a considerable plain. The fertility of Lydia, and the salubrity of the climate, are frequently mentioned by ancient writers; and this account is confirmed by the reports of modern travellers. Chishull speaks of the country between Tmolus and Mésogis as a "region inexpressibly delicious."

The origin of the Lydian people is uncertain. Some writers, and among others Josephus ('Antiquit.', i. 6, 4), have imagined that they are mentioned in the book of Genesis (x. 22) under the name of Lud, in which passage they are described as descendants of Shem. Homer does not appear to have known the name of Lydia, but always calls the people Mæones. According to most ancient writers, the people were originally called Mæones, and obtained the name of Lydians from Lydus, the son of Atys, who is mentioned by tradition as the first king of the country. (Herod., i. 7; Diod. Sic., iv.; Pliny 'N. H.', v. 30.) Later writers make a distinction between Mæonians and Lydians, and represent the former as dwelling on the north-east of Tmolus, near the river Hyllus, and the Lydians as inhabiting the southern part of the country. According to Herodotus, the Lydians were of a common origin with the Carians and Mysians (i. 171).

The early history of Lydia is related by Herodotus, who informs us that three dynasties ruled in Lydia: the Atyadæ from the earliest times to B.C. 1221; the Heraclidæ from B.C. 1221 to 716; and the Mermnadæ from B.C. 716 to 556. The proper history of Lydia can be said to begin only with the last of these dynasties; since the two first are almost entirely fabulous. The following is a list of the Mermnadæ princes;—1. Gyges, who obtained the throne by the murder of Candaules, the last of the Heraclidæ monarchs, reigned from B.C. 716 to 678. 2. Ardys, from B.C. 678 to 629. 3. Sadyattes, from B.C. 629 to 617. 4. Alyattes, from B.C. 617 to 560. 5. Croesus, from B.C. 560 to 556, though he was probably associated in the sovereignty during the lifetime of his father. These monarchs were engaged in almost uninterrupted wars with the Greek cities on the coast; but the empire steadily increased in wealth and power. It obtained its greatest prosperity during the reign of Croesus, who subdued all the people of Asia Minor west of the river Halya, with the exception of the Cilicians and Lycians. (Herodot., i. 28.) But this empire, the most powerful at that time in Western Asia, was overthrown by Cyrus (B.C. 556); and the country became a Persian province. Herodotus informs us that no nation in Asia was more warlike than the Lydians (i. 79); till, through the advice of Croesus, they were deprived of their arms by Cyrus, and obliged to learn music and dancing (i. 154). After Alexander's conquests, Lydia, with the rest of Western Asia, formed part of the empire of the Seleucidæ; and on the conquest of Antiochus by the Romans (B.C. 189) it was given to Eumenes, king of Pergamus, as a reward for the assistance he had afforded them in their war against the Syrian monarch. (Livy, xxxvii. 56; Appian, 'Syr.', 38; 1 Macc., viii. 8.) On the death of Attalus III. (B.C. 133) it came, with the other dominions of the kings of Pergamus, into the power of the Romans.

The ancient Lydians appear to have enjoyed great commercial prosperity and to have possessed abundance of the precious metals, as is evident from other circumstances, and particularly from the rich presents which Croesus sent to the different oracles in Greece. (Herodot., i. 50.) They are said to have obtained a large quantity of gold which was washed down from the mountains by the river Pactolus; but there is no proof that they ever carried on the operation of mining. (Herodot., i. 93, v. 101.) But in the time of Strabo no gold was found in this river (xiii. 928); and if Herodotus had been misinformed, which is improbable since he visited Sardis, the tale might have arisen from the appearance of Mount Tmolus, which, according to a modern traveller, Chishull, as quoted by Chandler, "is adorned with bright and shining particles, resembling gold-dust." The Lydians are said by the Greeks to have been the first people who put a stamp upon gold and silver; and they claimed to be the inventors of the games which were prevalent in Greece in the time of Herodotus (i. 94).

The most extraordinary work of art in ancient Lydia was the enormous sepulchral mound of Alyattes, the father of Croesus, erected a little to the north of the river Hermus, about three or four miles from the city of Sardis. Herodotus classes it next to the great works of the Egyptians and Babylonians, and describes it as six stadia (about three-quarters of a mile) and two plethra (200 feet) in circumference; and 13 plethra (1300 Greek feet) in width. The basement was built of great stones, and the upper part of earth. (Herodot., i. 93.) Chandler visited the spot in which this mound is supposed to have been raised; he describes the ground as covered with earthen barrows or mounds of various sizes, and mentions one in particular, near the middle, larger than the rest, which he supposes to have been

the sepulchral mound of Alyattes, and conjectures that the basement of stone is now concealed by the mould, which has been washed down from the top. In the neighbourhood of this mound is the lake known to the ancients by the name of Gygma. (Homer, 'Il,' ii. 864; Herodot., i. 93.) It is described by Chandler as large and abounding in fish; its colour and taste like common pond-water, with beds of sedge growing in it. ('Travels,' p. 262.)

The most important Lydian towns were Sardis, Philadelphia, and Thyatira.

Sardis, now *Sart*, was situated on the river Pactolus, a tributary of the Hermus, in the middle of an extensive plain, now in great part a swamp. The citadel was remarkable for its strength, being built on a lofty hill, which was a perpendicular precipice on the back part towards Mount Tmolus. It is not mentioned by Homer, but some have conjectured that he speaks of it under the name of Hyde (Hm, 'Il,' xx. 385.) Sardis was taken by the Cimmerians during their invasion of Lydia, in the reign of Ardyas. (Herodot., i. 15.) It was the capital of the Lydian monarchy, and the residence of the Persian satraps of the country. It was burnt by the Athenians, B.C. 503 (Herodot., v. 100-101); at which time the houses were principally made of reeds or straw, and those built of brick had thatched roofs. Under the Romans, Sardis formed the seat of a separate provincial government. (Pliny, 'Nat. Hist.,' v. 30.) It was nearly destroyed by an earthquake in the time of Tiberius (Tac., 'Ann.,' ii. 47); but it was again rebuilt, and is frequently mentioned in the wars between the Greeks and Turks. Sart is now a 'miserable village;' there are large ruins of Sardis in the neighbourhood. Fellows mentions the remains of a colossal temple (said by Hamilton to have been dedicated to Cybele), the proportions of which resemble those of Agrigentum; they are near the Pactolus, about a mile from Sart. Among other remains he enumerates a theatre (which Hamilton says is of Roman erection), stadium, temples, which he says "may be readily traced, but the masses of wall composing the rest of the city speak with certainty only of its extent." One of the largest piles of buildings consists of distinct long rooms with circular ends and seems to have been a palace. The earth, which has fallen from the hills above it, has buried great part of the buildings of the city.

Philadelphia, now *Allah Shehr*, 28 miles S.E. from Sardis (Anton., 'Itin.,' p. 336), stands on a part of Mount Tmolus, by the river Coganus. This town was built by Attalus Philadelphus, king of Pergamus; and is still a place of some importance. "Its walls," says Fellows, "are still standing, inclosing several hills, upon the sides of which the town stood. They are built of unhewn stone, massed and cemented together with fragments of old buildings. Some immense remains of buildings, huge square stone pillars, supporting brick arches are also standing and are called the ruins of a Christian church," but Fellows supposes them to be the remains of a heathen temple.

Thyatira, now *Akhissar*, was built by Seleucus Nicator; though there appears to have been a small town on the same spot before his time, called Pelopia. (Steph. 'Byz.:' Pliny, 'Nat. Hist.,' v. 29.) Strabo mentions it as a colony of the Macedonians (xiii. p. 929). It was situated on the borders of Lydia and Mysia near the river Hyllus, on the road between Pergamus and Sardis. It was famous for the art of dyeing purple. (Acts, xvi. 14.) "Akhissar," says Fellows, who writes the name *Acsá* as he heard it pronounced, "teems with relics of a former city, although there is not a trace of the site of any ruin or early building." In a portion not exceeding one-third of the cemetery he counted 130 parts of columns, which from their measurement and different orders must have belonged to seven or eight distinct buildings. The streets of Akhissar are in places paved with fragments of carved stone. There are several columns of granite and of veined marble; and also some small columns, which were two-thirds engaged, and which Fellows pronounces to be an unerring indication of the Christian age, being probably for the interior adornment of the church. In the town, and for two miles out of it, the mouths of the wells are formed of the capitals of Corinthian pillars, the bucket being drawn up through holes cut in the centre. Thyatira, Philadelphia, and Sardis are three of the Seven Churches which are addressed in the Book of Revelations. There are Christian communities to this day in Philadelphia and Thyatira.

(Chandler, *Travels in Asia Minor*; Arundell, *Visit to the Seven Churches of Asia*; Heeren, *Researches*, &c.; Fellows, *Travels in Asia Minor*; Hamilton, *Researches in Asia Minor*; Lond. *Geograph. Journal*.)

LYDNEY. [GLOUCESTERSHIRE.]

LYME REGIS, Dorsetshire, a market-town, sea-port, and municipal and parliamentary borough, in the parish of Lyme, is situated in 50° 43' N. lat., 2° 55' W. long., distant 25 miles W. from Dorchester, 143 miles S.W. by W. from London. The population of the municipal borough of Lyme Regis in 1851 was 2661; that of the parliamentary borough was 3516. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Dorset and diocese of Salisbury.

The town of Lyme Regis had a charter as early as the 12th Edward I., from which time till the passing of the Reform Act it returned two members to Parliament. The streets are lighted, but the houses are irregularly built. The parish church is of the 14th perpendicular style, with a Norman entrance. It has been much

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improved by the vicar, Dr. Hodges, and adorned with painted glass. The Wesleyan Methodists, Baptists, Independents, and Roman Catholics have chapels, and there are British and National schools, an Infant school, and a savings bank. A pier called the Cobb, built of stone, runs out in a serpentine form into the sea. The harbour is useful as a place of refuge for small vessels during rough weather, there being no safe shelter eastward between this and the Start Point of Portland, about 30 miles distant. The number and tonnage of vessels registered as belonging to the port on 31st December 1853 were—under 50 tons, 7 vessels, 217 tons; above 50 tons, 13 vessels, 1754 tons. During 1853 there entered 195 vessels of 10,069 tons, and cleared 110 of 4703 tons. The market days are Tuesday and Friday. Fairs are held on February 13th and October 2nd.

LYMFIORD, or LÜMFIORD. [JUTLAND.]

LYMINGTON, Hampshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is agreeably situated on the right bank of the river Lymington, at a short distance from its mouth, in 50° 45' N. lat., 1° 32' W. long., distant 18 miles S.W. by S. from Southampton, and 93 miles S.W. from London. The population of the municipal borough was 2651 in 1851; that of the parliamentary borough was 5282. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The living is a curacy annexed to the vicarage of Boldre in the archdeaconry and diocese of Winchester. Lymington Poor-Law Union contains six parishes, with an area of 30,122 acres, and a population in 1851 of 12,153.

Lymington is a borough by prescription. It has returned two members to Parliament since the reign of Elizabeth. The town has a good supply of water, and is well lighted with gas and paved. As a port Lymington is subordinate to Southampton. In 1834 excellent baths were erected in the town; and other improvements have since been made. The parish church was erected in the reign of Henry VI., but it has undergone many alterations. The Wesleyan Methodists, Independents, Baptists, and Irvingites have places of worship, and there are National and British schools, a literary institute, a savings bank, and a dispensary. The chief manufactory is that of salt. The salt-works are situated on the bank of the Solent Channel, to the south-west of the town. Saturday is the market-day. The fairs, which are chiefly for cheese, are held on May 12th and October 2nd.

LYMM. [CHESHIRE.]

LYMPNE. [KENT.]

LYNCHBURG. [VIRGINIA.]

LYNDHURST. [HAMPSHIRE.]

LYNMOUTH. [DEVONSHIRE.]

LYNN, LYNN REGIS, or KING'S LYNN, Norfolk, a market-town, sea-port, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated chiefly on the right bank of the estuary of the Ouse, in 52° 45' N. lat., 0° 25' E. long.; distant 41 miles W.N.W. from Norwich, 96 miles N. by E. from London by road, and 98½ miles by the Eastern Counties and East Anglian railways. The population of the borough in 1851 was 19,355. The borough is governed by 6 aldermen and 24 councillors, one of whom is mayor, and returns two members to the Imperial Parliament. The lighting, watching, and general sanitary arrangements of the town are managed by a Local Board of Health. The livings are in the archdeaconry of Norfolk and diocese of Norwich. King's Lynn Poor-Law Union contains four parishes, with an area of 5410 acres, and a population in 1851 of 20,323.

It has been supposed that there was in the time of the Romans a town on the spot where the village of West or Old Lynn now stands, on the left side of the river. The harbour of Lynn was much enlarged by an alteration of the course of the river Ouse, the left bank of the river being to a considerable extent swept away, with one of the churches of Old Lynn. Lynn had been, previously to this, a place of considerable trade, and was especially favoured by King John, who granted it a charter of incorporation. From the 23rd of Edward I. the borough has returned two members to parliament. Henry VIII. changed the name of the town from Lynn Episcopi, Bishop's Lynn, to Lynn Regis, or King's Lynn. In the civil wars of Charles I. the town stood out for the king, but capitulated in 1643, after a siege of three weeks.

The town extends in length about a mile on the right bank of the river, and about half a mile in breadth. It is traversed or bounded by several narrow streams or 'fleets,' over which are many bridges. There is no bridge in the town over the Ouse, which is about as wide as the Thames at London Bridge; but there are bridges about a mile above the town over the Eau Brink, the old channel of the Ouse, communicating with West Lynn, Wisbeach, and the Lincolnshire Fens. The town was formerly defended on the land side by walls, of which a few fragments with one of the gates remain: the moat, which encompassed the walls, still encircles the town. On the north side of the town is St. Ann's Fort, a battery of heavy guns, intended to guard the passage of the river. The town is well paved and lighted, and supplied with water. The principal market-place comprises an area of about three acres, surrounded by many good houses. The market-cross, an octagonal building, erected in 1710, has an Ionic peristyle rising to the first story, surmounted by an open gallery. The guildhall is an ancient building of stone and flint, with court-

rooms, assembly-rooms, &c. There are a borough jail, an exchange and custom-house in one building, an excise-office, and a neat theatre. A county court is held in the town.

The church of St. Margaret is a spacious cruciform structure, containing portions of early English, decorated, and perpendicular architecture. The chancel has a fine east window, and two octagonal turrets crowning the buttresses at the angles. The nave was rebuilt in 1747, the old nave having been destroyed by the fall of the spire, 268 feet high, which was blown down in a storm. There are two western towers. The chapel of St. Nicholas, 194 feet long by 74 feet wide, consists of a lofty nave with side aisles, but without any transept or distinct choir: it is chiefly of decorated and perpendicular architecture, with large east and west windows. It has a very rich south porch, and a fine wooden roof. It had a spire 107 feet high, which was blown down on the same day as that of St. Margaret's. All Saints church is also cruciform, but smaller than St. Margaret's; the tower fell down in 1768, and demolished part of the church. St. John's church was built in 1846. The Wesleyan Methodists, Baptists, Independents, Quakers, Roman Catholics, and Mormons have places of worship. The Grammar school, founded in 1510, has an endowment of 75*l.* a year, and six exhibitions for Cambridge University. The number of scholars in 1858 was 53. There are several National and British schools; a society of arts, with 120 members, and a literary institute with 323 members in 1851; several public libraries, a savings bank, an hospital for about 60 patients, almshouses, and numerous charitable institutions.

The corn-market is held on Tuesday, and a general market on Saturday. Fairs are held in February and October. Rope-making and ship-building are carried on to some extent. Operations for deepening the channel have been carried on for some years by the Norfolk Estuary Improvement Company. The exports are chiefly corn and agricultural produce sent coastwise, and a fine white sand which is found near the town, and used in making glass. A vast quantity of shrimps, caught on the shores of the Wash, are sent to London. The imports are—corn and coal; timber from America; timber, deals, hemp, and tallow from the Baltic; wine from France, Spain, Portugal, &c. The number and tonnage of vessels registered as belonging to the port of Lynn on the 31st December 1853 were as follows:—Sailing-vessels, under 50 tons, 55, tonnage 1769; above 50 tons 122, tonnage 18,569; steam-vessels 2, tonnage 26. During the year 1853, in the coasting trade, there entered the port 1529 sailing-vessels, of 133,725 tons, and 49 steam-vessels of 5439 tons; and there cleared 365 sailing-vessels of 18,057 tons, and 51 steamers of 5661 tons. In the colonial and foreign trade the returns were—inwards, 166 vessels, tonnage 17,291; outwards, 36 vessels, tonnage 4619.

Some remains of ancient ecclesiastical edifices are in the town. A hexagonal tower 90 feet high, formerly the Gray (or Franciscan) Friars monastery, serves as a landmark to vessels entering the harbour. The Chapel of our Lady on the Mount, or Red Mount Chapel, on the east side of the town, is remarkable for the beauty of its architecture: it is a small chapel of stone, cruciform inside, but octagonal externally, erected on the walls of a more ancient building of coarse red brick, an irregular octagon, about 26 feet in diameter, with buttresses at the angles. There are beautiful walks, called the Mall, along the old fortifications on the east side of the town.

LYNTON. [DEVONSHIRE.]

LYON (the Celtic and Roman *Lugdunum*), an ancient and large city in France, capital of the department of Rhône, is situated at the junction of the Saône with the Rhône, and at an elevation of 969 feet above the level of the sea, in 45° 45' 45" N. lat., 4° 49' 33" E. long., at a distance of 240 miles in a straight line, 316 miles by railway through Dijon, S.S.E. from Paris; and had 156,169 inhabitants in the commune, according to the census of 1851. The population, including the suburbs of Croix-Rousse and La Guillotière, which at the time of taking the census formed distinct communes, is probably over 200,000. The commune of La Guillotière has been recently annexed to the city.

It is said that Lugdunum was founded by L. Munatius Plancus, commander of the Roman legions in Gaul at the time of Julius Cæsar's death, who settled here the people of Vienna (Vienne), driven from their homes by the Allobroges about B.C. 42. It seems improbable however that a situation so advantageous should have been overlooked by the Gauls; and the Celtic name Lugudunum, or Lugdunum, would lead one to think that there was a town here before the time of Plancus. Cæsar does not mention Lugdunum. About thirty years after the settlement of the Viennese Plancus established at Lugdunum a Roman colony, or rather a municipium. Augustus was in Gaul about the time, and appears to have made Lugdunum his place of residence for some time, an indication of the rising importance of the place. Agrippa, son-in-law of Augustus, made it the centre of four great Roman roads which traversed Gaul. Strabo describes Lugdunum as the most populous city of Gaul, except Narbonne (iv. 192, Casaub.). It was the great mart of the Romans, had even at that early time a mint for coining gold and silver money, and it gave name to one of the four great divisions of Gaul. An altar was erected here by sixty of the nations of Gaul, by common consent, in honour of Augustus.

Both Tiberius and Caligula appear to have favoured the town. The latter visited it, and instituted games professedly in honour of

Augustus, about A.D. 40. The emperor Claudius, himself a native of Lyon, raised it from the rank of a municipium to that of a colony, and regulated its local government. It was utterly destroyed in a single night by fire about 59. The rebuilding of the city was promoted by a grant from the emperor Nero, to whom the citizens manifested their affection and fidelity in his downfall. Upon Vitellius assuming the imperial purple they embraced his cause, and he stayed some time at Lugdunum on his way from the Rhenish provinces to Rome. Domitian, afterwards emperor, came to this city on the overthrow of Vitellius, to establish the authority of his father Vespasian in Gaul.



Coin of Lyon.

British Museum. Actual size. Silver.

In the contest of Clodius Albinus with Septimius Severus, Lugdunum became the scene of contest. In an engagement near this town Albinus was totally defeated and slain (197). Lugdunum, which had afforded a retreat to the vanquished, was pillaged by the victor, who put most of the inhabitants to the sword, and burned the town, which Herodian describes as being then large and wealthy. In the reign of Probus, Proculus was elected emperor by the people of Lugdunum, who had been ill-treated by Aurelian, and were fearful of the severity of Probus. The latter however defeated Proculus, and caused him to be put to death (280).

The usurper Magnentius, having been defeated by Constantius, sole survivor of the sons of Constantine, took refuge in Lugdunum, but was seized by the townsmen, who thus made their peace with Constantius (353). Magnentius slew himself to avoid being delivered up. While Julian held the government of Gaul under Constantius, the environs of Lugdunum were ravaged and the town nearly captured by the Allemanni. The emperor Gratian, pursued by the usurper Maximus, was overtaken and slain at Lugdunum (383). In the beginning of the 5th century, in the reigns of Honorius and his successors, the Burgundians seem to have possessed themselves of this town and of the south-eastern part of Gaul, under the sanction of the emperors, who employed them to oppose other barbarians of a fiercer character. On the overthrow of the Burgundian kingdom, Lugdunum came into the power of the Franks.

Lugdunum, during the Roman period, occupies a considerable place in ecclesiastical as well as in civil history. The Gospel had been early introduced into this part of Gaul, and here a severe persecution raged in the reign of Marcus Aurelius Antoninus (172 or 177). The churches at Vienna (Vienne) and Lugdunum sent a relation of their sufferings to those of Asia and Phrygia. Pothinus, bishop of Lyon, and perhaps the person who introduced the Gospel into these regions, was one of the martyrs in this persecution. His successor was St. Irenæus, one of the most eminent of the early Fathers.

In the division of the Frankish kingdom under the Merovingian princes, Lyon, as we may now call it, was included in the kingdom of Bourgogne (561-613). In the division of the Frankish empire among the grandchildren of Charlemagne (843), Lyon, with the district of Lyonnais, fell to the lot of the emperor Lothaire, and in the subsequent division of his states (855) it fell to Charles, king of Provence, who made it his usual residence. On his death (863) it was seized by Charles le Chauve, king of France. On the re-establishment of the kingdom of Bourgogne by Boson (879), Lyon was included in his dominions. In the troubled period of the later Carlovingian kings of France, Lyon was subject alternately to that kingdom and to the kingdom of Bourgogne Transjurane. It was in these troubled times that the counts, or governors, of Lyon succeeded in establishing a hereditary sway over the districts of Lyonnais, Forez, and Beaujolais, but not over the city of Lyon, the lordship of which was obtained by Bouchard, archbishop of Lyon, and after his time remained annexed to the see. The archbishops, whose temporal power over the city was confirmed by the emperor in 1157, received the title of Exarch: they were allowed free and independent jurisdiction, except so far as they were subject to the supreme authority of the emperor and the general laws of the empire.

At Lyon was held, in 1245, the 13th general council, in which the Pope Innocent IV. pronounced sentence of excommunication and deposition against the emperor Frederick II., on the ground of sacrilege and heresy; a new crusade for the recovery of the Holy Land was agreed upon; and it was determined to render aid to the emperor Baudouin, or Baldwin II., of Constantinople. In 1274 the fourteenth general council was held also in Lyon, attended by 500 bishops, 70 abbots, and about 1000 other dignitaries. Pope Gregory X. presided in person. At this council the emperor Paleologus and the Eastern bishops renounced by their representatives the Greek schism, accepted the faith of the Roman Church, and acknowledged the primacy of the Pope. The other proceedings of the council had for their chief object the reform of abuses among the clergy. Many other councils were held in Lyon.

About the middle of the 13th century the citizens of Lyon became

dissatisfied with the government of their ecclesiastical rulers; they elected a municipal body, between whom and the archbishop dissensions broke out, which led to the annexation of the city to the dominion of the French crown, the judicial administration remaining partly in the hands of the archbishop, partly in the municipality or consulate, as the civic council of Lyon was called. The citizens had the right to elect their own magistrates, and to control the receipts and outlay of the municipal officers; they were also exempt from the jurisdiction of any courts but those established in the city. Under this government the town increased in population, wealth, and commerce till the 16th century, when it suffered much at the hands of the Huguenots, but recovered its prosperity in the 17th and 18th centuries. In the year 1793, during the government of the Convention, the people of Lyon rose against the tyranny of the Revolutionary Club which had been established in the city, and seizing the town-hall put Challier, the president of the club, to death. To avenge this affront the Convention sent an army of 60,000 men, with a hundred pieces of cannon. The town was bombarded, and obliged, after a siege of sixty-six days, to yield to famine and force; and during the cruelties that followed in the next five months nearly 6000 victims perished, including those who fell in the defence; the principal buildings were demolished; and a new name, Commune Affranchie, was given in mockery to the city. This dreadful blow, together with the long war which followed the French revolution, caused the commerce and manufactures of Lyon to languish; but under the empire it rose again to prosperity. The city capitulated to the Austrians in 1814. On the return of Napoleon I. from Elba in 1815, his cause was espoused by the Lyonnese. In 1831 and 1834 Lyon was the scene of great disturbances, which originated in the disputes of the trades-unions with the master-manufacturers respecting wages, but had also connection with the republican party who headed the insurrection, and were ready to make it subserve their own purposes. In the last-mentioned year the insurgents by barricading the suburbs contested the possession of the town for two days with the military, but at the end of that time they laid down their arms.

The city of Lyon is very advantageously situated on the line of railway from Paris to Marseille, and on two navigable rivers, the Rhône and the Saône, in the fork between which the greater part of the town is built. This part of Lyon consists mostly of narrow crooked dirty streets, formed by solidly built houses of 7 or 8 stories high. To afford room for the extension of the town southward the two rivers have been made to meet about a mile below their original junction, thus forming the peninsula of Perrache, on which the streets are built with more regularity and elegance, and some beautiful promenades are laid out. The old fortifications between the city and the hill and suburb of Croix-Rousse prevented the extension of the town northward, but by a decree of the French Republic, dated March 1848, these fortifications were ordered to be demolished, and a wider enceinte to be constructed, so as to include this suburb. A considerable part of the town lies on the right bank of the Saône, both shores of which are lined with quays. Here also is the steep hill and suburb of Fourvières on the south-west; and the suburbs of Serin and Vaise on the west. On the left bank of the Rhône are the suburbs of Brotteaux and Guillotière; its right bank is lined with quays throughout the whole length of the city, some of them being planted with trees and forming delightful promenades.

The suburbs of Fourvières and Croix-Rousse are chiefly inhabited by silk-weavers. The hill of Fourvières is said to derive its name from *Forum-Vetus*, an ancient Roman structure which stood on its summit, and on the site of which the church of Notre-Dame is now built. The remains of an aqueduct and amphitheatre have been found on this hill. From the terrace close by this church, or from a tower erected near it, the view over the city of Lyon, its two noble rivers, its squares, chief structures, quays, avenues, and bridges, the hills and plains in the vicinity, of the snowy peak of Mont Blanc and the Alps of Dauphiné in the far distance, presents one of the most varied and most beautiful panoramas in Europe.

The Rhône, which runs along the eastern side of the town, flows with a rapid current 656 feet wide, and is spanned by four bridges, that unite the city to the populous suburbs of Guillotière and Brotteaux, which are protected from the inundations of the river by high embankments. The Saône flows in a gentle current with a breadth of 492 feet along the base of the hill Fourvières, a projecting crag of which formerly blocked up the passage along the right bank, but was cut through by the Romans, and hence it got the name of *Petra Excisa*, still remaining in the modern name *Pierre-Scise*. The Saône is crossed by nine bridges.

Of the 50 squares or open spaces in the city, the finest are—the *Place-Bellecour*, which is planted with lime-trees and is one of the largest squares in Europe; and the *Place-des-Terreaux*, of which the town-hall and the *Palais-des-Arts* form two sides. In the latter a

colossal equestrian statue of the Emperor Napoleon I. was erected in 1852.

The public structures of Lyon are numerous, and, with some exceptions, more remarkable for solidity than elegance. Among the chief religious edifices are—the splendid cathedral of St.-Jean, on the right bank of the Saône, the churches of St.-Pierre, d'Ainai, de l'Observance, Notre-Dame-de-Fourvières before mentioned, St.-Nizier, St.-Bonaventure, St.-Polycarpe, des-Chartreux, St.-Georges, St.-Irénee, and St.-Just. These, together with the palace of the archbishop, form a series of buildings interesting for their architecture, extent, decorations, and antiquity. Among the civic structures are the prefect's residence, once a convent; the town-hall, the finest building of the kind in France; the court-house, on the Quai-de-la-Saône; the public library the *Palais-des-Arts*, in which are an exchange, galleries of paintings and sculptures, cabinets of medals, collections of minerals, and of natural history, specimens of silk manufactures, &c.; the *Loge-du-Change*, formerly an exchange, now a Calvinist church; the college, situated on the Quai-du-Rhône; the mint; the general hospital, or *Hotel-Dieu*; the *Maison-de-la-Charité*, or asylum for the poor; the hospital de l'Antiquaille, built on the site of the Roman palace in which Claudius, Caligula, and Germanicus were born; the *Mont-de-piété*; the prisons; the two theatres; and the numerous barracks.

The fortifications of Lyon are formed by a series of detached forts, seven of which are built on the left bank of the Rhône, and the rest on the heights of Croix-Rousse, and the hills on the right bank of the Saône. The environs of Lyon are dotted with numerous country seats, gardens, and vineyards.

Lyon is an important manufacturing town. The staple articles of industrial produce are silk-stuffs of all descriptions, which for solidity of texture, richness and permanence of dye, and beauty of design are not equalled in the world. In this manufacture about 100,000 of the population are directly or indirectly concerned. Cashmere and silk shawls, ribands, cotton-cloth, hosiery, hats, printed calico, jewellery, liqueurs, chemical products, gold and silver lace, crapes, tulle, glue, sheet lead, musical strings, ornamental paper, &c., are also manufactured. There are besides, numerous printing-establishments, dye-houses, metal-foundries, glass-works, potteries, tan-yards, breweries, boat-building yards, &c.

Lyon is also, from its advantageous position, a place of great commerce. The products, imported into the town for its own consumption, or for re-exportation, are wine, brandy, oil, hemp, flax, soap, rice, chestnuts, salt, raw cotton, coffee, indigo, sulphur, lead, teazles, madder and other dye-stuffs, &c. Timber, firewood, building-stone, and asphalt are the chief articles brought down the Rhône to this city. Down the Saône are brought timber of all kinds, oak-staves, fire-wood, charcoal, tanning-bark, iron and iron-ore, gypsum, hay, straw, corn, building-stone, bricks, tiles, &c. Steamers ply on the Saône to Chalon-sur-Saône; on the Rhône down to Avignon and Arles, and up as far as Seyssel. The town has communication with the Rhine by the Canal-du-Rhône-au-Rhin; and with Paris by the Saône and the canals that join it to the Seine. Railroads unite Lyon with Paris and with the great manufacturing town of St.-Etienne, and the extensive coal-fields of the department of Loire. A railway is in course of construction southward to Avignon, whence it is completed to Marseille.

Lyon gives title to an archbishop, whose see includes the departments of Rhône and Loire. It is the seat of a High Court of Justice, which has jurisdiction over the departments of Ain, Loire, and Rhône; and of a University-Academy, the limits of which comprise the departments just named and also Saône-et-Loire. It is also the head-quarters of the 8th Military Division, which includes the departments of Rhône, Loire, Saône-et-Loire, Ain, Isère, Hautes-Alpes, Drôme, and Ardèche. There are also in Lyon faculties of theology and the sciences, a secondary school of medicine, and a college. The city has also a tribunal of first instance, a tribunal and chamber of commerce, a council of Prud' Hommes, an academy of sciences and arts, a diocesan seminary, a preparatory theological college, a school of the fine arts, a mint, an establishment for deaf mutes, a school of arts and trades, besides various other literary, scientific, and benevolent institutions.

(*Dictionnaire de la France; Almanac pour l'An 1853; Official Papers; L'Art de Vérifier les Dates*, vol. iii.) [See SUPPLEMENT.]

LYONNAIS, a former province of France, which now forms the departments of Rhône and Loire. It was divided into Lyonnais proper, of which Lyon was the capital; Franc-Lyonnais, chief town Neufville; the Beaujolais, capital Villefranche; and the Forez, which had Fourvières for its chief town.

LYS. [BELGIUM.]

LYS, ST. [GARONNE, HAUTE.]

LYTCHETT MATRAVERS, and LYTCHETT MINSTER.

[DORSETSHIRE.]

LYTHAM. [LANCASHIRE.]

M

MAAS. [MEUSE.]

MAASEYK. [LIMBURG.]

MAAS-SLUIS, or MAASLAND-SLUIS. [HOLLAND.]

MAASTRICHT. [LIMBURG.]

MACAIRE, ST. [GIRONDE.]

MACAO, an island at the south-western mouth of the Choo-Kiang or Canton River in China. It terminates to the southward in a peninsula running in the direction of north-east to south-west for a length of more than two miles, with a breadth of half a mile where widest, and is connected with the rest of the island by a long narrow isthmus about 100 yards across. On this peninsular projection stands the Portuguese town and settlement of Macao; the rest of the island is held by the Chinese who have built a wall, with a gate and guard-house in the centre, across the isthmus. The town is built on declivities round the harbour, the shore beneath being embanked so as to form a marine parade, backed by a terrace of white houses, above which Chinese and European houses are intermingled. The principal buildings are the church and college of St. Joseph, 11 other churches, the senate-house, and several Chinese temples. The house in which Camoens wrote part of the 'Lusiad' still exists. The harbour which lies north and west of the town, and between it and the island of Patara, is not deep enough for large ships; these anchor in the Macao roads on the east side of the peninsula from 5 to 10 miles E.S.E. from the town. The Chinese regulations permit none but Portuguese or Spanish vessels to trade at Macao; but through the connivance of the Chinese officials, and the readiness of the Portuguese inhabitants to lend their names to foreigners who wish to be associated with them for the purpose of trading to the port, vessels of other nations have little difficulty, generally speaking, in lading or discharging in the roads by means of Portuguese boats. The Portuguese obtained possession of the peninsula of Macao in 1586, and made it for a long time the centre of an extensive commerce with China, Japan, the Philippines, and other eastern countries. For many years the trade has been of little importance. Indeed Macao may be said to be a place without any manufactures or commerce of its own. It is merely a place for landing goods, which are afterwards sent for sale to Canton. Goods imported (comprising cotton, broadcloth, camlets, betel-nut, tin, edible birds'-nests, rattans, saltpetre, pepper, opium, gold and silver, &c.) pay a moderate duty at the Portuguese custom-house. No cognisance is taken of goods exported, nor do they pay any duty.

The population of the peninsula is about 13,000, more than half of whom are Chinese; the whole island has a population perhaps exceeding 20,000. The Chinese part of the island, to which the Portuguese are rarely admitted, has a light sandy soil, and is extremely well cultivated, being made to yield all kinds of potherbs and vegetables. The town receives its supplies from the Chinese part of the island or from the mainland. When the Portuguese give offence to the Chinese the gate of the isthmus is shut, and all supplies and intercourse are cut off till satisfaction is made. The Portuguese govern themselves. The administration is vested in a governor and senate composed of the Catholic bishop, the judge, and a few of the principal inhabitants; but all real authority is in the hands of the Chinese mandarin resident in the town. The harbour of Macao is defended by six forts. Besides the college of St. Joseph the Portuguese have an endowed grammar school, and an orphan asylum. Macao is about 80 miles from Canton. The flagstaff is in 22° 12' 45" N. lat., 113° 35' E. long.

MAC CARTHY'S ISLAND. [GAMBIA, Colony of.]

MACASSAR. [CELEBES.]

MACCLESFIELD, Cheshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Prestbury, is situated on the river Bollin, in 53° 15' N. lat., 2° 6' W. long., distant 34 miles E. by N. from Chester, 167 miles N.W. by N. from London by road, and 165½ miles by the North-Western and North Staffordshire railways. The population of the borough in 1851 was 39,048. The borough is governed by 12 aldermen and 36 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry and diocese of Chester. Macclesfield Poor-Law Union contains 41 parishes and townships, with an area of 65,078 acres, and a population in 1851 of 63,322.

In 1260 the son of Henry III., as Earl of Chester, made Macclesfield a free borough. Various advantages were granted to the burgesses in later times. Macclesfield is a chief seat of the silk-throwing trade, which progressively advanced from 1808 to 1825, when it attained its greatest prosperity. The manufacture is still very considerable. Almost every variety of silk, including the finest kind, is manufactured here. The mills are mostly situated on the Bollin. Macclesfield possesses also several cotton-factories, dye-works, foundries, and breweries. Small wares are extensively made. Coal, slate, and stone are found in the neighbourhood.

Macclesfield is situated on the west side and at the base of a range of high land on the border of Cheshire which forms part of the mountain region of Derbyshire. A canal which unites the Grand Trunk and Peak Forest canals passes close to Macclesfield, and thus opens a water communication with most parts of England. The town contains four principal streets, diverging from the market-place in various directions; the streets are partially paved, the town is lighted with gas, and the sewerage is good. Baths and wash-houses were established in 1850. The town-hall is a good building. A subscription library, founded in 1770, has above 20,000 volumes, and contains likewise the public records. The court-house and jail are situated in the market-place. A county court is held in the town.

There are in all seven churches. The oldest and finest, St. Michael's church, was founded by Eleanor, queen of Edward I., in 1278: the chancel, which has been rebuilt, contains a painted window. The Independents, Wesleyan, Primitive, New Connexion, and Association Methodists, Baptists, Roman Catholics and Mormons have places of worship. The Free Grammar school was endowed with lands in 1502 by Sir John Percyval, Lord Mayor of London, a native of Macclesfield. It was refounded by Edward VI. The annual revenue is 1500*l.* The number of scholars in 1853 was 39. A Commercial school is also supported on the foundation, and the Grammar school has two exhibitions. In the town are National and Infant schools, and schools supported by the Wesleyan Methodists and the Roman Catholics. There are a school of design, established in 1851; a useful knowledge society, which had 518 members in 1851, and 2000 volumes in its library; a museum; a dispensary; and a savings bank. The corn and butchers' markets are held on Tuesday and Saturday. Fairs are held on May 6th, June 21st, July 11th, October 4th, and November 1st.

MACEDO'NIA, in the time of Strabo, included a considerable part of Illyria and Thrace; but Macedonia proper may be considered as separated from Thessaly on the south by the Cambunian Mountains; from Illyria on the west by the great mountain chain called Scardus and Bernus, and which under the name of Pindus also separates Thessaly from Epirus; from Mœsia on the north by the mountains called Orbelus and Scomius, which run at right angles to Scardus; and from Thrace on the east by the river Strymon. The Macedonia of Herodotus was however still more limited, as is afterwards mentioned. Macedonia proper, as defined above, is watered by three rivers of considerable size, the Axius, the Lydias, and the Haliacmon, all of which flow into the Thermaic Gulf (Gulf of Saloniki). The most easterly as well as the largest of the three, the Axius (Vardar), flows from the ranges between Scardus and Orbelus, in the north-west of Macedonia, and is increased by several tributaries, and particularly the Erigon (Kuchuk Kara-su), which rises in the mountains between Macedonia and Illyria. The next river to the west of the Axius is the Lydias (called at the present day Kara Azmac, on the coast, and Potova in the interior), which flowed, according to Strabo (vii. 'Extracts,' sec. 9, vol. ii. p. 130, Tauchn.), through the lake on which Pella is situated into the sea. It now joins the Axius about a league above the entrance of the latter into the sea. To the west of the Lydias is the Haliacmon, which flows from the Cambunian Mountains; in the time of Herodotus it joined the Lydias (vii. 127), but at present it flows directly into the sea to the south-west of the mouth of the Axius. The Haliacmon was called Astræus, probably from the gorges of Beræa; the modern corresponding names are Injëkara and Vistriza. The whole of the district on the sea-coast, and to a considerable distance in the interior, between the Axius and the Haliacmon, is very low and marshy. [AXIUS.]

From the mountains which divide Illyria and Macedonia two mountain ranges run towards the south-east, separating the valleys of the Haliacmon, the Lydias, and the Axius: the most southerly of these ranges, which is between the Haliacmon and Lydias, was called Bermius; and the most northerly, between the Lydias and the Axius, Dysorum, in one part of its course at least. The only other rivers of any importance were the Strymon and the Angites, whose valleys were separated from that of the Axius by a range of mountains which runs from Orbelus on the north towards the peninsula of Chalcidice. The Strymon (Struma) rises in Mount Scomius and flows into the Strymonic Gulf (Gulf of Orphano). Not far from the sea it forms a lake, called Cercinitis (Kerkine), into which the Angites flows from the eastward. [AMPHIPOLIS.]

The origin and early history of the Macedonians are involved in much obscurity. Some moderns have attempted to derive the name from the Kittim mentioned in Gen. x. 4; Numb. xxiv. 24; Jer. ii. 10; Ezek. xxvii. 6; Dan. xi. 30. In the book of Maccabees, Alexander the Great is said to come from the land of Chaitteim (1 Macc. i. 1), and Perseus is called king of the Kittians (1 Macc. viii. 5). Whatever the origin of the name, there is abundant reason for believing that the Macedonian princes were of Hellenic race, and that the Macedonians themselves were an Illyrian people, though the

country must also have been inhabited in very early times by many Hellenic tribes. The Greeks always regarded the Macedonians as a people not of Hellenic origin; and the similarity of the manners and customs, as well as the languages, as far as they are known, of the early Macedonians and Illyrians, appear to establish the identity of these two nations. In the time of Herodotus, the name of Macedonia comprehended only the country to the south and west of the Lydias, for he observes that Macedonia was separated from Bottissis by the united mouth of the Lydias and Haliacmon. (Herodot., vii. 127.) How far inland Herodotus conceived that Macedonia extended does not appear from his narrative. According to many ancient writers, Macedonia was originally called Emathia (Plin., 'Nat. Hist.', iv. 17; Justin, vii. 1; Gell., xiv. 6); but we also find traces of the name of Macedonians from the earliest times, under the ancient forms of Maketa and Makedni. They appear to have dwelt originally in the south-western part of Macedonia near Mount Pindus (Herod., i. 56; viii. 43), whence they emigrated in a north-easterly direction.

There are various accounts of the origin of the Macedonian monarchy, but all agree in asserting that the royal family was descended from the race of Temenus of Argos. (Herodot., viii. 137-139; Thucyd., ii. 99.) Perdiccas is usually regarded as the founder of this empire, the dominions of which were first confined to the country in the neighbourhood of Edessa between the Lydias and the Haliacmon, but afterwards extended as far as the Axios, and subsequently along the coast as far as the Strymon. Very little however is known of the history of the country till the reign of Amyntas I., who was king of Macedon at the time of the expulsion of the Pisistratides from Athens, B.C. 560. This monarch submitted to Megabyzus, who had been left in Europe by Darius after the failure of his Scythian expedition; and Macedonia was considered a province of the Persian empire till the battle of Platæa delivered it from subjection to the king of Persia.

Amyntas was succeeded by his son Alexander I., who was obliged to accompany the Persian army into Greece, but was able on several occasions to render important services to the Grecian cause. Alexander was not allowed to contend at the Olympian games until he had proved his Argive descent. (Herodot., v. 22; Justin, vii. 2.) The time of Alexander's death is uncertain, but he lived at least to B.C. 463 (Plutarch, 'Cimon', c. 14.) He was succeeded by Perdiccas II., a fickle and dishonourable prince, who took an active part in the Peloponnesian war, and alternately assisted Athens and Sparta as his interests or policy dictated. His successor Archelaus (B.C. 413) was the wisest monarch that had yet sat upon the throne of Macedon. He effected greater improvements in his kingdom, according to Thucydides, than all the other monarchs together who had preceded him (ii. 100). He greatly improved the condition of his army; he erected forts to repress his barbarous neighbours; constructed roads; and endeavoured to diffuse among his subjects a love of Grecian literature and refinement. He is said to have invited Socrates to settle at his court, and Euripides resided there during the latter part of his life.

On the assassination of Archelaus, B.C. 399, the greatest confusion prevailed; and it was not till the accession of Amyntas II. (B.C. 393), that anything like order was restored to the country. But even during the greater part of his reign Macedonia was distracted by intestine commotions and foreign enemies; and on his death, B.C. 369, the same state of confusion prevailed that had followed the death of Archelaus. Amyntas was succeeded by his eldest son, Alexander II., who was assassinated at the end of the first year of his reign by Ptolemy Alorites, who held the supreme power for three years as regent during the minority of Perdiccas; but, in consequence of abusing his trust, he was cut off by Perdiccas, B.C. 364. Perdiccas, after a reign of five years, fell in battle against the Illyrians, B.C. 359, and was succeeded by his younger brother, the celebrated Philip, who succeeded to a kingdom assailed by numerous enemies and weakened by intestine commotions, and left it to his son, Alexander the Great, the most powerful monarchy in Europe. The career of Alexander, which put an end to the Persian empire, and established the short-lived Macedonian empire, cannot be traced in a sketch like this. It may be sufficient to state here, that in the commotions consequent upon Alexander's death the royal family was finally destroyed, and Cassander obtained at first the power and eventually the title of king of Macedon. Cassander was succeeded by his son Philip, B.C. 296, who reigned only two years; and on his death, in B.C. 294, his two younger brothers, Antipater and Alexander, having quarrelled respecting the succession, the throne was seized by Demetrius, the son of Antigonus, who reigned for seven years. He was driven from his kingdom, B.C. 287, by Pyrrhus, king of Epirus, who was however deposed in his turn, after a short reign of seven months, by Lysimachus, king of Thrace.

On the death of Lysimachus, who fell in battle, B.C. 281, the country remained in almost a state of anarchy for many years. The invasion of the Gauls from B.C. 280 to B.C. 278, and the contests between the numerous pretenders to the throne, brought the country to the brink of ruin. Eventually Antigonus (surnamed Gonnatas), the son of Demetrius, was proclaimed king; but he was dethroned by Pyrrhus, who again obtained the kingdom on his return from Italy. After the death of Pyrrhus, Antigonus regained possession of the throne, which he retained till his death, B.C. 239. The two following monarchs,

Demetrius II. (B.C. 239-229) and Antigonus II. (B.C. 229-220), were principally occupied in the Grecian wars which followed the formation of the Achaean league.

Philip V., who succeeded Amyntas, alarmed at the increasing power of the Romans, entered into an alliance with Hannibal; but was never able to afford him any effectual assistance, in consequence of continual wars with the Ætolians and Illyrians. On the conclusion of the war with Carthage, Philip found that he was unable to cope with the Roman power; and after continuing the contest for a few years, was obliged to sue for peace on such terms as the victors chose to grant. Philip was succeeded by Perseus, B.C. 178, who carried on war against the Romans, and was finally conquered, B.C. 168. Macedonia was not immediately converted into a Roman province, but was divided into four districts, which were considered independent, and governed by their own laws, and of which the capitals were respectively—Amphipolis, Thessalonica, Pella, and Pelagonia. Macedonia was reduced to the form of a Roman province, B.C. 142.

It is very difficult to determine the boundaries of the Roman province of Macedonia. According to the 'Epitomizer' of Strabo (vii.), it was bounded by the Adriatic on the west; on the north by the mountains of Scardus, Orbelus, Rhodope, and Hæmus; on the south by the Via Egnatia; and on the east it extended as far as Cypæla and the mouth of the Hebrus. But this statement with respect to the southern boundary of Macedonia cannot be correct, since we know that the province of Macedonia was bounded on the south by that of Achaëa; and although it is extremely difficult, if not impossible, to fix the precise boundaries of these provinces, yet it does not appear that Achaëa extended farther north than the south of Theasaly.

Macedonia was inhabited from the earliest times by numerous tribes, whose names continued to be given till a late period to various districts of the country. The most important of these divisions were—Mygdonia, Bottissis or Bottisæa, Pieria, Elimeæ, Stymphalia, Orestis, Lynceus, Kordia or Eordæa, Emathia, Pæonia, and Chalcidica.

Mygdonia, on the Thermaic Bay, was separated from the district of Bottissis, or Bottisæa, by the Axios (Herodot., vii. 123); but its boundaries on the east are doubtful. Thucydides makes it extend as far as the Strymon (ii. 99); but this is at variance with the statement of Herodotus, who speaks of the land to the west of the Strymon under the name of Bisaltia. (Herodot., vii. 116.) Mygdonia was originally occupied by the Edones, a Thracian people, who were expelled thence by the Temenidæ. (Thucyd., ii. 99.) The principal town in this district was *Therme*, afterwards called *Theasalonica* by Cassander in honour of his wife, who was daughter of Philip. (Strabo, vii. 'Excerpta,' sec. 10, vol. ii. p. 131.) It was a large and prosperous town, and exists at the present day under the name of Saloniki. The apostle Paul addressed two epistles to the Christian converts in this town. The lake *Bolbe*, called at the present day *Betchik*, was either in or near Mygdonia (Thucyd., i. 58); it is said by Dr. Clarke to be about 12 miles in length, and 6 or 8 miles in breadth. To the west of *Bolbe* was another and smaller lake, which is now called *St. Basilii*.

The *Bottissis*, or *Bottisæa*, of Herodotus, was bounded on the east by the Axios, on the west by the united mouth of the Haliacmon and Lydias (vii. 127), and on the north by Emathia. The principal town of Bottissis was *Pella*, situated on the lake through which the Lydias flows, which afterwards became the residence of the kings of Macedon. Pella was a small place till the time of Philip, by whom it was greatly enlarged and beautified. (Strabo, vii. sec. 9, vol. ii. pp. 130, 131.) The ruins of Pella may still be seen at *Alakilisseh*. Near the mouth of the Lydias was the town of *Ichnæ*, celebrated for an ancient temple. (Herodotus, vii. 123; Pliny, 'Nat. Hist.', iv. 17; Mela, ii. 3; Hesych., under *Ἰχναίων*.) Thirty miles to the south-west of Pella, at the foot of Mount *Bermius* (Pliny, 'Nat. Hist.', iv. 17), was the ancient city of *Berrhæa*, or *Bereæ*, which is mentioned in the Acts of the Apostles (xvii. 10).

Proceeding along the coast, we come to *Pieria*. The ancient district of Macedonia originally intervened between Bottisæa and Pieria. According to Strabo (vii. sec. 8, vol. ii. p. 130), and Livy (xlv. 9), Pieria was bounded on the south by Dium; but in more ancient times the name was probably applied to all the country between Macedonia and the Peneus. Ptolemy calls the country between the mouth of the Lydias and that of the Peneus by the name of Pieria. Pieria was celebrated in Grecian mythology as the first seat of the muses. *Pydna*, the chief place in this district, also called *Cydna* (Steph. Byz.), and *Citron*, according to Strabo (vii. sec. 8, vol. ii. p. 130), known at the present day under the name of *Kidros*, is said to have been a Greek city, and was for some time in possession of the Athenians; but was afterwards taken by Philip, and given to Olynthus. The battle between Perseus and Æmilius, which decided the fate of the Macedonian monarchy, was fought near *Pydna*. South of *Pydna* was the town of *Dium*, at the foot of Mount Olympus, of which Livy has given a short description (xlv. 6, 7). It afterwards became a Roman colony. (Pliny, 'Nat. Hist.', iv. 17.) Forty stadia to the north of *Pydna* was *Methone* (Strabo, vii. sec. 8, vol. ii. p. 130), at the siege of which Philip, the father of Alexander the Great, lost an eye.

In the interior, to the west of Pieria, in the valley of the Haliacmon, was the district of *Elimeæ*, the inhabitants of which were called *Elimiotæ*. In the time of Thucydides, Elimeæ was subject to the Macedonian monarchs, but was governed by its own princes (ii. 99)

There was a road from Elimea to Thessaly over the Cambunian Mountains (Livy, xlii. 58), and another to Ætolia (Livy, xliii. 21).

South-west of Elimea was the district of *Stymphalia*, which was annexed to Macedon on the conquest of Perseus by the Romans (Livy, xlv. 30), together with the country of the Atintani and Paravæi, which extended to the west of Elimea, in Illyria and Epirus.

North-west of Elimea was the district of *Orestis* (Polyb., xviii. 30; Liv., xxxiii. 34), which probably derived its name, as Müller has remarked, from the mountainous nature of the country (*σπος*, mountain), and not from Orestes, the son of Agamemnon. The Orestæ appear to have been independent of the Macedonian kings for a considerable time; they were however obliged at length to submit to their authority, but were declared independent again on the conquest of Macedonia by the Romans (Livy, xxxiii. 34). The principal town in this district was Celetrum, situated on a peninsula, which ran into a lake of the same name (the modern Kastoria, or Kessie).

Lyncus, or *Lyncæstis*, the country of the Lyncestæ (Thucyd., iv. 83, 124; Liv., xxvi. 25; xxxi. 33; xxxii. 9), north of Orestis, was surrounded by mountains on all sides. It contained no towns of any importance except Heraclea, which was situated on the great Egnatian road. The Lyncestæ were governed by an independent prince of the name of Arrhibæus during the early part of the Peloponnesian war. (Thucyd., iv. 124.)

To the east of Lyncus, and north of Elimea and the Bermius, was the district of *Eordia*, or *Eordæa*, in the valley of the Lydias. The Eordians are said to have been driven out of their country, which however still continued to bear the name of Eordia, by the Temenidæ, and to have settled afterwards about Physca, which was probably a town in Mygdonia. (Thucyd., ii. 99.)

Emathia, which was afterwards limited to the country north of Bottiæ, in the valley of the Lydias, was the name, as has been already remarked, by which the country was originally called, according to many ancient writers. The chief town in this district, *Æga*, afterwards called *Edessa* (*Vodina*), was the capital of the Macedonian kingdom in the earliest times; and even when it had ceased to be the royal residence, it still continued the burial-place of the kings. It was a large city in the time of Livy (xiv. 30). It stood on the Via Egnatia, 80 miles west of Pella.

The northern part of Macedonia was inhabited by various tribes of Pæonians: of which the principal were the Pelagonians, who dwelt north of Lyncestis. The chief town of this district was also called Pelagonia. The Agrians, north-east of the Pelagonians, were a powerful Pæonian tribe, living near the sources of the Strymon. (Strabo, vii. a. 18, vol. ii., p. 133.)

The peninsula south of Mygdonia, between the Thermaic and Strymonic gulfs, was called *Chalcidice* from the Chalcidians of Eubœa, who formed settlements in this country in very early times. The peninsula of Chalcidice comprised in the south three smaller peninsulas: Pallene, formerly called Phlegra (Strabo, vii. a. 12; vol. ii. p. 131), between the Thermaic and Toronaic gulfs; Sithonia, between the Toronaic and Singitic gulfs; and Acté, as Thucydides calls it (iv. 109), or Athos, according to Herodotus (vii. 22), between the Singitic and Strymonic gulfs. [Ἄθος.] The peninsula of Chalcidice, together with the three smaller peninsulas, contained several important towns, which are frequently mentioned in Grecian history.

Potidæa, afterwards called *Cassandria* from Cassander, king of Macedon, founded by the Corinthians (Thucyd., i. 56), stood on the narrow isthmus which connects the peninsula of Pallene with the mainland. It sent 300 men to Plataea (Herodot., ix. 28), and after the Persian war was subject to the Athenians. Potidæa revolted from Athens, B.C. 432; and was not taken till after a siege of two years, when the Potidæans surrendered and were allowed to quit the place. A mutilated inscription in elegiac verse, now in the British Museum, commemorates the courage of those Athenians who fell in a battle before this town, B.C. 432. An Athenian colony was afterwards sent to occupy the town. (Thucyd., ii. 70.) It subsequently fell under the power of Philip of Macedon, and continued from that time subject to the Macedonian kings. The other towns of Pallene were Aphytis, with a celebrated temple of Bacchus; Mende, a colony of Eretria in Eubœa (Thucyd., iv. 123), which revolted from the Athenians, B.C. 423, and was retaken by Nicias and Nicostratus; and Solone, said to have been founded by the Pellenians from Achaia in Peloponnesus, which also revolted from the Athenians, B.C. 423, but was retaken, and the inhabitants treated with great cruelty; the town and lands were afterwards given to the Plataeans. (Thucyd., v. 82.)

At the head of the Toronaic Gulf was the important town of Olynthus, founded by the Chalcidians and Erethrians of Eubœa. [ΟΛΥΝΘΙΟΥΣ.] The chief town in Sithonia was Torone, on the south-western coast, which was also probably founded by the Eubœans. Torone was for a long time subject to the Athenians, but afterwards belonged to the Olynthian confederacy, and was eventually united to the Macedonian monarchy by Philip.

The peninsula of Acté, or Athos, was inhabited in the time of Thucydides by a few people of Chalcidic origin, but principally by Pelasgians, Bisaltæ, Crestonians, and Edoneæ, who dwelt in small fortified villages. (Thucyd., iv. 109.) At the extremity of this peninsula was Mount Ἄθος. The canal which Xerxes cut across the isthmus

can still be distinctly traced. Acanthus, situated on the isthmus which connects the peninsula with the mainland, was once an important town. [Ἄθος.] The chief towns in the interior of the peninsula of Chalcidice were Chalcis and Apollonia, mentioned in the Acts of the Apostles (xvii. 1).

The Via Egnatia, which formed one great line of communication between the Ionian Sea and Byzantium, commenced at Apollonia in Illyria, and was joined at Clodiana on the Genusus by the Via Candavia, from Dyrrachium, which however is also called the Via Egnatia. (Strabo, vii. sec. 3.) The Via Egnatia entered Macedonia in the district of Lyncus, and passed by the towns of Edessa, Pella, Thessalonica, Apollonia, and Amphipolis, where it entered Thrace.

MACERATA-E-CAMERINO, a province of the Papal States, forming part of the old division called the Marches, is bounded N. by the provinces of Ancona and Urbino-e-Pesaro, E. by the Adriatic, W. by the province of Perugia, and S. by those of Spoleto and Fermo-ed-Ascoli. Its area is 1173 square miles, and its population in 1843 was 264,030. The country slopes towards the north-east from the foot of the central Apennine chain to the coast of the Adriatic. The principal rivers are the Potenza, Chienti, and Musone, which rise in the Apennines and flow into the Adriatic.

The province of Macerata is in part very mountainous and barren; but the valleys and plains towards the sea-coast produce abundance of corn, wine, most kinds of fruit, and very good silk. The coast along the Adriatic has no harbour which deserves the name. Recanati has an anchoring-place for small vessels at the mouth of the river Potenza, where some trade is carried on.

The chief towns are the following:—*Macerata*, on a hill in a fine country watered by the Chienti, is a well-built town, with 16,000 inhabitants. It has several churches and convents with good paintings, a college, and a university with a library containing 20,000 volumes, a court of appeal, a handsome town-house, and several fine private palaces, amongst which the Palace Compagnoni is the most remarkable. Macerata is a bishop's see and the residence of the delegate. It carries on a considerable trade in born, silk, and cattle.

Loreto is famous for its sanctuary of the Madonna, called the Santa Casa, or Holy House, which is said to be the house in which the Virgin Mary lived at Nazareth, and to have been miraculously carried, first to the hill of Tersatto, above the town of Fiume in Dalmatia, and finally in 1294 to its present site, on a hill about 15 miles S.E. from Ancona, and 3 miles from the Adriatic coast. The ground on which the house was deposited belonged to a woman named Lauretta, whence the name of Loreto. The city which has grown up around the sanctuary is well built, and contains 8000 inhabitants. The square in which the church called Chiesa della Santa Casa is situated is occupied on one side by a house belonging to the Jesuits; on the other side by the palace of the governor, a noble building, erected after designs by Bramante; in the centre is a fine bronze statue of Pope Sixtus V., seated, and giving the benediction. Over the central door of the façade of the church, which forms the third side of the square, is a full-length bronze statue of the Virgin and Child, by Girolamo Lombardo. The great ornaments of the interior are three superb bronze doors, which are divided into compartments, filled with bas-reliefs representing various events recorded in the Old and New Testaments and the triumphs of the Church. The Campanile, which is of great height, was designed by Vauvitelli; it exhibits a combination of the four orders, and is surmounted by an octagonal pyramid containing a bell 22,000 lbs. weight. The vault of the nave is painted in chiaroscuro, the subjects being taken from the prophetic books of the Holy Scriptures. But the great wonder of this celebrated church is the Santa Casa itself, which is said to be the birthplace of the Blessed Virgin, the scene of the Annunciation and Incarnation, and the residence of the Holy Family after the return from Egypt. It is a small brick house, with one door facing the north and one window facing the west, and it is built in the rudest manner. Above the fireplace is a celebrated statue of the Blessed Virgin and the Infant Jesus, reputed to have been sculptured by St. Luke: it is of the cedar of Lebanon, and quite black with age. The Santa Casa is cased with white marble, and this casing is one of the most remarkable works of modern art. It was designed by Bramante, and executed by Sansovino, Girolamo Lombardo, Bandinelli, John of Bologna, and other illustrious artists. The casing forms four fronts, each of which is covered with sculptures in relief. The western front presents the Annunciation by Sansovino, characterised by Vasari as a 'divine work,' with smaller tablets on which are sculptured representations of the Visitation and of St. Joseph and the Blessed Virgin in Bethlehem by Sangallo; and in the angles are the prophets Jeremiah and Ezekiel by Sansovino and Girolamo Lombardo respectively. On the southern front is the Nativity, another grand work by Sansovino. The eastern front presents the fine bas-reliefs of the Arrival of the Holy House at Loreto, the Death and Burial of the Blessed Virgin, &c., by Nicolò Tribolo. On the northern front are bas-reliefs of the Nativity of the Blessed Virgin, the Sposalizio, and several prophets, by Sansovino, Bandinelli, and Raffaele da Montelupo. The baptistry, or font, is a noble work in bronze, covered with bas-reliefs of great merit, representing the Baptism of Our Saviour, and several other scriptural subjects. The side chapels are ornamented with fine mosaics, from pictures by great masters, with bas-reliefs, frescoes, and paintings.

The chapel of the Treasury is remarkable for the frescoes of its roof, which represent the leading events in the life of the Blessed Virgin. The treasury contains a rich collection of costly offerings.

Recanati, 4 miles S.W. from Loreto, on the Musone, near the Adriatic, has 4050 inhabitants, a cathedral and several other churches, convents, and some fine palaces. There is an aqueduct from Recanati to Loreto for the water supply of the latter city. *Tolentino*, farther inland, on the left bank of the Chienti, near the foot of the Apennines, has 9437 inhabitants and an interesting cathedral. By the treaty of Tolentino (1797) the Pope ceded the Romagna to the French. *Camerino*, the ancient *Camerinum*, is an old town among the Apennines, and a bishop's see, with 5500 inhabitants, a cathedral, a university, several churches and convents, and some silk-factories. Camerino has been recently made the capital of a separate delegation, which comprises 311 square miles of the area, and 38,415 of the population given above. *Fabriano*, farther north, is a bishop's see, with 7000 inhabitants, manufactories of paper and parchment, and a considerable trade in wool. *San Severino* has 3000 inhabitants. *Matelica*, is an old walled town, with 3000 inhabitants.

MACHECOUL. [LOIRE-INFÉRIEURE.]

MACHYNLETH, Montgomeryshire, a market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Machynlleth, is situated in 52° 35' N. lat., 3° 51' W. long., distant 35 miles W. from Montgomery, and 205 miles W.N.W. from London. The population of the borough in 1851 was 1673; it forms one of the Montgomery district of boroughs in returning a member to the Imperial Parliament. The living is a rectory in the archdeaconry of Montgomery and diocese of St. Asaph. Machynlleth Poor-Law Union contains 11 parishes and townships, with an area of 116,647 acres, and a population in 1851 of 12,116.

The town is near the confluence of the Dulais with the Dovey. It is neatly and regularly built, and consists chiefly of two principal streets, which are wide, and contain some good houses. There is a plain town-hall and market-house. The ancient building in which Owen Glyndwr held the parliament or assembly of the chief men of Wales in 1402, by which his title to the principality was formally acknowledged, is still standing, but is converted to private use. The church, dedicated to St. Peter, was rebuilt, with the exception of the tower, in 1827. The Wesleyan and Calvinistic Methodists, Independents, and Baptists have places of worship; and there is a large National school. The chief manufacture of the town and neighbourhood is that of 'webs,' or coarse woollen cloths and coarse flannels. Tanning is carried on. Lead-ore is found in the neighbourhood, and slate is quarried. Salmon-trout and sewin are taken in the river Dovey, and during the season Machynlleth is much resorted to by anglers. The market is held on Wednesday, and there are six fairs in the year.

MACKENZIE RIVER. [HUDSON'S BAY TERRITORIES.]

MÂCON, an ancient town in France, occupies the site of *Matisco*, one of the towns of the *Ædui*, mentioned by Cæsar ('De Bell. Gall., vii. 90). It is mentioned in the 'Itinerary' of Antoninus, and in the 'Notitia Imperii' (in which latter it is designated *Castrum*), and is noticed for the manufacture of arrows. It suffered much from Attila. It passed into the hands of the Burgundians and the Franks; was included in the kingdom of Bourgogne under Boso, and in the duchy of Bourgogne under the later dukes. It was much injured in the religious wars of the 16th century. Before the first French Revolution it was a bishop's see.

Mâcon, now the capital of the French department of Saône-et-Loire, is situated on the right bank of the Saône, in 46° 18' 24" N. lat., 4° 50' 18" E. long., at an elevation of 605 feet above the sea; 275 miles S.S.E. by railway from Paris, 41 miles N. from Lyon, and has 12,658 inhabitants in the commune. The town stands on the slope and at the foot of a hill above the Saône, along the bank of which there is a noble quay, commanding a distant view of the Alps. A green island occupies the centre of the stream opposite to the quay; and an ancient bridge of twelve arches connects the town with the suburb of St-Laurent on the other side of the river, in the department of Ain. The streets of Mâcon are crooked, narrow, and ill-paved; the houses are of stone, and substantially built. The ramparts of the town have been demolished and their site laid out in promenades. The former cathedral was ruined in the first Revolution, but the episcopal palace escaped, and is now used for the prefect's residence. The chief public buildings are—the town-hall, which contains a theatre and public library; the general hospital, on the parade; the church of St-Vincent; and the prison. Among the Roman antiquities are a triumphal arch and the ruins of a temple of Janus. The inhabitants carry on a considerable trade in the excellent wines of the district, corn, hoops, staves, cattle, &c. There are manufactories of blankets, leather, earthenware, clocks, and watches. Mâcon is the seat of tribunals of first instance and of commerce; it has also a college, and a primary normal school.

Mâcon had in the middle ages counts of its own. Their county constituted the district of the *Mâconnais*, which nearly coincided with the present *arrondissement* of Mâcon. St. Louis purchased the county and united it to the domains of the crown. [BOURGOGNE.]

(*Dictionnaire de la France, Annuaire pour l'An 1853.*)

MACON. [GEORGIA, U.S.]

MACQUARIE RIVER. [NEW SOUTH WALES.]

MACROOM, county of Cork, Ireland, a post and market-town, and the seat of a Poor-Law Union, is situated on the river Sullane, and on the road from Cork to Killarney, in 51° 55' N. lat., 8° 55' W. long., distant by road 24½ miles W. from Cork, and 182½ miles S.W. by S. from Dublin. The population in 1851 was 3727, besides 2124 in the workhouse. Macroom Poor-Law Union comprises 25 electoral divisions, with an area of 179,108 acres, and a population in 1851 of 37,394. The town consists principally of one street nearly a mile in length, occupied in great part by cabins and other mean dwellings. Near the centre are some good houses and shops. The parish church, the Roman Catholic chapel, the sessions-house and bridewell, and a market-house, the dispensary, and the Union workhouse are the public edifices. Petty-sessions are held monthly. Fairs are held on the 12th day of May, July, September, and November. There is a large weekly market. Macroom Castle is a fine old structure overhanging the river.

MADAGASCAR (called by the natives *Madecasse*), a large island in the Indian Sea, about 240 miles from the coast of Mozambique on the eastern shores of Africa, extends from 12° to 25° 45' S. lat., and between 48° and 51° E. long. From north to south, between Cape Ambré and Cape St. Mary, it is 960 miles long, with a width varying from 200 to 500 miles; it is estimated to cover a surface of 225,000 square miles, or somewhat more than the extent of France. The most eastern and western points of the island are Cape East and Cape St-Felix respectively. It is separated from the continent of Africa by the Channel of Mozambique.

The eastern coast runs in the direction of north by east, and nearly in a straight line, being indented only by the bay of Antongil, which runs up into the island to the west of Cape Baldrick, and Cape East. The western side of the island has a much more sinuous outline; the part of the coast that faces the north-west, between Cape Ambré and Cape St. Andrew, presents several small inlets—Chimpaiki, Narinda, Majambo, and Bembatooka; on the southern part, between the Crab Islands and the Barraconta Islands, are Murderers Bay and the Bay of St. Augustine. Cape St. Andrew is nearly in 16° S. lat.; between it and Mozambique Island the Channel of Mozambique is narrowest, being about 240 miles across. The Comoro Isles, and near the African coast the Querimba Islands, lie at the northern entrance of the channel, in which are numerous small islets; of these we can only name the Juan-de-Nova Islands in its narrowest part, and Europa Island opposite Murderers Bay, and near 40° E. long. The most important island on the eastern coast is that of St. Mary, which lies south of Antongil Bay, and is occupied by the French.

A mountain range traverses Madagascar in its whole length; some of the summits rise to an elevation of 10,000 or 12,000 feet. The eastern and western slopes of this range are furrowed by numerous rivers, many of which traverse lakes and form cascades in the upper part of their course. Its offsets cover the greater part of the interior, and in some places approach to the very shores of the sea, especially in the north between Cape Passadava and Cape Ambré, where the stupendous peak of *Matowla* raises its head not far from the shore, and also near Cape St. Andrew on the west coast. But between Cape St. Andrew and Cape Passadava a low marshy plain, crossed by several rivers, extends along the shore and runs 60 or 80 miles inland. The bays, harbours, and rivers which indent this part of the coast, and which are mentioned above, are admirably adapted for commerce, but they are all neglected, with the exception of Bembatooka. The eastern coast is high and rocky from Cape Ambré to the bay of Antongil, one of the most spacious harbours of the Indian Sea. South of this bay the shores are low and swampy to a distance inland varying from 10 to 40 miles, and extremely unhealthy. In the interior the country in many places contains extensive plains, which are excellent pasture-ground, and frequently possess a soil adapted to all kinds of tropical plants.

At the entrance of St. Augustine Bay is Sandy Island (23° 39' S. lat., 44° E. long.). Onglahy River falls into the head of the bay. Ships anchor here for provisions, refreshments, and barter. Large fat bullocks (with a hump), sheep, and goats are obtained for European articles, such as gunpowder, brass-nails, looking-glasses, muskets, kettles, scissors, glass and coral beads, &c. Pumpkins, yams, sweet-potatoes, limes, oranges, and other fruit may be had here. Fish are abundant. Good Water is got 4 or 5 miles up the river, which is infested with alligators.

Bembatooka Bay, on the western coast, is the estuary of several rivers. It is 17 miles long and 3½ miles wide at the entrance (15° 43' S. lat., 46° 28' E. long.), but inside it is nearly 8 miles wide. Under Bembatooka Point, to the north of Bembatooka town, ships may lie land-locked and sheltered from all winds. This bay is considered to be very eligible as a commercial station, its shores being healthy and easy of access. Prime bullocks are very numerous and cheap, and salt-beef might be prepared in any quantity; wild pigs abound, and rice is grown extensively. The French buy bullocks here, and have them driven to Fort Dauphin, on Antongil Bay, where salt provisions for their navy and for colonial consumption are cured. The Arabs of Mascat frequent this port. Slaves are an article of trade. Bembatooka itself is a village, but *Majunga*, on the north side of the bay, is a large town, and the harbour of Thansan-arive, the capital of the *Ovaha*, the most powerful, industrious, and civilized nation of the

island. Vessels drawing 15 feet water can proceed to Majunga and 15 miles up the bay. From this point to the mouth of the river Betsibooka, a distance of 10 miles, there is an extensive lagoon, deep enough to be navigated by vessels of considerable burden; in spring-tides the water rises 20 feet at the mouth of the river. From its mouth to Thanaan-arive is a distance of 245 miles by the road. Boats sail 160 miles up the Betsibooka; from the point where the navigation terminates merchandise is carried overland to Thanaan-arive, a distance of about 85 miles. Following the road from Majunga along the river to the capital, the country is low and swampy for 60 miles, but well adapted to the culture of rice: 40 miles farther, the land is more elevated and the raffia-tree (*Sagrus raffia*) abounds. Then for 70 miles a barren country intervenes, and the remaining distance of 75 miles to the capital is rather a level country, in which rice, sugar-cane, and cotton are cultivated.

Thanaan-arive, which is described as a close assemblage of numerous villages, is situated in 18° 56' S. lat., about 47° E. long., at an elevation of about 4000 feet above the sea-level, and has about 20,000 inhabitants. It contains some well-built houses, and a few in the European fashion were erected in modern times, under the reign of Radama. *Tamatave*, a sea-port on the eastern coast (18° 10' S. lat. 49° 31' E. long.), has a good anchorage with a hard and sandy bottom. The entrance to Tamatave however is between reefs, and ships are exposed to easterly winds. It carries on some commerce, though it was destroyed by the French in 1819. To the north of Tamatave is Foul Point, where ships may anchor and procure provisions and water.

South of Tamatave is the mouth of the river Manooroo, or Mangarow. It traverses an extensive country, which is generally level and of great fertility, and contains extensive pastures. The Mangarow seems to be the most important river which descends from the eastern declivity of the interior mountain range.

Antongil Bay, called Manghalees by the natives, is named from its discoverer Antonio Gil, a Portuguese captain. At the bottom of the bay are several small islands; the largest of which is Marotto, in 15° 25' S. lat., about a mile long and the same distance from the shore. Ships anchor to the north of the island, on which wood and water may be obtained: provisions are got from the mainland. A river, navigable for boats, enters the head of the bay north-north-west from the island. The anchorage of the river is called Port Choiseul by the French; near it is Fort Dauphin, named above.

St. Mary's Island, called Nossi Ibrahim by the natives, lies between Foul Point and Antongil Bay, and extends north-east by north from 17° 5' to 16° 33' S. lat. On the west side of it there is a bay, at the entrance of which is Quails Island. The French occupied St. Mary's in 1740 and again in 1743. They abandoned it in 1761 but we believe they have recently re-occupied it and several points along the coast.

At another Fort Dauphin (25° 5' S. lat., 46° 35' E. long.) the French carry on a considerable trade, bartering European articles for rice, poultry, cattle, turtle, oranges, and other fruit, all of which are abundant, and exported to the Mauritius and the Isle of Bourbon. The country about Fort Dauphin is very populous, the natives living in fortified villages built on eminences. Cattle and poultry are very abundant, large quantities of rice are grown; beautiful mats, cloth from native cotton, and various stuffs from vegetable fibre are manufactured by the natives.

The climate of Madagascar is not so hot as might be expected from its geographical position. The elevated range in the interior, and the wind constantly blowing from the sea, render the heat supportable. The interior is very healthy, but the low swampy coast, which contains numerous marshes and lakes, and in certain seasons large sheets of stagnant water, is destructive to the health of Europeans. The year is divided between the dry and the wet seasons. The first occurs when the sun is in the northern hemisphere, and then the south-east monsoons prevail. During the north-west monsoons, which blow when the sun is in the southern hemisphere, rains are abundant, and sometimes incessant for several days.

Madagascar contains a very large proportion of fertile soil, and produces nearly every kind of grain. Rice is the principal object of agriculture; it is cultivated either on high or low ground, but with little care. Other products are manioc, or cassava root, maize, sweet potatoes, cotton, indigo, allspice, black-pepper, ginger, cinnamon, saffron, tobacco, sugar-cane (which is indigenous), grapes, and all tropical fruits. Indigenous plants used as food are the prickly yam, bread-fruit, many varieties of plantain, and arrow-root. The *Sagrus raffia* is much cultivated on account of its leaves, the fibres of which are ingeniously woven into cloth, which is worn by the greater part of the natives. The dresses of the higher classes are manufactured of silk or cotton. The silk-worms of this island are of a large size, and suspend their cocoons from the branches of trees. They feed on the leaves of *Cytisus Cajan*, or Pigeon-Pea, which is indigenous in Madagascar. By an incision into the bark of the *Urania speciosa*, a glutinous juice is obtained which is very nourishing; and the leaves of this tree are used in building and thatching houses. There are eleven varieties of tobacco indigenous in this island. Coffee has been introduced by the French, and succeeds very well. The cocoa-nut tree and the mangrove abound along the shores. Forests cover a

large part of the island; the timber trees are of great size and excellent quality.

Cattle, sheep, goats, fowls, ducks, and geese are kept. Wild swine, and in parts wild cattle, are numerous. The wild ass, wild large-tailed sheep, and zebras abound. The large wild animals of the African continent are not met with, but macaoucs, caimans, and serpents abound. Birds of beautiful plumage exist in great variety; the pheasant and the wild-duck, as elsewhere, are highly prized as food. Fish in great numbers frequent the coasts and the rivers; whales also visit the shores during the rainy season; sharks and crocodiles, or rather perhaps alligators, infest the bays and rivers. Beautiful shells are common on the beach.

In the absence of scientific examination little is known of the mineral wealth of the island, except that lead, tin, iron, copper, mercury, talc, rock-salt, saltpetre, rock-crystal, and precious stones are stated to be found abundantly in the mountains.

The population is estimated to amount to between four and five millions. The inhabitants seem to belong to different races, which have mixed together, and speak only one language, which contains a great number of Malay words. The inhabitants of the shores are short, rather darker than mulattoes, with low foreheads, broad and flat faces, and large eyes and mouths. Their hair is long but crisp. The Ovahs, who inhabit the elevated plains in the interior (which are remarkably fertile and populous), are in height rather above the European standard, portly in their person, and of all shades of colour from deep black to copper, and their hair is long and lank. The Madagasses have made considerable progress in the arts of civilisation, which is evinced by the houses they build in a climate which does not require such substantial dwellings. In agriculture and the arts connected with it they are perhaps not inferior to the inhabitants of Java. The Ovahs are distinguished by their superior skill in manufacturing silk and cotton dresses, in forging iron, which they apply to various purposes, from the blade of a lance down to a needle, and in the making of silver and gold chains, balances, and other articles, in which great ingenuity is displayed. Their language is written in the Arabic character. Their religion is idolatry. Under the reign of Radama Christianity was much favoured; schools were established by English missionaries, who were protected by the king; but after his murder in 1823, Ranavala Manjoka, who succeeded him on the throne, restored the old system of Fetichism; and by a royal edict of 1835 the public profession of Christianity was forbidden in the island. The French missionaries nevertheless have still continued their endeavours to introduce Christianity among the natives in the neighbourhood of their establishments on or near the coast.

Madagascar is said to be divided into 22 states, governed by kings; but in the present century most of them were subjected to the sway of the Ovahs by King Radama, who died in 1828. This extraordinary man, who in energy of character resembled Peter the Great, introduced into his country the arts and civilisation of Europe. He established a communication with the English in the Island of Mauritius. He received and protected missionaries, and promoted the establishment of schools, the number of which at the time of his death had increased to more than 100, in which nearly 6000 children were instructed. Several young people were sent to the Mauritius and even to England to receive instruction. European mechanics were well received and employed by Radama. He introduced into his army the discipline and arms of the English. Besides the Ovahs, the Seclavas have distinguished themselves, but only as pirates. They inhabit the north-western shores, whence they send fleets consisting of several small vessels to the Comoro Islands and even to the coast of Mozambique for the purpose of making slaves; but since the abolition of the slave trade, which Radama, their conqueror, effected at the request of the English, their excursions have been less numerous and destructive. Still however slavery exists in Madagascar.

The French alone have tried to establish colonies on this island. The first attempt was made in 1665, and several others were made afterwards. These settlements never prospered, partly on account of the unhealthiness of the low western coast, where they were formed, and partly on account of the warlike character of the inhabitants. Since the return of peace in Europe the French have again made some attempts in two or three places. In 1821 they settled on Isle St. Mary, which is 31 miles long, and from 2 to 3 miles in breadth. This settlement is improving, though the French at first suffered much from the climate. There is another settlement at Foul Point Bay, but it is inconsiderable. There are also small settlements at S. Luce (24° 44' S. lat.), and on the tongue of land called Tholagar (25° 5' S. lat.), where the French have built a small fortress, called Fort Dauphin. In these establishments the French cultivate sugar, coffee, and other tropical productions, which are sent to the Island of Bourbon. The English of the Mauritius fetch from the harbour of Tamatave rice, cattle, tortoise-shells, amber, and some minor articles. Some parts of Madagascar keep up a commercial intercourse with the southern coasts of Arabia.

(Owen, *Voyages to the Shores of Africa*; London *Geographical Journal*, vol. v.; Ellis, *History of Madagascar*; Macgregor, *Commercial Statistics*. [See SUPPLEMENT.]

MADDALONI. [LAVORO, TERRA DL]

MADEIRA, an island belonging to Portugal, is situated in the Atlantic Ocean, between 32° 30' and 32° 50' N. lat., 16° 40' and 17° 20' W. long., and about 400 miles from the north-western coast of Africa. It is 45 miles long, with a breadth of 10 to 16 miles, but towards the east the island terminates in a narrow projection about 9 miles long and 3 miles wide, opposite the isle of Fora. The area is about 360 square miles. The population is about 100,000.

This island is one mass of basalt, rising with a rather steep ascent from the south and from the north towards the interior, where the highest part of the mass runs from south of east to the north of west, between Cape de St. Laurengo on the east to Cape de Pargo on the west. Pico Ruivo, the highest summit, attains 6165 feet above the sea-level. Both declivities of the mountain-mass are furrowed by deep and generally narrow valleys and depressions, traversed by streams of clear water. These valleys contain gardens and vineyards. The vineyards are formed on the declivities of the rocks and on artificial terraces on the mountain sides, to the height of 2300 feet above the sea. The rocks in most places come down to the very shore, along which however soundings are found at a depth of 35 to 50 fathoms on a rocky and unequal ground.

The climate of Madeira is very equable and mild. The mean temperature of the year does not exceed 68°. In the months of December and January the thermometer rarely sinks below 60°; the mean temperature of that season being 63°. The mean temperature of the hottest months (August and September) is between 73° and 74°; but when the winds blow from the African desert, the thermometer sometimes rises as high as 90°. Madeira suffers occasionally from hurricanes. The climate is considered very healthy, and many consumptive persons withdraw to it from England for the purpose of prolonging their lives.

In the lowest region of the island to about 750 feet above the sea-level many tropical plants are cultivated, as the date palm-tree, the plantain, two kinds of cactus, the sweet potato, Indian corn, arrow-root, coffee, and the American agave, as well as the sugar-cane, the olive-tree, the pomegranate, and the fig. Above this region, to a height of from 750 to 2500 or 2800 feet above the sea-level, the fruits and grains of Europe, especially wheat and maize, are raised; and in this region are also the extensive vineyards, which furnish the most important article of exportation. Then follows a tract covered with high trees, which rises to 3200 feet and higher, where many plants and trees are found which do not occur in Europe. This region contains also extensive chestnut forests, the fruit of which is the common food of the inhabitants. Its surface is extremely broken, and bare rocks appear in many places. The highest portion of the rocks is covered with heath, fern, and in some places with fine grass, which preserves its verdure through the greater part of the year, this region being frequently enveloped by dense fogs, and subject to heavy dews.

Few horses are kept, and most of them are imported. Cattle are more numerous, and of a large size. Asses are the most common domestic animals, and best adapted to the roads of the country as beasts of burden. Hogs are rather numerous, as well as fowls. In the interior there are many wild swine and rabbits. Birds are not numerous, and fish is rare, on account of the great depth of the sea which surrounds the island. Salt cod and herring are important articles of import.

Funchal, the capital, and the only town of the island, is on the southern coast in 32° 51' 7" N. lat., 16° 54' 7" W. long. It has only an open roadstead, with a rocky and very uneven anchorage, in which vessels are exposed to great danger from November to February, when gales from the south-east and south-west prevail. It is frequently visited by ships bound to South America, the Cape of Good Hope, or the East Indies, as a place of refreshment, and from it all the produce of the island is exported. The town consists of a pretty wide street along the sea-shore, where there are several good buildings, and numerous narrow lanes, which extend to a considerable distance up the slope of the hill. The number of houses amounts to about 2000, and that of the inhabitants to 20,000. The town is defended by four forts, and has a cathedral, eight churches, several convents, a theatre, and an hospital. In the midst of the town is an open square, planted with exotic trees. The environs are studded with numerous villas. Foreign consuls reside in Funchal.

The commerce of Madeira with England is considerable. The principal export is wine, which is of two kinds, Madeira wine and Malvasia de Madeira. The former is cultivated on the southern slopes of the island, the latter on the north-eastern coast, near the village of Machico. Minor articles of export are, fruits, dragon's-blood, honey, wax, orchil, and tobacco, besides provisions for the vessels bound to more remote places. The imports consist of manufactured goods, corn, fish (herring and cod), oil, salt-beef, salt, and some tropical productions.

Madiera was discovered about 1420 by Goncalves Zarco. It was then covered with forests, whence its name is derived, Madiera in Spanish signifying wood. The forest was set on fire, and it is said that the conflagration lasted seven years. Soon afterwards it was settled by the Portuguese, and the culture of sugar and wine was introduced. Sugar was grown to a considerable extent before the islands in the West Indies were settled; but upon that event the culture decreased, and was replaced by that of wine, which now seems to be giving way to coffee.

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About 40 miles N.E. from Madeira lies the small island of *Porto Santo*. It is a basaltic rock, which does not exceed 500 feet in height. Indian corn and vegetables are cultivated for consumption, and a little wine for exportation. The population amounts to about 1400, of whom 600 live in the small town of Porto Santo, the roadstead of which is much exposed to southerly winds. The island is destitute of trees and has only one spring. It has a bleak and barren look. There are several small rocky islets near Porto Santo.

To the south-south-east of Cape St. Laurengo are three small basaltic rocks, lying in a row from north to south. They are called *Ilhas Desertas*, and are only inhabited by sea-fowl, but they are visited from Madeira for the purpose of collecting the orchil, with which the greatest part of their surface is covered.

MADEIRA, RIO. [BRAZIL.]

MADELEY, Shropshire, a market-town and the seat of a Poor-Law Union, in the parish of Madeley, is situated in 52° 38' N. lat., 2° 26' W. long, distant 14 miles E.S.E. from Shrewsbury, and 140 miles N.W. from London. The population of the parish in 1851 was 8525. The living is a vicarage in the archdeaconry of Salop and diocese of Hereford. Madeley Poor-Law Union contains 12 parishes and townships, with an area of 27,951 acres, and a population in 1851 of 27,627.

Madley is situated about a mile from the left bank of the Severn. The streets are lighted with gas. The parish church is a Grecian structure, erected in 1796. A second church has just been erected. In Madeley are National and British schools; and at Ironbridge are a dispensary and savings bank. The extensive coal- and iron-works of Coalbrookdale are in Madeley parish. The products of this vast manufacturing district are exported and distributed by the Severn and by several canals. An iron bridge, the first erected in the country, here crosses the Severn, and consists of one arch with a span of 100 feet. In the neighbourhood of Madeley is a manufacture of coal-tar. China-ware is manufactured at Coalport. The market-day is Friday. Two fairs are held annually at Ironbridge.

MADISON. [INDIANA.]

MADLEY. [HEREFORDSHIRE.]

MADRAS, Presidency of. The presidency of Madras comprises the southern part of the peninsula of Hindustan, including part of the Circars and the whole of the Carnatic on the eastern side, and extending across so as to include Canara, Malabar, &c., on the western side. The distribution of the presidency into Regulation Districts and Non-Regulation Districts, and also the total area and population, are stated in the article HINDUSTAN. The government of the presidency is conducted by a Governor, who is subordinate to the Governor-General of India, a council of three members, and secretaries of the political, civil, and military departments. The total net revenue of the presidency for the year 1851-52 was 3,704,048*l.*; the total expenditure for the same year amounted to 3,204,273*l.*

MADRAS, the capital city of the presidency of Madras, is situated on the eastern coast of Hindustan, in 13° 4' N. lat., 80° 16' E. long. In 1639 a factory was established here, and a fortress was built to protect it, which was named Fort St. George. This name was formerly given to the presidency and the city, and is still occasionally used, as Fort William is for Calcutta. The entire population of Madras probably amounts to 300,000, and there are several populous suburban villages.

The largest portion of Madras is called the Black Town, from its being inhabited by the native population. The Black Town is north of Fort St. George, and both are situated close to the shore, on level ground, with a large open space called the Esplanade between them. The Black Town contains many good streets, especially one very handsome street in which Europeans reside; but the houses of most of the Europeans occupy a space of several miles in the rear of Black Town and the fortress. These houses are placed without any arrangement into streets; they are generally one story in height, and are shaded with trees, and inclosed by hedges of bamboo and prickly pear. St. George's church is a large and handsome structure; and at Vepery is one of the finest modern gothic churches in Hindustan. The Government House, which adjoins the Esplanade, is a handsome structure; detached from it is a large banqueting-house. Madras gives title to a bishop of the English Church, and is the principal station in South India of the Church Missionary Society. In the city are several endowed public schools and charitable institutions.

The coast has no indentation, nor has Madras any harbour or pier. A heavy swell rolls in shore throughout the year, and vessels anchor in the open roads at the distance of a mile or two. Considerable difficulty is frequently experienced in landing passengers and goods.

MADRID, the capital of the kingdom of Spain, of the ancient province of Castilla la Nueva, and of the modern province of Madrid [CASTILLA LA NUEVA], is situated near the centre of the extensive table-land of Castilla la Nueva, in the middle of Spain, in 40° 25' N. lat., 3° 42' W. long. Though it is the residence of the court and of the chief civil and military authorities, it is only designated a villa (town), not a ciudad (city); it is not the see of a bishop, and has no cathedral. The circumference is about five miles, and it has no suburbs. The population in 1845 was 216,745.

Madrid is about 2000 feet above the level of the sea, and has the range of the Guadarrama Mountains at a distance of about 30 miles to

the north. The summer heat is excessive, especially when the wind is from the south-east, the average summer temperature being $76^{\circ} 4'$ Fahr.; but it sometimes rises to 90° , and even 100° . The winters are very cold, especially when the wind is from the north, the mean winter temperature being 43.1° Fahr.; but it sometimes sinks to 18° . Standing in a wide and arid plain, without the shelter of trees, and overlooked by the snowy ridges of the Sierra de Guadarrama, it is subject to sudden and extreme changes of temperature, producing pulmonary and other diseases, which are often fatal. The average of deaths is 1 in 28.

Madrid is built on and around several low hills, near the east bank of the Manzanares, a small river which rises in the Guadarrama Mountains, and falls into the Jarama, an affluent of the Tagua. The Manzanares is sometimes dried up in the summer; but in the winter, and more especially during the rains of spring, it is occasionally swollen to a wide and rapid torrent, which however soon passes away. It is crossed by five bridges, of which the Puente de Segovia is the largest; it is a solid and handsome structure of stone, built by Herrera, 695 feet long, and 31 feet wide. The Puente de Toledo and the Puente de Casa del Campo are also of stone. The Puente de San Isidro is an old bridge of wood, and the Puente Verde is a modern bridge of wood, painted green—whence the name.

Madrid is surrounded by a brick wall 20 feet high, and is entered by 15 gates, 5 of which are principal. Some of the approaches have a gentle ascent between rows of trees, and terminate in handsome arched gateways, mostly of granite. The Puerta de Alcalá is particularly handsome.

The general aspect of Madrid from all the approaches is anything but inviting. The numerous fantastic spires of churches and conventual buildings, the tiled roofs of the houses, the sterility of the neighbourhood, and the total absence of villas, pleasure-gardens, or other ornamental buildings, such as usually indicate the approach to a great city, give to the capital of Spain a very gloomy and forbidding appearance. The interior however is not devoid of beauty. The form is somewhat circular, or rather that of a square with the corners rounded off. The principal streets are wide and well paved, and in these streets the houses are well built, four, five, and six stories high, with basements of granite, the rest of brick, stuccoed, and generally painted. Each house contains, as in Paris, several families, who occupy the different floors. The streets are lighted with gas, obtained mostly from oil. There are several large and handsome public buildings, and more than 30 public fountains, several of which are handsome structures. The water is obtained from springs which have their origin in the Guadarrama Mountains, filtering naturally through coarse sand and gravel, and is pure. Much of the washing of clothes is performed in the bed of the Manzanares, and the articles are spread out to dry in the sun on the gravelly banks. The whole of the interior, as to paving, lighting, and cleansing, has been greatly improved since the time of Ferdinand VII.

Nearly in the centre of Madrid is an open space of no great extent called the Puerta del Sol, from the east gate having formerly stood there. From this spot some of the principal streets diverge—the Calle de Alcalá eastward, the Calle Mayor westward, the Calle de Montera northward, and the Calle de las Carretas southward. The Puerta del Sol is a place of resort for all classes; for the men of business and for the idle. It is continually thronged with company. The Calle de Alcalá runs east-north-east from the Puerta del Sol; it has a gentle rise, is planted with acacia-trees, and widens gradually as it approaches the Prado (meadow), which is an extensive district, including a park (the Campo Grande), a botanic garden, a Campo Santo or cemetery, the Palacio del Buen Retiro, and the artillery-barracks. The principal square (Plaza Mayor) is a short distance west-south-west from the Puerta del Sol, and from it extends the Calle de Atocha in an east-south-east direction, and the Calle de Toledo southward. There are altogether upwards of 40 squares, but, with the exception of the Plaza Mayor, the Plaza de Cebada, and one or two others, they are mostly of small size. The Plaza Mayor is quadrilateral, 434 feet by 334 feet, and it is surrounded with stone buildings six stories high, ornamented with pillars of gray granite, which form a fine piazza all round.

Madrid, as already observed, has no cathedral, and not one of the seventy churches which it contains is worthy of special description. The royal palace (Palacio Real) is a magnificent structure. It stands at the west end of Madrid, and occupies the site of the Alcazar of the Moors, which was inhabited by Philip II. and his successors till it was destroyed by fire in 1734. The present structure was commenced by Philip V., and was continued by his successors. It is a square of 470 feet each side, and is 100 feet high. The basement is of granite rusticated, the upper part of a white stone which glitters in the sun like pure white marble. The interior was fitted up in the most costly style, but was greatly injured by the French during their occupation of Madrid. The Patio, or interior court, is 240 feet each side. The Palacio del Buen Retiro is in the Prado at the east end of Madrid. It was built by Philip IV. as a summer residence. It occupies an eminence. A wide esplanade separates it from the artillery-barracks (Cuartel de Artillería), and near it is a new theatre. Extensive gardens, well laid out and well kept, are attached to the palace, and a large portion of them have recently been opened to the public. Near the

Palacio del Buen Retiro is the Museo de Pinturas (Picture Gallery), the largest and finest collection in the world. It contains about 2000 pictures, among which are—62 by Velasquez, 46 by Murillo, 53 by Ribera, 62 by Rubens, 22 by Vandyke, 43 by Titian, 10 by Raffaele, and other masters in a like proportion. Just outside the Puerta de Alcalá is the Plaza de Toros (Bull-Arena), a large circular structure capable of containing 14,000 spectators. It belongs to the government, and the profits are given to the public charities. In the summer there is a bull-fight every Monday afternoon. The Armoury, a fine building of the time of Philip II., is near the Palacio Real. It contains some of the most beautiful specimens of armour in Europe, especially of the Middle Ages. It contains several complete suits of armour which formerly belonged to Ferdinand V., Charles V., the Great Captain, John of Austria, Garcia de Paredes, and other illustrious Spaniards. The centre of a gallery 227 feet in length is filled with steel-clad warriors on foot and horseback. Swords, shields, helmets, and fire-arms, are contained in glass-cases. The new parliament house (Palacio del Congreso) is in the Plaza de las Cortes. It is built in imitation of the Chamber of Deputies at Paris. On the north side of the Calle de Alcalá, near the Puerta del Sol, is the Aduana (Custom House), a large and handsome quadrilateral structure, built in 1769. The Real Academia de San Fernando is near the Aduana. It contains about 300 pictures of no great merit, and has a cabinet of natural history (Gabinete de Ciencias Naturales), in which is the largest and most perfect semi-fossil known, the huge Megatherium, which was found in 1789 about thirteen leagues from the city of Buenos Ayres. The collection of minerals is chiefly from Spain and the Spanish dominions in America. The post-office (Casa de Correos) is a large square building on the south side of the Puerta del Sol. It was originally built as a palace for Carlo III. Adjoining, to the west, are the mail and post-horse establishments (Casa de Postas). The town-hall (Casa de Ayuntamiento) is a structure of the 16th century. The stock-exchange (Bolsa de Comercio) was established in 1831; it is near the Puerta del Sol. The Biblioteca Nacional contains about 200,000 volumes. It is rich in Spanish books and manuscripts. It is open daily from 10 to 3. The Biblioteca de San Isidro has a good collection of books which formerly belonged to the Jesuits. The theatres are—Teatro del Principe, Teatro de la Cruz, Teatro del Circo (gymnastics), Teatro del Museo (built in 1838), Teatro del Instituto (built in 1845), Teatro de Variedades (built in 1843), Teatro de Buena-Vista, and Teatro de Oriente. Besides the buildings already mentioned there are—a college, 9 academies, an observatory, a founding hospital, 18 other hospitals, 2 other public libraries, and a Conservatorio de Artes. On the west bank of the Manzanares is the Real Casa del Campo, a summer palace, with extensive walks and gardens.

Before the year 1834 there were 66 convents, 34 for men and 32 for women. Some of them have been since pulled down either to widen the streets or to form squares; others have been converted into barracks (especially the large convent of San Francisco el Grande), hospitals, magazines, and government offices.

Among the public monuments are—an equestrian statue of Felipe IV., in the Plaza de Oriente; a statue of Cervantes, in the Plaza de las Cortes, erected in 1835; and the Monumento del Dos de Mayo, a column erected to the memory of the Spaniards who were slain on that day by the French in 1808.

The chief industrial establishments are—the royal manufactories of porcelain and carpets, and manufactures of jewellery, silks, hats, and paper, none of which are important.

Madrid is supposed to occupy the site of the Mantua Carpetanorum of the Romans, which was called Majoritum by the Goths. During the occupation of the peninsula by the Arabs the place served as a frontier town, and its castle was often taken from the Moors and retaken by them until 1086, when it was finally taken by Alfonso VI., the conqueror of Toledo, who annexed it to the bishopric of Toledo, to which it now belongs. It continued to be a mere village until the reign of Henry III. of Castile, who, being very fond of hunting the wild boar and the bear, both which animals were then abundant in the mountains near Madrid, made the place his residence during the hunting season. Charles V. occasionally lived in it, and it was at last made the capital of the Spanish dominions by his son, Philip II. On the 23rd of March 1808 Madrid was entered by the French troops under Murat, and the royal family was decoyed into France. The heroic rising of the inhabitants of Madrid on the 2nd of May of the same year obliged the French to evacuate the town, and aroused the whole Spanish nation. Madrid was again occupied by Napoleon I. in person in December following, and by his brother Joseph in 1809. It was held by the French till 1812, when the Duke of Wellington entered it, and restored it to the Spaniards.

(Laborde, *View of Spain*, vol. iii.; *Viage Artistico de España*, vol. vi.; Miñano, *Diccionario Geografico de España y Portugal*, vol. v.; Quintana, *Grandes de Madrid*; Captain Cook, *Sketches in Spain*; Mesonero, *Manual de Madrid*; Ford, *Handbook of Spain*; Baxter, *Tagus and the Tiber*; Madoz, *Diccionario Geografico de España*.)

MADRIDEJOS. [CASTILLA LA NUEVA.]

MADURA, an island in the eastern sea, separated by a narrow strait from the north-east coast of Java. Madura lies between $6^{\circ} 58'$ and $7^{\circ} 30'$ S. lat., $110^{\circ} 20'$ and $111^{\circ} 50'$ E. long. Its extreme length from east to west is 90 miles, and its mean breadth 17 miles.

The island is politically divided into three districts, each of which is nominally under the government of a native chief; but the whole are subject to the authority of the Dutch governor of Java. These divisions are:—Bangkalan occupying the western, Pamakassan the centre, and Sumanap the eastern portions of the island. Each division contains a town or capital bearing the name of the district.

The population of Madura in 1815, according to a census made by the English government, which was then in the possession of the island, was 218,659, of whom 6844 were natives of China. In 1840 the population numbered about 300,000. The inhabitants reside in villages. The religion of the Madurese is Brahminical, and the practice of widows burning themselves with the bodies of their husbands is prevalent.

The soil of Madura is fertile, and produces abundance of fine rice. Buffaloes and sheep are also bred for exportation. Cocoa-nut oil is prepared. The principal export trade is salt. [JAVA.]

MADURA. [CARNATIC.]

MÆANDER, RIVER. [ANATOLIA.]

MÆNTWROG. [MERIONETHSHIRE.]

MÆOTIS, PALUS. [AZOF, Sea of.]

MAFRA. [ESTREMADURA, Portuguese.]

MAGADOXO, or MUKDEESHA, a town on the eastern shore of Africa, is situated in about 2° 2' N. lat., 45° 25' E. long., and is the only important place on the coast between Cape Gardafui and the mouth of the Juba. The harbour is formed by a long coral-reef, and the town is divided into two parts, Umarween and Chamgany; the latter consists entirely of tombs. Umarween contains nearly 150 stone and many wooden houses, built in the Spanish style. It carries on some commerce with Arabia. Its exports are ivory, gum, and a particular kind of cloth; it imports sugar, dates, salt-fish, arms, and slaves. Its sovereign (whose territory extends along the Haines and Juba rivers, and has a population of about 150,000) is dependent on the Iman of Muscat in Arabia.

MAGALHAENS. STRAIT OF, commonly called the *Strait of Magellan*, is the most extensive known strait on the surface of the globe. Its length in a straight line is above 200 miles; but if the three great bends are taken into account it is rather more than 300 miles. It divides the continent of South America from Tierra del Fuego. The eastern entrance is formed by Cape de las Virgines on the continent, and by Cape del Espiritu Santo, or Queen Catherine's Foreland, which is on King Charles's Southland, the largest of the islands composing Tierra del Fuego. At its western entrance are Cape Pillar on the south, on the island of South Desolation, and Cape Victory on the north, on a small island belonging to Queen Adelaide's Archipelago. The most northern bend of the strait approaches 53° 10' S. lat., and the most southern inlet, called Admiralty Sound, 55° S. lat. The eastern extremity of the strait is situated in about 68° 20' W. long., and the western extremity in about 74° 40'.

This strait may be considered as divided into three parts. The eastern part extends from Cape de las Virgines to Cape Negro, and its direction as far as the first Narrows is nearly west, but afterwards south-west. In two places the strait contracts to a width of 5 or 6 miles, forming the two Narrows, of which the eastern is called De la Esperanza, and the second that of San Simon. It is extremely difficult and dangerous to pass through these Narrows from east to west, as western winds prevail in them nearly all the year round, and the western currents set through them sometimes at the rate of 7 miles an hour. The country on both sides of this part of the strait is rather level; at some distance from the shore a range of hills rises on each side to a moderate height. No trees grow in this country; the bushes are few in number and stunted, and the grass though abundant is coarse.

The central portion of the strait, from Cape Negro to Cape Froward, lies north and south, and is the widest part, extending in two large inlets, called the Useless Bay and Admiralty Sound, deep into King Charles's Southland. This part of the strait is the easiest to navigate, being free from islands and cliffs, except the large island of Dawson. The country on both sides rises into high snow-covered mountains. Between the mountains there are valleys of some extent, which, as well as the lower part of the mountains themselves, are covered with a heavy growth of timber-trees.

The western part of the strait extends from Cape Froward to Cape Pillar, in a direction nearly south-east and north-west. This part is very difficult to navigate on account of its narrowness, the width varying between 5 and 25 miles, and also by reason of the numberless cliffs and islets, with which the shores, especially on the north side, are lined. To these disadvantages must be added the north-western gales, which sweep with incredible force along the channel of the strait. The mountains on each side rarely attain the snow-line; but their huge masses approach so close to the shores that in many places it is difficult to find as much level ground as is required to place a boat upon. Land-locked basins of moderate extent however occur in several places, and afford safe harbours. On each side of Clarence Island an island-studded strait leads out of Magellan Strait, entering the Pacific by Cockburn Channel. Nearly opposite the south-eastern extremity of the large island of South Desolation a channel opens eastward into the continent. This strait, called Jerome Channel, leads to Otway Water, a large inland sea 50 miles long, trending to the

north-east, and separated from the eastern portion of the strait only by a narrow isthmus. From this lake another channel, called Fitaroy Channel, 12 miles long, leads in a north-west direction to another inland lake, called Skyring Water, which is about 34 miles long and 12 miles wide. The country bordering these lakes on the south and west is high, rocky, and mostly covered with trees; whilst that which incloses them on the east and north is a low undulating grassy plain without trees. [AUCON-SUN-SALIDA.]

The Strait of Magalhaens was discovered by Fernando Magalhaens in 1520. Its navigation has been for a long time rarely attempted by trading vessels, the passage by Cape Horn being in general safer and more expeditious. Upon the discovery of gold in California however many emigrant and trading vessels found their way through the Strait of Magalhaens at the commencement of the excitement caused by that event.

(Cordova, *Voyage of Discovery to the Strait of Magellan*; London *Geographical Journal*, vol. i.)

MAGDALENA, RIVER. [NEW GRANADA.]

MAGDEBURG, one of the three governments of the Prussian province of Saxony, is composed of the ancient duchy of Magdeburg, the county of Barby, the bailiwick of Gommern (without the circle of the Saal), the Altmark, on the left bank of the Elbe, the bailiwick of Klötze, the principality of Halberstadt, with Derenburg, Quedlinburg, Wernigerode, and Schauen. Its area is 4466 square miles, and the population in 1847 was 674,149. The government is divided into 15 circles. The country is one of the finest parts of the Prussian monarchy, consisting chiefly of a fertile and level tract; the hills in the south-west, which are offsets of the Harz, are low, and in other parts the surface is merely varied by gentle elevations. Railways cross the government in several directions, from Magdeburg as a centre. One line proceeds eastward through Potsdam to Berlin; a second south through Cöthen and Halle to Leipsig; a third west through Brunswick to Hanover, near which it meets the lines to Harburg, Bremen, and Cologne; and a fourth northward through Stendal to the Berlin-Hamburg line, which it joins near the Wittenberg station on the right bank of the Elbe.

Magdeburg, the capital of the government and of the province of Prussian Saxony, and one of the strongest fortresses in Prussia, stands on the left bank of the Elbe and an island formed by its arms, in 52° 8' N. lat., 11° 39' E. long., 90 miles by railway S.W. from Berlin, and has a population of 55,000. The town consists of three parts, called Altstadt, Neumarkt, and Friedrichsstadt; and of two suburbs, Sudenburg and Neustadt. It is ill built, with narrow crooked streets. The most remarkable buildings are—the noble cathedral, which was completed in 1363, the town-hall, the government-house, the artillery barracks, and the theatre. Of the squares the largest are—the old market-place, in which is a statue of Otho the Great; and the cathedral square, which is surrounded by handsome buildings and avenues of trees. The town has numerous charitable, literary, and scientific institutions, schools, libraries, and picture-galleries. It has also manufactures of silk, broadcloth, leather, gloves, tobacco, jewellery, pottery, beer, spirits, &c. A canal runs from the Elbe at Magdeburg to the Havel; steamers ply daily to Hamburg. Magdeburg is rich in historical associations; the most celebrated events in its annals are its capture by storm (May 10th, 1631) by the Austrian general Tilly, and again in 1806 by the French, who annexed it to the kingdom of Westphalia.

Aschersleben. [ASCHERSLEBEN.]

Burg. [BURG.]

Halberstadt. [HALBERSTADT.]

Quedlinburg, a walled-town, the birthplace of Klopstock, stands on the Bode, a feeder of the Saale, 30 miles S.W. from Magdeburg, and has 14,000 inhabitants, who manufacture beet-root sugar, spirits, and woollen-cloth. This place was long famous for its convent, the superiress of which was in spiritual matters subject to the Pope only, was a princess of the empire, and had a vote in the Diet. At the Reformation the abbess embraced the Lutheran religion, and the institution continued, but with greatly diminished means, till 1802, when the convent was sequestered. The abbey church is a fine building, and interesting on account of the tombs it contains; among these are the tombs of the emperor Henry I. and his wife Matilda.

Salzwedel, a walled-town, 54 miles N.W. from Magdeburg, stands on the Jetzel, which divides it into the Old and the New Town. It has six churches, two hospitals, a gymnasium, and 8000 inhabitants, who manufacture woollen-stuffs, gloves, needles, beer, spirits, &c.

Schönebeck, 7 miles (10 miles by railway) S.S.E. from Magdeburg, stands on the left bank of the Elbe, and has important salt-works and 7400 inhabitants, who manufacture tobacco, leather, chemical products, gloves, &c.

Stendal, a walled-town, entered by five gates, stands on the Uchte, 32 miles N.N.E. from Magdeburg, and has 6800 inhabitants, engaged in the manufacture of cloth, calico, and leather.

MAGELLAN. [MAGALHAENS.]

MAGGIORE, LAGO. [LAGO MAGGIORE.]

MAGHERA. [LONDONDERRY.]

MAGHERAFELT, Londonderry, Ireland, a post and market-town, and the seat of a Poor-Law Union, is situated on the Armagh and Coleraine road, in 54° 46' N. lat., 6° 37' W. long., distant by road

41½ miles S.E. by E. from Londonderry, and 117½ miles N. by W. from Dublin. The population in 1851 was 1390. Magherafelt Poor-Law Union comprises 25 electoral divisions, with an area of 155,904 acres, and a population in 1851 of 64,822. The town, which has been much improved by its proprietors, the London Salters' Company, contains a parish church, chapels for Roman Catholics, Presbyterians, and Methodists, National, Free, and other schools partially endowed. The other public buildings are the court-house and market-house, the bridewell, district dispensary, and Union workhouse. The chief occupation is the manufacture of linen, of which large sales are made at the weekly market. Quarter and petty sessions are held in the town. Fairs are held May 25th, August 25th, and October 29th.

MAGINDANAO. [PHILIPPINE ISLANDS.]

MAGNA GRÆCIA, was used to designate the south of Italy, in consequence of the numerous and flourishing colonies which were founded by the Greeks in that part of the country. The name it seems was not applied to the country north of Cuma and Neapolis. Pliny apparently considers Magna Græcia to begin at the Locri Epizephyrii ('Nat. Hist.,' iii. 15); but Strabo even includes the Grecian towns of Sicily under this name. The name does not occur, as far as we are aware, in the early Greek writers, but it is used by Polybius and succeeding Greek and Roman writers. It contained many cities far superior in size and population to any in Greece itself. The most important of these places were—TARENTUM, founded by the Lacedæmonians; SYBARIS, Croton, and Metapontum, by the Achæans; Locri Epizephyrii, by the Locrians; and RHEGIUM, by the Chalcidians—all in Italy; and in Sicily—SYRACUSE, founded by the Corinthians; GELA, by the Cretans and Rhodians; and AGRIGENTUM, by the inhabitants of Gela. [BASILICATA; CALABRIA; PAESTUM, &c.]

MAGNESIA. [KARIA.]

MAGUIRE'S BRIDGE. [FERMANAGH.]

MAHÉ. [HINDUSTAN.]

MAHON, PORT. [MENORCA.]

MAIDENHEAD, Berkshire, a market-town and municipal borough, partly in the parish of Bray, and partly in that of Cookham, is situated on the right bank of the Thames, in 51° 31' N. lat., 0° 42' W. long., distant 14 miles N.E. by E. from Reading, and 22½ miles W. from London by the Great Western railway. The population of the borough in 1851 was 3607. The borough is governed by 4 aldermen, or bridge-masters, and 12 burgesses, one of whom is mayor. The living is a perpetual curacy in the archdeaconry of Berks and diocese of Oxford.

Maidenhead, anciently called South Ealington, is a small but neat town, a little way from the Thames, on the Bath road. It consists of one long street, which is lighted with gas and paved. In the town are a market-place, a town-hall, and a jail, a plain modern chapel, places of worship for Wesleyan Methodists and the Countess of Huntingdon's Connexion, a National school, and almshouses for eight poor men and their wives. The bridge consists of seven semicircular arches of stone, and three smaller arches of brick at each end. The Great Western railway is here carried across the Thames by a remarkably fine brick bridge. The chief trade of the place is in meal, malt, and timber; there is an extensive brewery. The market is on Wednesday, and is a considerable mart for corn. There are three fairs. In the neighbourhood are Cliefden, the seat of the Marquis of Stafford, Taplow Court, the seat of Earl Orkney, and several other mansions. The scenery of the Thames just above Maidenhead is very beautiful.

MAIDSTONE, Kent, the county and assize-town, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on a declivity, on the right bank of the Medway, in 51° 16' N. lat., 0° 30' E. long., distant 27 miles W. by S. from Canterbury, 34 miles S.E. from London by road, and 56 miles by the South-Eastern railway. The population of the borough in 1851 was 20,801. The borough is governed by 6 aldermen and 13 councillors, and returns two members to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry of Maidstone and diocese of Canterbury. Maidstone Poor-Law Union contains 15 parishes and townships, with an area of 35,806 acres, and a population in 1851 of 38,097.

According to Nennius this place was called *Cæsar Magusaid*, or *Medwig* (the town or city of the Medway). At a very early period Maidstone formed part of the possessions of the see of Canterbury; in the Domesday survey it is placed among the lands of the archbishop. Charters were granted to the town by Edward VI., Elizabeth, James I., Charles II., and George II. The town consists chiefly of four principal streets, which are well-paved and lighted, and contain many well-built houses. Water is supplied from reservoirs on the opposite bank of the Medway. The chief public building is the parish church of All Saints, which is one of the largest in the kingdom, and an excellent example of the perpendicular style: it has been recently restored in a very costly manner. There are also the churches of Holy Trinity, St. Peter's, and Tovil, and two other churches; with places of worship for Wesleyan Methodists, Independents, Baptists, Quakers, and Unitarians. All Saints College, founded in 1846, is held in a remaining portion of the old college of All Saints, suppressed by Edward VI. There was also a fraternity of Corpus Christi, on the suppression of which the buildings belonging to it, then called 'The Brotherhood

Hall,' were purchased by the corporation, who established the Free Grammar school, which has an endowment of about 60*l.* a year, and had 40 scholars in 1851. There are a Blue-Coat school for 60 boys and 40 girls; a Brown-Coat school for educating 200 boys and 100 girls, and for clothing and educating 24 boys and 24 girls; National schools; almshouses for 19 poor persons; a dispensary; a philosophical society; a mechanics institute; a library; a savings bank; county assembly-rooms; and a theatre. The county jail was erected in 1818, at a cost of 200,000*l.* A county court is held. There is a neat town-hall; and nearly opposite to it is a spacious corn-exchange. The archbishop's palace was originally erected in the 14th century, but has undergone many alterations. On the left bank of the river are cavalry barracks. There are at Maidstone numerous paper-mills, an extensive oil-mill, manufactories of felt and blankets, and several breweries. The navigation of the Medway has been greatly improved and the traffic increased by the construction of a lock two miles below the town. The imports consist chiefly of coal, timber, groceries, iron, and rags; the exports are mostly fruit, hops, Kentish ragstone from the quarries in the neighbourhood, and paper. The market days are Thursday and Saturday; fairs are held on February 13th, May 12th, June 20th, and a large hop fair on October 17th.

MAIMAITCHIN. [KIACHTA.]

MAINA. [LAONICIA.]

MAINE, LE, one of the old provinces of France, was bounded N. by Normandie, E. by Orléanais, S. by Anjou, or Touraine, and W. by Bretagne. It now forms the department of SARTHE (with the exception of the arrondissement of La-Flèche), the arrondissements of Laval and Mayenne in the department of MAYENNE, the arrondissement of Mortagne in the department of ORNE, and part of the arrondissements of Dreux and Nogent-le-Rotrou in the department of EUBRE-ET-LOIR. It was formerly divided into Haut-Maine, capital Le-Mans; Bas-Maine, capital Mayenne; Haut-Perche, capital Mortagne; Perche-Gouet, chief town Montmirail; Terres-Françaises, chief place Tour-Grise-de-Verneuil; and Thymerais, chief town Châteauneuf. Its length was about 113 miles from east to west; its breadth 59 miles, and its area about 3886 square miles. It was watered in the western part by the Mayenne; and in the central and western parts by the Sarthe and its branches.

Le-Maine, as well as its capital Le-Mans, derives its name from the Aulerici Cenomani, one of the Celtic tribes which inhabited it. The Aulerici Cenomani were among the nations who filled the north of Italy with a population of Gauls. Le-Maine was among the earlier conquests of the Franks, who established here a kingdom, which lost its separate existence when Clovis amalgamated the Frankish tribes under his sway.

Le-Maine was early formed into a county. It was conquered by William the Bastard, duke of Normandie (1068), a little before the conquest of England. Henry I., his youngest son, ceded the province (1100) to Hélie de la Flèche, on whose death (1110) it came to the counts of Anjou. On the accession of Henry Plantagenet, count of Anjou and Maine, to the duchy of Normandie (1151), and subsequently to the crown of England as Henry II. (1154), Maine again became part of the English possessions in France. On the confiscation of these by Philippe Auguste, the county of Maine was granted by that prince (1204) to Berengaria, widow of Richard I. of England, on whose death it probably reverted to the crown, and was granted by St. Louis, together with the county of Anjou (1246), to his brother Charles, count of Provence. Under Philippe VI. de Valois, who had inherited it before he came to the throne of France, it was reunited to the crown; but Philippe shortly after his accession invested his son Jean with the two counties, and when Jean became king he bestowed them on his second son Louis, who subsequently became count of Provence and king of Naples, in whose line it continued for some time. In 1440 René, who possessed the counties of Lorraine, Provence, Anjou, and Maine, bestowed the last on his brother Charles, who transmitted it to his son: but on the death of the latter (1481) the county of Maine was once more reunited to the crown, from which it has never since been permanently alienated.

MAINE-ET-LOIRE, a department in the west of France, bounded N. by the departments of Mayenne and Sarthe, E. by Indre-et-Loire, S. by the departments of Vienne, Deux-Sèvres, and Vendée, and W. by Loire-Inférieure. It lies between 46° 58' and 47° 46' N. lat., 0° 15' E. and 1° 18' W. long. Its greatest length from east by north to west by south is 77 miles; its greatest breadth, at right angles to the length, is 60 miles. The area is 2756.3 square miles. The population in 1841 was 488,472; in 1851 it was 515,452, which gives 187.34 inhabitants to a square mile, being 12.76 above the average per square mile for the whole of France. The department is formed out of the former province of Anjou, and it is named from the two principal rivers which traverse it.

The department has no mountains, nor are there any very high hills. The high lands which separate the basins of the Vilaine and the Loire occupy a small part of the north-western border, and the southern part is overspread by the prolongation of the heights of Gâtine, which bound the basin of the Loire on the south-west. The surface of the department consists for the most part of low hills covered with vineyards, or of gently undulating plains, divided by ditches and quickset hedges, and adorned with clumps of trees, whose foliage gives

variety and beauty to the landscape. The eastern side of the department is occupied by the chalk which encircles the Paris basin: a belt of land in the centre, extending across the department, first south-west along the eastern bank of the Sarthe to its junction with the Mayenne, and from thence south-east by Angers, Brissac, and Doué, is occupied by the formations between the chalk and the saliferous sandstone: the western side is occupied by the primitive rocks.

The department belongs entirely to the basin of the Loire, which river crosses it from east to west, and forms in its course several beautiful islands. The northern districts are drained by the Mayenne and its feeder the Oudon, by the Sarthe and its feeder the Loire, and by the Authion. [MAYENNE; SARTHE; LOIRE-ET-CHEV; INDRE-ET-LOIRE.] The Mayenne and the Sarthe unite above Angers and form the *Maine*, which after a course of about 5 miles falls into the Loire south by west of Angers. These last-named rivers are navigable; the Loire steamers between Nantes and Tours ply up the Maine as far as Angers. The chief feeders of the Loire from the left bank in this department are the Thouet and the Layon. The Sèvre-Nantaise and its tributary the Moine drain a small portion of the south-west of the department. The department is traversed by the Orléans-Nantes railroad, which passes through Saumur and Angers; it is also crossed by 9 state, 24 departmental, 17 military, and 33 parish roads. The climate is healthy, and the temperature mild; winter is rainy; west and south-west winds prevail.

The soil is generally fertile, yielding corn more than enough for the consumption. The chief crops are wheat, rye, barley, and pulse of all kinds. Other valuable products are hemp, flax, nuts, excellent fruits, &c. About 11,000,000 gallons of white and red wine are made annually, some of which is of good quality. Since 1838 a good deal of effervescing wine, resembling the true champagne and rivaling it in quality, has been manufactured. The department is famous for its melons. A considerable quantity of cider is also made. The forests of the department, which are extensive, consist chiefly of oak and beech. The pasturage is good, and great numbers of horses, mules, horned cattle, and sheep are reared. Deer and wild boars are met with in the forests; wolves and badgers are sometimes seen; foxes, weasels, and wild cats are more common. Feathered game is very abundant. Fish is plentiful; the rivers are infested by otters. Among the reptiles are vipers, adders, the common snake, and land-lizards.

Iron and coal mines are worked. Marble, granite, building stone, limestone, slate, and potters'-clay are quarried. The slate-quarries of the department, especially those of Angers, are vast excavations, worked right from the surface of the ground. They give employment to above 3000 men, who raise about 80,000,000 slates annually. The number of wind- and water-mills amounts to 622; of iron forges and foundries to 90; and there are 160 factories and workshops of different kinds, in which sailcloth, linen, cotton-handkerchiefs, flannels, paper, oil, cotton- and woollen-yarn, &c., are manufactured. There are also numerous tan-yards, sugar-refineries, distilleries, bleach-works, and dye-houses.

The department is divided into five arrondissements, which with their subdivisions and population are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Angers	9	88	154,945
2. Baugé	6	66	79,713
3. Segré	5	61	62,080
4. Beaupréau	7	75	121,375
5. Saumur	7	83	97,339
Total	34	373	515,452

1. Of the first arrondissement, and of the whole department, the capital is *Angers*, which is noticed in a separate article. [ANGERS.] Of the other towns named in this article the population given in each case is that of the commune. *Chalennes*, prettily situated at the foot of a hill between the Layon and the Loire, 12 miles by railway S. by W. from Angers, has 4927 inhabitants, who manufacture serge, handkerchiefs, and brandy. *Ponts-de-Cé*, a town of 4000 inhabitants, stands about 4 miles S. from Angers, at the entrance of the Authion into the Loire. It takes its name from the series of bridges that here connects the banks of the Loire with the intervening islands. These bridges form one of the most important passes of the Loire; they are partly of wood and partly of stone, and contain 109 arches in all, the entire length, including the causeway, being 3280 yards. The town consists merely of rows of houses built along the causeways connecting the bridges. About half a mile below *Ponts-de-Cé*, and on the right bank of the Loire, is an ancient Roman encampment, which is traditionally said to have been occupied by Cæsar. Some derive the name *Ponts-de-Cé* from *Pontes Cæsaris* (Cæsar's Bridges).

2. The second arrondissement of Baugé, has for its chief town *Baugé*, which stands east of Angers, in 47° 32' 32" N. lat., 0° 6' 11" W. long., 192 feet above the level of the sea, near the Couesnon, a feeder of the Authion, and has a tribunal of first instance, a college, and 3147 inhabitants, who manufacture coarse woollens, linen, and articles of horn. The old castle built here by Foulques Nerra is well

preserved, and forms now one of the finest hospitals in Maine. *Beaufort*, situated in an extremely fertile country on the right bank of the Loire, was formerly one of the most important towns of Anjou; but since the construction of the dyke along the Loire, on the summit of which the road from Tours to Angers runs and not as formerly through Beaufort, the town is much fallen from its former prosperity. It is however a well-built and still important town, with 5474 inhabitants, who manufacture sailcloth, zinc, leather, &c. There is also a considerable trade in corn, wine, oil, fruit, hemp, &c. *Durtal*, a town of 3452 inhabitants, is built at the foot and on the slope of a hill on the right bank of the Loire, which is here passed by a bridge of cut stone. There is a pretty château, with two battlemented and machicolated towers, on a hill near the town. Earthenware, tiles, bricks, and linen are manufactured here. *Longué*, on the Lathan, a feeder of the Authion, a few miles S. of Baugé, has 4287 inhabitants, who manufacture oil and leather, and trade in cattle, leeches, and agricultural produce. The leeches are found in a marsh lake traversed by the Lathan.

3. The third arrondissement is named from its chief town *Segré*, which is situated in the north of the department, on the Oudon, a feeder of the Mayenne, and has a tribunal of first instance, and 2631 inhabitants. *Lion-d'Angers*, a well-built little town, near the junction of the Oudon with the Mayenne, has a population of 2732. *Pouancé*, in the north-western angle of the department, has iron-smelting forges and blast furnaces, and 2821 inhabitants.

4. In the fourth arrondissement the chief town, *Beaupréau*, stands on the Erve, a feeder of the Loire, 34 miles S.W. from Angers, and has a tribunal of first instance, a college, and 3448 inhabitants. There is a fine turreted chateau near the town. Leather, flannel and other woollen stuffs, and linen are manufactured. *Chemillé*, E. of Beaupréau, on a river called Ionne, is an old town with 4049 inhabitants, who manufacture linen of all kinds, calico, cotton-yarn, and paper. *Chollet*, or *Chollet*, a busy manufacturing town in the south of the department, stands on the Moine, and has a tribunal of commerce, a council of Prud'Hommes, a college, and 8413 inhabitants. The town was burnt in the Vendean war by the Vendéans and the Republicans; but it has been since rebuilt. It is famous for the manufacture of linen and pocket-handkerchiefs; flannel, calico, cotton-yarn, and leather are also made; there is a brisk trade in these articles, and in cattle and agricultural produce. *St.-Florent-le-Vieil*, a town of 2025 inhabitants, stands on a steep hill above the left bank of the Loire.

5. In the fifth arrondissement of Saumur the chief town, *Saumur*, stands in a charming situation on the left bank of the Loire, in 47° 15' 34" N. lat., 0° 4' 17" W. long., 252 feet above the level of the sea, at a distance of 28 miles by railroad W. from Tours, and has tribunals of first instance and of commerce, a college, and 12,608 inhabitants. A magnificent stone bridge, of 12 arches, 310½ yards long, joins the town to an extensive suburb built on several islets in the river and along the dyke on its right bank. Saumur is built at the foot and on the slope of a hill, the summit of which is crowned by an old castle, now used as an arsenal. The lower part of the town is well built, and extends along the river, which is lined with quays. The higher part of the town is irregularly built; the streets are ill laid out, and some of them very steep. The principal buildings, besides the castle, are the churches of St.-Pierre, Nantilly, and Notre-Dame-des-Ardilliers (the convent formerly attached to this church is now an hospital); and the town-hall. The splendid barracks of Saumur, which were built between the Loire and the Thouet, were destroyed by fire, May 8th, 1848. Other objects of notice at Saumur are the public library, the theatre, and the baths. There are several fine promenades; the view from the castle over the valley of the Loire is very splendid. The environs of Saumur, along the left bank of the Loire, abound in druidical monuments. The chief industrial products are linen, cotton handkerchiefs, enamelled articles, beads, saltpetre, and leather. The line of steamers that ply between Nantes and Tours put in at Saumur. *Doué*, S.W. of Saumur, is a well-built little town, with 2590 inhabitants, who trade in corn, linen, iron, and cattle. It possesses one of the finest fountains in France, both in an architectural point of view and on account of the abundance of its waters. *Fontevrault*, in the south-eastern angle of the department, 9 miles from Saumur, has a population of 3639. The town owes its existence to the famous abbey of Fontevrault, founded in 1099, of which the great church, a magnificent monument of the 12th century, and all the other buildings now remaining, have been converted into a central prison for eleven departments. The abbey possesses great interest for an Englishman; it contains the cemetery of the Norman kings of England and the Counts of Anjou. The tombs of Henry II. and his queen, Eleanor of Guienne, of Cœur-de-Lion, and Elizabeth the Queen of John, alone have been saved from utter destruction.

The department forms the see of the Bishop of Angers. It is included in the jurisdiction of the High Court of Angers, and belongs to the 15th Military Division, of which Nantes is head-quarters. It returns four members to the Legislative Body of the French empire. There are at Angers a diocesan seminary, a preparatory theological college, a secondary school of medicine, an endowed college, and a primary normal school; and communal colleges at Baugé, Beaufort, Doué, and Saumur. The former University-Academy of Angers (like some others) is now suppressed and by recent legislation and a decree

of the emperor the department is now placed within the limit of the University Academy of Rennes.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

MAINE, the most northern of the United States of North America, extends between 43° and 47° 30' N. lat., and between 66° 52' and 71° 6' W. long. It is bounded E. by the British colony of New Brunswick; N. and N.W. by that of Lower Canada; W. by the state of New Hampshire; and S. by the Atlantic Ocean. The state, which is of very irregular form, has an area of about 35,000 square miles, or about 3600 square miles larger than that of Scotland. The population in 1850 was 538,169, or 16.66 to the square mile. The inhabitants being all free, the federal representative population is the same as the entire population in 1850; this according to the present ratio of representation entitles the state to send 6 representatives to Congress. To the Senate, like each of the other states, Maine sends two members.

Coast-line, Surface.—The coast-line extends in a straight line 230 miles, but following its windings it is above 900 miles long. It is greatly broken, and in the north-eastern part is skirted by numerous islands, generally small, but some of considerable size, inhabited and cultivated. The southern portion, as far north as Casco Bay, is rather high, but comparatively free from rocks and islands. Casco Bay extends from south-west to north-east 20 miles, with a mean width of five miles, and is landlocked by a chain of islands, the largest of which are the Great Gebrag and Sebascodegan. Along the bay are several good harbours. So far the coast trends from south-south-west to north-north-east. Between Casco Bay and Penobscot Bay the coast of the mainland runs nearly east and west; but numerous long peninsulas stretch out from it southward into the sea, and are divided from each other by narrow and deep indentations, which form excellent harbours. These bays contain numerous small islands. Penobscot Bay extends from St. George's Point (44° N. lat.) and the Fox Islands, thirty miles northward, to the mouth of the Penobscot River, nearly in a northern direction. It contains numerous wooded islands, some of which are considerable, as Long Island, which is fifteen miles long, and from two to three miles wide, Fox, Deer, and Haut islands. The remainder of the coast-line, from Penobscot Bay to Passamaquoddy Bay, resembles the coast west of Penobscot Bay, consisting of an alternation of promontories and indentations; but the promontories are commonly wider, and the inlets do not run so far into the mainland. The most extensive bays are Frenchman's Bay and Machias Bay. Frenchman's Bay is formed on the west side by the extensive island called Mount Desert Island. The approach to this coast, which runs from the south of west to the north of east, is also rendered difficult by numerous rocks and small islands. Though the frost along this shore is very intense in winter, and the numerous islands favour the formation of ice, the harbours are commonly open all the year round, the strength of the tide, which rises from 24 to 40 feet, preventing their being closed up.

The surface of the state is mostly hilly, except along the shore, which is flat and sandy; but it is only in the north-western and northern districts that the hills rise to any great altitude. This northern and north-western region is full of high hills and mountains, of which the highest, Mount Kathadin, between the east and west branches of the Penobscot River, rises to 5380 feet. The other lofty heights are the Bald mountains west of Moosehead Lake, Mounts Saddleback, Abraham, and Bigelow, and the Sugar Loaf mountains on the west of the Walloostook. These hills and mountains, though mostly isolated, occupy perhaps one-fourth of the region, and about as much is occupied by the lakes. The lowest part of this region is probably from 600 to 700 feet above the surface of the sea; and few settlements have been formed in it, except in the valley of the Androscoggin, at the southern extremity, where the hills are of moderate elevation. This region occupies more than one-fifth of the area of the state.

Between this region and the coast is the hilly region, which is well drained by numerous rivers with a rapid course. Swamps are here of rare occurrence and of moderate extent, except along the banks of the Matawamkeag, where they occupy a space fifty miles in length.

Hydrography, Communications.—Maine is in every part abundantly provided with streams, rivulets, or lakes. It is estimated that above a tenth of the surface is covered with water. The rivers in the southern district have a short course. The principal are the Piscataqua [NEW HAMPSHIRE], the Saco, and the Presumpscot, or Casco. The two latter rise on the southern and western declivity of the White Mountains in New Hampshire, the Saco running about 90 miles and the Presumpscot about 60 miles. The Presumpscot traverses a large lake called Sebago Pond, and falls into Casco Bay, a short distance north of Portland. In the northern part of the state is the Walloostook, or Main St. John, the chief branch of the St. John's River. It rises in Somerset county, and flows at first north and then north-east to its confluence with the St. Francis at the northern boundary of the state. The united river, under the name of the St. John, flowing at first east and then south-east, forms the boundary of the state to 67° 49' W. long., when it enters the province of New Brunswick, to which the remainder of its course belongs.

East of Casco Bay is a deep indentation which receives two considerable rivers, the Androscoggin and the Kennebec. The Androscoggin is formed by the confluence of two small streams in the north-eastern

part of New Hampshire, and enters Maine about 44° 15' N. lat. It then flows for some distance in a generally eastern direction, but near the town of Jay turns south and afterwards south-east, when it passes over the Pejepakeag Falls, and joins the Kennebec at Merry Meeting Bay, 16 miles from the sea. The Kennebec rises in several branches on the eastern declivity of the mountain-range which separates Maine from Canada: these branches, some of which have a course of 40 miles, unite in Moose-head Lake, a sheet of water about 30 miles long from north to south, with a breadth varying from 5 to 20 miles. From the south-western side of this lake the Kennebec issues in a large stream, and the general direction of the remainder of its course is to the south, but with considerable deviations to the west and east, until it reaches the mouth of the Androscoggin, after a course of about 180 miles. Though their courses are much obstructed by falls and shoals, both of these rivers are of great importance in the transportation of lumber. The tide ascends to Augusta, 50 miles from the sea; steamers of light draught and small vessels ascend to Augusta. Kennebec Bay, in which the Androscoggin and the Kennebec unite, stretches more than 20 miles farther south, being formed by the long peninsula of Phippsbury on the west, and by numerous islands on the east.

The upper branches of Penobscot River are numerous. All the waters which descend from the southern declivity of the high land which forms the southern border of the St. John's River, between 68° and 70° W. long., flow down to the Penobscot. The western or principal branch is formed by several mountain-streams uniting in Chesuncook Lake, from the southern extremity of which it issues, flowing eastward to Pemadumcook Lake, after leaving which it unites with the north branch and the Matawamkeag, two large rivers which come from the north. The united stream flows in a south-western course to its junction with the Piscataquis River, a large stream which falls into it from the west. The remainder of its course is a little to the west of south, and it falls into Penobscot Bay after a course of about 300 miles. The tides reach up to Bangor, 60 miles from the sea. Penobscot River is more navigable than the other rivers of Maine, as no obstruction occurs for 20 miles above Bangor, except its rapid current, and it is much used for the transport of lumber.

From Penobscot Bay to that of Passamaquoddy, a distance of 100 miles along the margin of the ocean, no large river empties itself into the sea. The last remarkable river is the St. Croix, or Scodoc, which forms the boundary-line in this part between the United States of North America and the British colony of New Brunswick. Its farthest sources are a number of lakes, curving from north to east, and extending in length about 40 miles; they are known as the Grand or Chiputnatook Lake. The river issuing from the last of this series of lakes runs southward until it unites with the outlet of another series called the Scodoc lakes. Hence its course is to the south-east, but with some considerable bends. It enters Passamaquoddy Bay after a course of about 100 miles. Passamaquoddy Bay is of a very irregular form, extending upwards of 20 miles from the mouth of the St. Croix River to Quoddy Point; on the side of Maine it forms a bay of considerable extent, called Kopscook Bay.

The estuaries of the above rivers, with the deep inlets and harbours, form the natural lines of communication belonging to the state. The only canal of any magnitude is the Cumberland and Oxford Canal, which connects Portland with Sebago Pond; it has 25 locks, and is 20½ miles long; but by an additional lock is connected with Saco River, and with Brandy and Long Ponds, giving a navigable length of over 50 miles.

The carriage-roads are generally well laid out and well maintained. The railways are extensive and important: above 450 miles are completed, and a great additional length is in progress or projected. The most important completed line is the Grand Trunk, originally called the Atlantic and St. Lawrence, which was finished in 1853, and forms a continuous line from Montreal in Canada to Portland in Casco Bay, Maine, a distance of 292 miles: of this railway the Maine portion, 149 miles long, is known as the Portland District railway, and has a branch from Mechanic Falls to Buckfield, 13 miles. Three other lines of railway meet or terminate at Portland: the Portland, Saco, and Portsmouth, 52 miles long, which runs to Portsmouth, New Hampshire, and unites Portland with Boston; a connected line called the Portland and Kennebec, which is completed to Augusta, 60 miles, with a branch 9 miles long to Bath; and the York and Cumberland railway, which is open to Saco River, 18 miles. The other lines in this state are—the Androscoggin Junction, 20 miles, connecting Androscoggin and Livermore; the Androscoggin and Kennebec, a broad-gauge line, from Danville to Waterville, 55 miles; the Bangor and Piscataqua, from Bangor to Old Town, 12 miles; the Calais and Baring, uniting the places so named, 6 miles; and the Franklin, from Machias Port to Whitneyville, 9 miles.

Geology, Mineralogy, &c.—The larger part of the rocks of the state is of the Igneous and Paleozoic formations. Igneous rocks, eruptive and metamorphic, occupy the greater part of the western and southern sides, and they appear in the Silurian districts about the middle of the state. Much of the north-western mountain region is granitic; Mount Kathadin and other of the loftier summits in the neighbourhood of Moosehead Lake, and the St. John River, are of granite; and it occurs largely about Augusta and elsewhere towards the south. Trap-dykes are very widely distributed; porphyries, mica, and talcose

schists, greenstones, soapstone, &c., abound. Lower Silurian strata occupy the whole centre of the state, except where broken through or transformed by intrusive rocks. The Lower Silurian series is here represented chiefly by strata of blue fossiliferous limestone and argillaceous schists. The Upper Silurian rocks occupy the north-west districts, including the valley of the Walloostock, and they also appear in detached portions quite across to Eastport, at the south-eastern corner of the state: these rocks are chiefly a light-gray limestone. In the most northern part of Maine the characteristic rocks are of the Devonian formation, consisting of strata of deep red-sandstone, which correspond to the old red-sandstone of Great Britain, crowning beds of schistose clay. Miocene and Pliocene strata, or the middle and upper series of the Tertiary formation, occur at Portland, Augusta, and elsewhere. Recent rocks are found in various places at the estuaries of rivers and along the coast. Raised beaches are met with in several localities.

Gold is said to be found in the tributaries of the Penobscot and Moose rivers. Iron-ore of excellent quality is found in considerable quantities. Traces of bituminous coal, outcrops of the carboniferous measures of New Brunswick probably, are said to have been discovered in the south-eastern districts between the Kennebec and St. Croix. Granite-limestone and marble of superior quality are largely quarried, as well for export to other states as for use in Maine. Lime is burnt to a great extent at Camden and Thomaston. There is a salt-spring at Lubec.

Soil, Climate, and Productions.—Along the sea-coast, and from ten to twenty miles inland, the soil is of moderate fertility, and frequently intersected with sandy and sterile tracts; but beyond this region the soil improves, and produces plentiful crops of grain, flax, and hemp. Between the Penobscot and Kennebec rivers is a very fertile tract of country. The tract between the Penobscot and Passamaquoddy has a strong moist soil, and is known as the White-Pine Land, from the tree which most largely covers it. The mountain districts are chiefly available for grazing.

The winter is very severe. From the 1st of November to the 1st of April the ground is covered with snow, and the rivers and lakes with ice. The summer on the sea-shore is very hot. The thermometer frequently rises to 90°, and sometimes to 100°; and the weather is subject to sudden and great changes. Vegetation commences late; the season of growth lasts from the middle of April to the middle of October, but growth is vigorous for little over three months, during which it makes rapid progress. Drought is frequent. The mean temperature is about 42°. In the year the thermometer ordinarily ranges 116°; between 96° above and 20° below zero. In the interior of the hilly region the weather, though not so warm, is much more regular. The climate is generally healthy.

A very dense forest covered Maine in its natural state, and still spreads over the greater part of it. The forest-trees consist principally of white pine, spruce, maple, beech, birch, white and gray oak, and constitute the principal wealth of the state, timber being its staple. The cultivated fields do not occupy one-twentieth part of the surface. Maize, which constitutes the principal food of the inhabitants, thrives well as far north as the valley of the Lower Penobscot River. Most other cereals are cultivated in this state. The fruit-trees of northern Europe thrive very well, especially pears and apples, as well as most of our vegetables.

Cattle and hogs are numerous, and afford articles of exportation. Deer were formerly abundant; wolves, bears, beavers, foxes, and squirrels are still common. The sea abounds in fish, especially cod; and the rivers and lakes are full of fish, especially salmon; large trout are common in the lakes in the interior.

Manufactures, Commerce, &c.—Maine is not to any great extent a manufacturing state; the chief branches of manufacture are cotton and woollen goods and iron. Very nearly half of the male population over 15 years of age (77,082 out of 162,711) are returned as employed in agriculture, while a very large number are occupied in the forests cutting timber, in the numerous saw-mills on the rivers preparing the timber for market, and in various employments more or less connected with agriculture and the timber trade.

The exports consist chiefly of the produce of the forests, as timber, lumber, boards, and potash, and of dried fish, beef, pork, and grain. For the year ending June 30th 1852 the value of the articles of domestic produce exported was 1,668,274 dollars; of foreign produce exported, 49,544 dollars; total, 1,717,818 dollars. The imports amounted in the same year to 1,094,977 dollars, of which 947,926 dollars were in American vessels and 147,051 dollars in foreign vessels. The imports consist mostly of manufactured articles from Europe, and salt, iron, and colonial produce from the West Indies, especially Cuba. This state possesses a larger amount of shipping than any other state in the Union except Massachusetts and New York; and a larger number of ships are now built in Maine than in any other state. In 1852 there were 354 vessels built in the state of the aggregate burden of 110,047 tons: of these 138 were ships, 63 brigs, 148 schooners, and 5 sloops and canal-boats.

Divisions, Towns, &c.—Maine is divided into 13 counties. Augusta is the political capital; but Portland is the commercial metropolis and most populous town in the state. These, with the other more important towns, we notice below: the population is that of 1850, but it

is proper to intimate that the term 'town' as used in Maine is equivalent to the English 'township,' and the Census Report does not discriminate the urban and rural population.

Augusta, the capital, is built chiefly on the right bank of the Kennebec River, at the head of steam navigation, 43 miles from the sea, and 595 miles N.E. from Washington, in 44° 18' N. lat., 69° 50' W. long.: population, 8225. The town is regularly laid out, and a fine bridge 520 feet long connects the main part with that which lies on the left bank of the river. The principal buildings are the state-house, which stands a little south of the town, the county buildings, state lunatic asylum, United States arsenal, several churches, schools, &c. Steamers ply regularly to the principal North Atlantic ports, and the Portland and Kennebec railway terminates here. Four newspapers are published here weekly.

Portland, the capital of Cumberland county, is the chief commercial city in Maine, and the third in importance in the New England states. It is finely situated on an elevated promontory on the south-west side of Casco Bay, 55 miles S.S.W. from Augusta: population, 20,815. The city is regularly laid out, and well built, especially in the more recent parts. The chief public buildings are the Exchange, which includes the post-office, custom-house, and United States court-rooms; the city-hall; the old custom-house; 18 churches; numerous high and public schools; an athensium; natural history society's museum, &c. Portland is a place of considerable trade. The foreign commerce of the city is principally with Europe and the West Indies. The coasting-trade is chiefly with Boston, with which port there is regular, and during summer daily, steam-boat communication. The exports are lumber, ice, fish, provisions, &c. Portland Harbour is capacious, safe and well sheltered, has a good entrance, and is seldom obstructed by ice. Four lines of railway terminate at Portland, and afford very complete facilities for communication with the neighbouring states and Canada. There is a very extensive manufactory of locomotives and railway-cars in the town. Two daily and seven weekly newspapers are published here.

Bangor, the capital of Penobscot county, occupies both banks of the Kenduskeag River, at its confluence with the Penobscot, at the head of steam navigation, 60 miles N.E. from Augusta: population, 14,432. The harbour is spacious and deep. The chief trade is in timber. The town has good railway and steam-boat communication with the other leading towns of the state. A bridge 1820 feet long, across the Penobscot just above the city, connects Bangor with the manufacturing village of Orrington. *Bath*, on the right bank of the Kennebec, 12 miles from the sea, and 28 miles S. from Augusta, population 8020, is a busy sea-port and commercial town. The shipping belonging to the town in 1850 amounted to 103,626 tons, of which 76,606 tons were engaged in the foreign trade. A branch of the Kennebec and Portland railway is carried to the town. *Belfast* is situated at the head of Belfast Bay, 30 miles from the sea, and 87 miles E. by N. from Augusta: population, 5051. The harbour is capacious, deep enough for the largest vessels, and is rarely obstructed by ice. The town possesses a considerable trade in the export of lumber and fish. Ship-building is carried on to some extent. There is regular steam-boat communication with the neighbouring ports. *Brunswick*, on the right bank and near the mouth of the Androscoggin, 29 miles S. by W. from Augusta: population, 4977. A large quantity of lumber is brought here for export, and there are extensive saw-mills both at Brunswick and at the village of *Topsham*, on the opposite side of the river. The two places are connected by a bridge, on which also passes the Portland and Kennebec railway. Bowdoin College and Medical School is situated at Brunswick. *Camden*, on the west side of Penobscot Bay, 36 miles E. by S. from Augusta, population 4005, possesses a good harbour, is somewhat largely engaged in the coasting-trade, especially in the export of lime, fisheries, and ship-building. *Calais*, on the right bank of the St.-Croix River, at the head of steam navigation, 133 miles E.N.E. from Augusta: population, 4749. Calais consists of an upper and a lower village; to the lower vessels of considerable burden ascend, and there is an extensive trade in the preparation and sale of lumber. The upper and lower villages are connected with each other and with other parts of the state by a railway, and with the British territory by a bridge, which is carried across the St.-Croix below the lower falls of that river. *Eastport*, on Moose Island, Passamaquoddy Bay, close to the British islands Campo Bello and Indian, 145 miles E.N.E. from Augusta: the population of the island, which is 4 miles long, and several smaller islands, is 4125. Eastport has a large lumber trade; and a considerable business in the foreign and coasting trade, the cod and mackerel fisheries, and ship-building. A United States garrison is maintained on the island, which is the most eastward portion of the territory of the United States. *Gardiner*, on the right bank of the Kennebec, at the confluence of the Cobbessacotee, 12 miles S. by E. from Augusta: population, 6486. A great amount of water power is afforded by the rivers, and immense quantities of timber are sawn here. The Portland and Kennebec railway passes through Gardiner. *Hallowell*, on the right bank of the Kennebec, 2 miles S. from Augusta: population, 4769. The town is regularly laid-out, and contains some neat buildings. The town has an extensive coasting trade; the chief exports are lumber and granite. Vessels drawing 9 feet of water can lie alongside the wharfs. The Portland and Kennebec railway passes through

Hallowell. *Saco*, on the left bank of the river Saco, 67 miles S.S.W. from Augusta, population of the township 5798, carries on a considerable trade in the preparation of lumber for export, and has nine large cotton-factories, a woollen-mill, and other establishments. The town is united by a bridge with *Biddeford* on the opposite side of the river, and the two places are closely associated in business interests. The Portland, Saco, and Portsmouth railway places these towns in connection with the railway system of the state. *Waldoboro*, on the left bank of the Muscongus River, where it opens into Muscongus Bay, 30 miles S.E. from Augusta: population, 4199. The inhabitants are engaged principally in ship-building, the coasting-trade, and the cod and mackerel fisheries. There are several mills and tanneries. *Wells*, on the coast, 80 miles S.W. by S. from Augusta: population, 2945. The town carries on a rather considerable coasting-trade; and has numerous mills, tanneries, &c. The Portland, Saco, and Portsmouth railway has a station here. *Wiscasset*, on the right bank of the Sheepscot River where it opens into Sheepscot Bay, 22 miles S.S.E. from Augusta: population, 2332. The town is well built, and contains the usual county buildings, churches, schools, &c. Although the foreign trade has somewhat declined, Wiscasset is still one of the most important sea-port towns in the state. *York*, on the coast, 92 miles S.W. from Augusta: population, 2930. The town is regularly laid out. Vessels of 250 tons can lie in the harbour. The coasting-trade and fisheries are the chief sources of employment.

Government, Judicature, &c.—The constitution was framed and adopted in 1820 when Maine was admitted into the Union as an independent state. By the constitution the right of voting in all state elections is vested in every white male citizen 21 years of age, not being a pauper or under guardianship, who has resided for three months in the town for which he proposes to vote. The legislative body, elected annually, consists of a Senate of not less than 20 nor more than 31 (at present 30) members, and a House of Representatives of not less than 100 nor more than 200 (at present 151) members.

Maine was discovered by one of the Cabots in 1497. It was afterwards visited by the French, who called the southern part, west of the Kennebec River, Maine, and the eastern part Acadie. About 1635 the English succeeded in making some settlements in the southern district. The first charter was proprietary, and granted in 1639 to Sir Ferdinand Gorges; but in 1652 Maine was united to Massachusetts under the title of the county of Yorkshire. In 1676 Massachusetts bought the country from the family of the Gorges, and from that time it remained annexed to that state, but advanced slowly, on account of the constant disputes between the English and French, and the incursions of the native Indians. Its progress became more decided from 1712, when England obtained full possession of it by the peace of Utrecht. After the declaration of independence Massachusetts opposed the attempts of the inhabitants to separate Maine from Massachusetts; but in 1819 it gave permission to the freemen of Maine to decide this question; and the majority of votes being in favour of a separation, Maine became in 1820 an independent member of the Union.

(*Statistical Gazetteer of the United States*; Darby, *View of the United States*; *Seventh Census of the United States*; *American Almanac*, 1854; Maroon, *Geological Map of the United States*, &c.)

MAINTENON. [EURE-ET-LOIRE.]

MAINZ, *Mentz*, or *Mayence*, the Roman *Moguntiacum*, the capital of the province of Rheinhessen, in the grand-duchy of Hesse-Darmstadt, is situated in one of the most beautiful and fertile parts of Germany, on the left bank of the Rhine, a little below the junction of the Maine with that river, on the slope of a hill, in 50° N. lat., 8° 11' E. long., and has about 31,000 inhabitants. It is connected, by a bridge of boats over the Rhine, with the village of Kastel, or Kassel, included in the system of fortifications, which render Mainz one of the strongest fortresses in Europe, and a chief bulwark of Germany against France. The town is connected by railways with Frankfort, Manheim, and Paris. The distance to Paris by railway through Ludwigshafen, Forbach, and Nancy is 415 miles W. Besides the hill-side the town occupies a long alip of land on the river bank. The extent of the fortifications, which were much enlarged by the French while the city was in their possession, including the citadel and other strong works, exclusive of Kastel, is two leagues and a half. Kastel, which is united with Mainz as an outwork, has very extensive fortifications, which consist of four strong forts besides the strongly fortified island of Petersau, including which latter the works are of greater extent than even those of Mainz itself. The inner works consist of 14 principal and 13 smaller bastions. On the land side there are four great gates with double drawbridges, and toward the river several gates. The Rhine runs from south to north, and the Maine from east to west. About a mile above the junction of the two rivers is the village of Kostheim on the Maine, and a little farther up a bridge of boats, defended by a strong tête-de-pont. On the last settlement of the affairs of Germany by the Congress of Vienna, Mainz was assigned to the grand-duke of Hesse-Darmstadt, but it was decided that, as a fortress, it should belong to the German Confederation, with a garrison of Austrian, Prussian, and Hessian troops. This garrison in time of peace consists of 6000 men. The military governor, who retains his post five years, is alternately an Austrian and a

Prussian general. This great fortress requires for its defence a garrison of 30,000 men.

Mainz is on the whole an old-fashioned and ill-built town. The streets, with three or four exceptions, are narrow, crooked, and gloomy, though there are many handsome private houses and some fine public edifices. Of the 27 squares and market places the principal is the Parade, which is surrounded with avenues of trees. Of the 11 churches, of which only one is for Protestants, the most remarkable are the cathedral, the church of St. Ignatius, which is considered a model of beautiful ecclesiastical architecture, St. Peter's church, and St. Stephen's. The cathedral, founded in the 12th century, is 350 feet long, 140 feet wide, and has 14 altars and 20 chapels. It was much injured in the siege by the French in 1793, and under the government of Napoleon I. it was intended to pull it down, but it has since been repaired. Nothing however remains of the great treasures which it formerly possessed, or of its library, and even many of the fine monuments have been destroyed. The other public edifices comprise the grand-ducal palace (formerly the house of the Teutonic order), the arsenal, the palaces of the commandant and of the vice-governor, the episcopal palace, the theatre, &c. A bronze statue of Gutenberg, the inventor of printing, and a native of Mainz, modelled by Thorwaldsen, and cast in Paris, was erected in an open space opposite the theatre in 1837. The expenses were paid by subscriptions from all parts of Europe. A gymnasium has taken the place of the former university, and there are several schools. The city library consists of above 90,000 volumes, and in the same building there are cabinets of medals and of natural history, a collection of philosophical and mechanical instruments, a gallery of pictures, and a collection of Roman antiquities found in the vicinity of the town. The Eichelstein in the citadel is supposed to be a monument in honour of Drusus Germanicus, brother of the emperor Tiberius. Near the village of Zahlbach are the remains of an aqueduct said to have been built by the same Drusus. There are pleasant walks on the Rhine; the environs are very beautiful and the prospects over the surrounding country magnificent. Mainz is a free-port; it has manufactures of tobacco, soap, leather, glue, false pearls, musical instruments, porcelain, &c. The commerce in corn, wine, timber, and Rhenish products generally, is considerable. Steamers ply regularly to the chief towns on the Rhine. Two railroads run from Kassel, one east to Frankfurt-am-Main, the other north to Wiesbaden.

Mainz is supposed to have been originally a town of the Mediomatrici, who inhabited the left bank of the Rhine, and whose dominion ended in the year 72 B.C. In 13 B.C. Drusus founded the fortress of Maguntiacum, or Maguntiacum, on the site on which Kastel now stands. The town which sprung up near it did not extend under the Romans to the Rhine. It was destroyed by the Vandals in 406, and lay in ruins for some centuries, till it was rebuilt by the kings of the Franks. A new and brilliant epoch in its history commenced with St. Bonifacius, the apostle of the Germans, who was bishop of Mainz. Some affirm that the bishopric of Mainz was founded by Crescens, a disciple of St. Paul, who suffered martyrdom in A.D. 103. Others say that Bonifacius was its first bishop. In 1798 Mainz became the capital of the French department of Mont Tonnère; in 1816 it was ceded to the grand-duke of Hesse.

MAIO. [CAPE VERD ISLANDS.]

MAIRE, LE, the name of a strait that lies in the Southern Atlantic Ocean, on the eastern shore of Tierra del Fuego, between Staten Island and King Charles's Southland, along which it extends from Cape San Diego to Cape Good Success. This strait, which is situated in the route of vessels making for Cape Horn, is about 20 miles in length and width. It is free from rocks and shoals, but still some difficulties are encountered in traversing it from the north, on account of the prevalence of western and south-western winds, and a strong current which always sets through it from the south. Strait Le Maire was first traversed by the Dutchmen Le Maire and Schooten in 1616, from the former of whom it received its name.

MAJORCA, the English name of the largest of the Balearic Islands, which the Spaniards call *Mallorca*. [MALLORCA.]

MAKARIEW. [COSTROMA.]

MALABAR. [HINDUSTAN.]

MALACCA, a British settlement on the south-western coast of the Malay peninsula, between 2° and 3° N. lat., 102° and 103° E. long. It comprises the town of Malacca and a territory of about 1000 square miles, including the district of Nanning, which is of some value for its tin-mines. The population is estimated at about 60,000. The surface is undulating, the hills are covered with trees, and the valleys are swampy. The soil is generally adapted to tropical produce, but little of it is cultivated. Around the town of Malacca are extensive fields of rice, cultivated mostly by Malays. The other products are tin, sugar, sago, pepper, nutmegs, rattans, and timber. Malacca, with Prince of Wales's Island and Singapore, since September, 1851, have formed a separate province of the East India Company's possessions. The revenue of Malacca for the year 1851-52 was 9,275*l.*; the expenditure for the same year was 7,820*l.*

MALACCA, the capital of the British settlement of Malacca, is situated at the head of a small bay by the mouth of an inconsiderable river, in 2° 12' N. lat., 102° 16' E. long. The town presents a handsome appearance from the sea. The houses are mostly of stone, and

well built, and several of the streets are spacious and handsome. The principal public buildings are the town-house, court-house, jail, barracks, civil and military hospitals, and an Anglo-Chinese college. The population is about 16,000, mostly Malays and Chinese. There is a fort on the south side of the river, and nearly opposite is a small island, between which and the mainland is secure anchorage for vessels drawing not more than 18 feet water. Owing to a bar at the mouth of the river, the small harbour close to the town is only accessible to boats.

Malacca was built about 1250 by Sri Iscander Shah, king of the Malays. It was first visited by the Portuguese in 1507, and taken by Alfonso Albuquerque in 1511. It was taken from the Portuguese by the Dutch in 1640. It was taken possession of by the British in 1795, was restored at the peace of Amiens, but was soon afterwards taken again. In 1814 the Dutch recovered possession of the place. The town and fort with their dependencies were finally ceded to the British by treaty with the government of the Netherlands, in March 1824.

MALAGA. [GRANADA.]

MALAHIDE. [DUBLIN, County of.]

MALAR, LAKE. [SWEDEN.]

MALASIA. [MALAY PENINSULA.]

MALATIA (Malatiah), a town in Asia Minor, about 38° 27' N. lat., 38° 20' E. long., is built in a limestone plain on a small tributary of the Tokma-su, a feeder of the Euphrates, and contains only about 200 houses. The Tokma-su flows about 6 miles to the north of Malatiah, and joins the Euphrates at a considerable distance to the eastward. There is little or no wood near Malatiah, so that in summer it is exposed to all the violence of the sun's rays. Formerly the inhabitants used to reside here during the winter, and in summer and autumn to retire to Aspuzi; but the Turkish pasha having for a long time previous to 1840 occupied Malatiah as winter quarters, the inhabitants have been obliged to reside permanently at Aspuzi, and Malatiah itself has sunk into a state of ruin and decay, although it is still we believe the seat of a Kaimakan. The town occupies the site of the ancient *Melitene*, of which parts of the walls and old gateways still remain. *Melitene* was originally a Roman camp; from this a city sprung up, which became the capital of the Cappadocian province of *Melitene*. The province which gave name to the town was so designated from the *Melas*, the ancient name of the Tokma-su. According to Mr. Brandt, who visited Malatiah in 1835 at a time when it was deserted, the population then at Aspuzi numbered 2800 Turkish and 1123 Armenian families. About six miles south of Malatiah is the town or village of *Aspuzi*, the neighbourhood of which is subjected to a refined system of irrigation (an heirloom of remote antiquity), and is covered with verdant and shady gardens. Since the inhabitants of Malatiah have taken up their abode permanently at Aspuzi a bazaar has sprung up at the latter place, and all the comforts and conveniences of a town are to be found. Malatiah is about 2780 feet and Aspuzi about 2980 feet above the level of the sea; both places are very hot in summer and have a low temperature in winter. Malatiah derives its importance only from its being situated on the great caravan-road which leads from Sivas to Diar-bekr and Mosul, and from being one of the places to which the Kurds resort for the purpose of trade. (*London Geographical Journal*, vols. vi. and x.)

MALAY PENINSULA constitutes the most southern extremity of the continent of Asia, extending between the Gulf of Bengal and the Straits of Malacca on the west, and the Gulf of Siam and the Chinese Sea on the east. It is united to the continent at its northern extremity. Its most southern points form the northern shore of the Strait of Singapore. Kwi Point, in the Gulf of Siam, and the mouth of the Tenasserim River, which enters the Gulf of Bengal, may be considered as constituting its northern boundary; they are situated near 12° N. lat. Cape Burus, the most southern promontory of Asia, in 1° 15' N. lat., and Cape Romania, in 1° 17' N. lat. constitute the two extremities of the Strait of Singapore. The peninsula lies between 98° and 104° E. long. It is 750 miles long, with a width varying between 60 and 180 miles. Its surface may cover an area of about 80,000 square miles.

The peninsula is traversed by a mountain range, which is a continuation of the Samroiyet (that is, three hundred peaks) Mountains, which between 12° and 14° N. lat. separate the valley of the Tenasserim River from the streams which fall into the Gulf of Siam. This chain, which in this part rises in numerous peaks to the elevation of 3000 feet, sinks lower south of Kwi Point, where it traverses the isthmus of Krah, or Kraw, the narrowest part of the peninsula, between 8° and 12° N. lat. The mountain range on this long isthmus, though of moderate elevation, occupies together with its offsets the whole country from one sea to the other, except at its southern extremity, where an extensive tract of alluvial land, inclosing the Bay of Chai-ya, occurs on the shore of the Gulf of Siam.

The isthmus of Krah lies due north and south. At its southern extremity, between 8° and 9° N. lat., the Malay Peninsula turns to the south-east, and preserves this direction to its most southern point. Between 6° 30' and 8° N. lat. the mountains seem to be higher than on the isthmus, but this fact is not established, as no European has ever traversed this country. The tract between 5° and 6° 30' N. lat., appears to be the highest part of the mountain range, the peak of Titch Bangsa, opposite the town of Queda, rising, according to Crawford, to 6000 feet. The mountains in this part occupy the greatest part of the country, leaving only a low level tract, about seven or eight miles

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in width, along the Gulf of Bengal, which is swampy and mostly covered with jungle, but when cultivated yields rich crops of rice and paddy. On the eastern coast the level tracts are probably more extensive, but the offsets of the mountains in some parts approach near the sea-shore, as Cape Patani and Rocky Point.

South of 5° N. lat. is the widest part of the peninsula. The interior or mountain region of this part is little known, but it is certain that it is less elevated than the country farther north, and the summits of the hills are more rounded. The level tract along the Strait of Malacca widens considerably, being about 18 miles in breadth north of 4° N. lat., and more than 20 miles in breadth south of that parallel; but along the sea-shore a few isolated hills rise to a moderate height, as Rachado Point and others. The range forming the water-shed between the rivers which fall into the Strait of Malacca and the Chinese Sea does not occupy the centre of the peninsula, but is nearer the western than the eastern shores. The level country along the Chinese Sea is also, so far as is known, much more extensive near the town of Pahang, and contains a lake called Braugh, 50 miles in circumference. On the eastern boundary of the district of Malacca is an elevated summit, the Gunong Leadang of the natives, and Mount Ophir of the Portuguese, whose summit is estimated to be 4000 feet high. Proceeding farther south, the mountains subside into hills; but even along the Old Strait, which divides the island of Singapore from the continent, the country presents a rocky and elevated shore, and its surface is strongly undulating, though it can hardly be called hilly. Towards this extremity the level country along the Strait of Malacca and the Chinese Sea is of inconsiderable width.

The comparatively small width of this peninsula and the disposition of the mountain range prevent the formation of considerable rivers. The largest which are known are the Muar River, which forms the southern boundary of the district of Malacca and falls into the strait of that name, and the Pahang River on the eastern side of the peninsula. Both rivers are navigable before they issue from the mountains, and are separated by a portage of not more than 300 yards. The Pahang River flows 200 miles under the name of Suruting, and falls into the Lake of Braugh, from which it issues under the name of the Braugh River, but soon takes that of Pahang River. At its mouth, near Pahang, are four large islands, planted with cocoa-nut and palm-trees. It is probable that there are other rivers, navigable at least for a considerable extent, but they are not known. The number of small rivers is very great, and there probably is no country better watered than this peninsula.

The climate differs on the eastern and western sides of the peninsula. The eastern resembles the coast of Coromandel and of Cochin China proper, as the mountain range interrupts the clouds brought by the south-west monsoon, during which period the dry season prevails. But the country is exposed to the full effects of the north-east monsoon, and the wet season commences in the beginning of November and continues till March. The northern part of the western coast is exposed to the south-west monsoon, and in climate resembles Aracan, having its rainy season in our summer, and its dry season in our winter. The southern portion of the western coast differs in climate from all other countries in Southern Asia. It constitutes the eastern side of a large valley, running from north-west to south-east, in the centre of which the Strait of Malacca extends like a large river. On the north-east this valley is sheltered by the mountain range which traverses the peninsula in its whole length, and on the south-west by the mountain chain which traverses the island of Sumatra. Thus this country, as well as the low eastern coast of Sumatra, is perfectly sheltered against both monsoons, the north-eastern and the south-western. Accordingly the regular succession of dry and wet seasons is unknown. Showers of rain fall in every month of the year, but more abundantly in our summer. They moderate the heat of the atmosphere, and maintain a vigorous vegetation. No gales are known to occur, and no winds except the sea and land breezes. The heat is not so insupportable as in other countries near the equator; and though during the day the sandy shores are heated to a great degree, the air is cooled sufficiently during the night. The range of the thermometer amounts hardly to 10° or 12° in the whole year.

The soil is composed of a tough red clay, or of a black earth similar to peat; in many places it yields rich crops of rice. Besides rice the inhabitants live on plantains and some other vegetables; also on fruits, in which this country, especially towards the south, surpasses all other countries. The cultivated fruits are chiefly pine-apples, mangosteens, durion, shaddock, and oranges. The country is generally covered with high trees, even on part of the mountains, but the teak-tree does not occur. The variety of trees and plants is very great. Rattans are exported in great numbers. Among the miscellaneous products of the peninsula are comprised bamboo, areca-palm, sago, caoutchouc and many other valuable gums and resins, drugs, nutmegs, cloves, cinnamon, tobacco, coffee, sugar, cotton, indigo, &c. Ivory and horns are exported; grain is imported from Sumatra and Bengal.

Cattle are few in number, but buffaloes abound. No sheep are kept; hogs and fowls are plentiful. In the uncultivated tracts and woods tigers, leopards, and rhinoceroses are frequently met with, and sometimes elephants. Among birds the swallow, which makes the

edible nest, is the most remarkable. Fish is extremely plentiful, and constitutes one of the most common articles of food.

The most important articles of commerce are from the mineral kingdom. Gold is found in all the rivers, and also got from mines. A sufficient quantity of this metal is collected to justify the name of *Chersonesus Aurea*, or the Golden Chersonese, which the ancients gave to this country. Tin is still more abundant, and seems to occur in the whole range from the isthmus of Kra to the southern extremity, but not in the Samroyet range, north of the isthmus. Part goes to Pulo Penang, Malacca, and Singapore: part is exported from the harbours on the Gulf of Siam to China. Other metals are not noticed.

The bulk of the population consists of Siamese and of Malays. The former occupy the isthmus of Kra and the districts north of 6° 40' N. lat., and the latter the remainder of the peninsula. The Malays of this country have not attained that degree of civilisation which is found among the inhabitants of Sumatra and Java. They show little industry in cultivating the ground, and still less in the mechanical arts. Their principal occupation is fishing. The language of these nations is different. The Malay race and language seem to have spread over all the islands of the eastern seas from Madagascar to Easter Island; but the great body of the race inhabits the larger islands of the Indian Archipelago, which is from this circumstance sometimes called *Malasia*—a name which comprises Borneo, Celebes, the Moluccas, the Philippines, the Sunda Isles, &c. In person the Malays are short and robust, height about 5 feet 2 inches, face round, complexion generally brown, mouth wide, teeth remarkably fine, eyes small and black, hair long, coarse, and black. The Malays of Java are the most advanced in civilisation. They are acquainted with agriculture and some mechanical arts, have made some progress in medicine and music, and are devotedly fond of commerce and navigation, and not a little addicted to piracy. Most of the Malay tribes are Mohammedans.

In the interior there are two other nations: the Jakong, or Benua, inhabit some wooded plains towards the southern extremity of the peninsula; they are of a copper-colour, their hair is straight, and their features resemble those of the Malays. They have no fixed habitations, and live by the produce of the chase. In the interior, between 6° and 8°, live the Samanga, who seem to belong to the native Australian race. They resemble the African negroes in their features, and have woolly hair. In stature however they are much shorter, their average height not exceeding 4 feet 8 inches. They have no fixed habitations, they live in the forests and mountains on the produce of the chase, and eat every kind of animal food, even reptiles. They are extremely timid, and have little intercourse with their neighbours. The whole of the Malay peninsula is thinly inhabited, and many extensive districts in the interior are unpeopled. The whole population perhaps does not exceed 1,000,000.

The northern part of the peninsula, as far south as the Bay of Chai-ya, is immediately subject to the King of Siam. On that bay are two harbours, called Chai-ya and Bandon, and on the opposite western coast is the harbour of Phunga, or Pongo, from which a commercial road traverses the peninsula to Chai-ya and Bandon. The produce of the island of Junk Seylon, or Salanga, and also European goods, are transported from Phunga across the isthmus to Bandon and Chai-ya, and thence shipped to Bangkok. From the island of Kos Sammi, or Pulo Carnam, the Chinese fetch cotton and edible nests; 10 or 15 junks arrive annually for that purpose.

That portion of the peninsula which lies between the bay of Chai-ya and Cape Patani is partly governed by Malay sovereigns, dependent on the King of Siam, and partly belongs immediately to Siam. The town of Ligar is said to have 5000 inhabitants, Malays, Chinese, and Siamese. A few Chinese junks arrive annually here for cotton, tin, pepper, and rattans. The same articles, and in addition to them sapan-wood, are exported from the towns of Talung and Sungora, which lie opposite the mountainous but fertile island of Tantalum. A road begins at Talung which crosses the peninsula to the small town of Trang, and is passable for elephants. Patani is the most southern of the small kingdoms subject to Siam. It is more fertile and productive than the other Malay states. Its capital was once much visited by vessels from Hindustan in their voyages to Siam, Cochinchina, and China, but at present it is rarely resorted to. It has intercourse with Singapore; it exports much rice, salt, and a little tin.

The kingdoms of Calantan and Tringano on the eastern, and that of Queda on the western side of the peninsula are only nominally dependent on Siam, and their commercial produce, consisting of gold, tin, and pepper is brought to Singapore. Tringano, situated at the mouth of the little river Tringano, seems to be a considerable place. From Queda a commercial road, passable for elephants, leads across the peninsula to Sungora; this road is much frequented. Another communication connects the mouth of the river Muda in Queda with the town of Patani. For a considerable distance the goods are conveyed in boats on the river, but still this road is not much frequented. The British colony of Pulo Penang, or Prince of Wales Island, is partly situated within the kingdom of Queda. [PENANG.] The town of Queda is a small place. Its commerce was formerly considerable, but has been nearly destroyed by the establishment on Prince of Wales Island. A few miles farther up is Alustar, a more populous place, and the favourite residence of the princes.

The southern extremity of the peninsula is divided between the kingdoms of Pahang and Johore on the eastern side, that of Rumbowé in the interior, and those of Salangore and Perak on the western coast, together with the British colony of Malacca. [MALACCA.] These kingdoms are independent, and under the protection of the British. None of the commercial places in these states are of importance; they send their produce, consisting of gold, tin, and pepper to Malacca and Singapore. Perak contains the most productive tin-mines in the peninsula, and in Salangore also some rich tin-mines have been opened, not far from Cape Rachado. The islands lying in the Chinese Sea, as far as the Nantnas, are subject to Johore. Between the towns of Malacca and Pahang there is a communication, which is much favoured by the water-carriage on the river Suruting, a branch of the Pahang River, and also on the Pahang.

(Marsden, *History of Sumatra*; Crawford, *Embassy to Siam and Cochinchina*; Finlayson, *Journal of a Mission to Siam and Huh*; and *Notices of the Indian Archipelago*, &c., collected by J. H. Moor, Singapore, 1837.)

MALDON, Essex, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the right bank of the Chelmer, about a mile above its junction with the Blackwater River, in 51° 44' N. lat., 0° 40' E. long., distant 9 miles E. from Chelmsford, 37 miles N.E. by E. from London by road, and 44 miles by the Eastern Counties railway. The population of the municipal borough in 1851 was 4568; that of the parliamentary borough was 5888. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Essex and diocese of Rochester. Maldon Poor-Law Union contains 32 parishes and townships, with an area of 81,260 acres, and a population in 1851 of 22,138.

The town of Maldon consists chiefly of two principal streets, at right angles to each other; it is lighted with gas. The town-hall is an old building. All Saints church is a very ancient edifice. St. Mary's parish church, and chapels for Wesleyan Methodists and Independents, are the other places of worship in the town. Of St. Peter's church only the tower remains. The Grammar school, founded by Alderman Breeder in 1608, had 12 scholars in 1850. There are National and British schools, and a savings bank. A county court is held. The market-day is Thursday. Fairs are held on the first Thursday in May and on September 13th. There are malt-houses, breweries, boat-building yards, sail-lofts, cooperages, soap-works, and iron-foundries; and on the Blackwater extensive salt-pans, and fisheries. The haven is convenient, and vessels of 200 tons burden can come up to the town at spring tides. The number and tonnage of vessels registered as belonging to the port on December 31st 1853 were as follows:—Under 50 tons 111, tonnage 3196; above 50 tons 48, tonnage 4741. During 1853 there entered the port 1220 vessels, tonnage 76,273; and cleared 1141 vessels, tonnage 47,104. Coal, iron, corn, &c. are brought into the port in considerable quantities.

MALEDIVA ISLANDS (the *Maldives*) lie in the Indian Ocean, and extend between 72° 48' to 73° 48' E. long., and from 7° 6' N. lat., to 0° 40' S. lat., or nearly 550 miles. They consist of several groups, or Atolls, surrounded by coral reefs, all of which however are not continuous. The most northern Atoll is about 350 miles from Cape Comorin, the nearest point of Hindustan. The name is derived from the language of Malabar, in which the Sanscrit *Dwipa*, 'an island,' is corrupted into *Diva*, and from the name of the largest of these islands, which is called *Mali*.

The sovereign of these islands styles himself Sultan of the Thirteen Atolls and Twelve Thousand Islands, but the actual number of these islands is probably more than treble or fourfold this number. They are inclosed and protected from the sea, which during the south-west monsoon is violently agitated, by narrow strips of coral-reefs, which surround them like a wall. This protecting wall is either circular or oblong, and contains breaks, which constitute convenient passages for vessels or boats to enter. The number of these coral-reefs is fourteen, thirteen of which are situated to the north of the equator. They lie on a long sand-bank, to the edge of which their outer sides extend, and beyond them there are no soundings. The channels which divide these Atolls, or Atollons (for so they are called), are in some places deep and safe. They are passed by the vessels which are bound to Ceylon or the Bay of Bengal, the Malediva Islands lying across the direct route to these places. Two of these navigable channels are south of the equator: the Addon, or south channel, and the Equatorial Channel, which are south and north of the island of Addon respectively. North of the equator are first, the One and a Half Degree Channel, the widest and safest of all these channels, and frequently used by ships proceeding eastward in the westerly monsoon: the Colloman-dous Channel, and the Cardiva Channel, all of which seem to offer a safe passage, but the last is not used at present, though it appears to have been much frequented two centuries ago.

Within the Atolls the sea is not agitated by storms, and there are always soundings in 20 or 30 fathoms of water. The islands are generally situated along the inclosing coral-wall, the central part of the Atolls containing only few of them. The islands are all small; not many of them exceed a mile in length and breadth, and a few are less than half a mile. They are generally circular or lozenge-shaped.

Many are mere narrow strips, 50 or 100 yards broad, forming a circle, which incloses a lower tract, filled up with broken coral-rocks, and dry at spring-tides. Within this ring there is sometimes a considerable depth of water, from one to ten fathoms, so that a perfect lagoon is formed. The highest part of the islands is from 6 to 14 feet above water. Their surface consists of sand, about 3 feet thick, the top part of which is mixed with vegetable matter, forming a black light sandy soil. Beneath the sand is a soft sandstone, resembling particles of beech-sand indurated. This sandstone is about two feet thick, below which depth it softens again to sand, and here fresh water is found. All the inhabited islands have fresh water, and also some which are not inhabited.

All the islands are covered with a thick impenetrable jungle, among which there are many fine large trees, as the Indian banyan fig-tree, the candoo-tree, the breadfruit-tree, and others. The bamboo grows on some islands, but is scarce. On some of the islands are small plantations of Indian corn and sugar-cane. A little cotton is grown, from which a small quantity of cloth is made. Two kinds of millet are cultivated. The inhabitants live mostly on fish and the cocoa-nut palmas, which are cultivated with care. A few cattle are found only on the Mali or Maldiva Atoll, but there are no sheep or goats. The common fowl is very abundant. A few cats are kept to keep the houses clear of rats and mice, which are very numerous. The 'flying fox,' as it is called in India, a large species of bat, is very common. Fish is very abundant, and sharks are common and dangerous. Turtle are common. Cowries are collected and exported to a great amount.

The inhabitants are Mohammedans. Two languages are in use among them—the common, which seems to be peculiar to the people, and the Arabic, as a learned language. They have also a peculiar alphabet, which is written from right to left, and the vowels are indicated by points, as in Arabic. The whole population may amount to between 150,000 and 200,000. They are governed by a chief called sultan, who sends annual presents to the British governor of Ceylon, receiving others in return. He resides on the Mali or Maldiva Atoll, which contains the largest of the islands, called Mali; its circumference is about 7 miles. Spoken of collectively as a kingdom the Maldives are called by the natives 'Male-Rague.'

The inhabitants bring cowries, coir, cocoa-nut oil, turtle-shell, salt-fish, rope-mats, and some smaller articles to Bengal, Sumatra, and elsewhere, whence they import rice, sugar, silk-stuffs, broadcloth, hardware, and tobacco. They arrive at Calcutta in June or July with the south-western monsoon, and depart from that place in the middle of December with the north-east monsoon.

(London Geographical Journal.)

MALINES. [MECHELEN.]

MALLING, TOWN, or WEST MALLING, Kent, a small town, formerly a market-town, and the seat of a Poor-Law Union, in the parish of West Malling, is situated in 51° 17' N. lat., 1° 23' E. long., distant 9 miles W. from Maidstone, and about 29 miles S.E. from London. The population of the parish in 1851 was 2021. The living is a vicarage in the archdeaconry of Maidstone and diocese of Canterbury. Malling Poor-Law Union contains 22 parishes and townships, with an area of 43,305 acres, and a population in 1851 of 19,555.

A Benedictine monastery was founded at Malling at a very early date. Many parts of the conventual buildings still remain, especially a portion of the west end of the church, which is a fine specimen of Norman architecture. The parish church is a spacious and handsome building, with a Norman tower at the west end. A parochial school is partly supported by endowment. There is a savings bank. Fairs are held in August, September, and October: the principal fair, that in September, is chiefly for horses. Numerous remains of moats and encampments, probably Roman, exist in the neighbourhood.

MALLORCA, or MAJORCA, the largest of the Balearic Islands, is situated in the Mediterranean, off the eastern coast of Spain, to which kingdom it belongs. It lies between 39° 20' and 39° 57' N. lat., 2° 20' and 3° 30' E. long., about 110 miles from the coast of Cataluña, and 120 miles from that of Valencia. It is nearly 60 miles long from east to west, and in some parts 40 miles broad from north to south. The circumference is 143 miles. The area is about 1410 square miles. The population is about 182,000.

The general surface of the country is hilly. On the north-west side a mountain range crosses the island, the highest summit of which, the Puig de Torellas, is above 4500 feet high. Another range of lofty hills runs parallel to this, through the heart of the island, and high grounds in many parts border on the coast. The eastern and southern districts are the most level. Some of the plains are liable to be inundated by the periodical rains, on which account they are generally used as pasture-land. Near Campos on the south, and near Alcudia on the north of the island, are marshy tracts which generate malaria to a very pernicious extent. The general aspect of the country is extremely beautiful and picturesque. The roads in the interior are very rugged and stony, and are traversed only by mules, which form the ordinary mode of conveyance, and by carts of clumsy and primitive construction.

The climate of Mallorca is delightful; the winters being mild, though occasionally stormy, and the heats of summer being tempered

by the sea-breezes and the vicinity of the mountains. The extreme fertility of the soil is mentioned by Strabo. Firs, holm-oaks, and wild olives, adorn the slopes, and often cover the summits of the higher mountains; lavender, rosemary, thyme, marjoram, saffron, and roses, perfume the air; and the valleys and level tracts produce some corn and wine, oil, and fruit in abundance. The date-palm and the plantain attain their full size, though seldom yielding fruit. The valley most famed for beauty and fertility is that of Soler, 11 or 12 miles in circumference, abounding in orchards of orange and lemon trees, and hemmed in by mountains luxuriantly clothed with wood.

Three rivers of no great size fall into the sea on the southern coast. One of these enters the sea beneath the ramparts of Palma. It is almost dry in summer, but in the rainy season it is very full and impetuous. Two other small rivers reach the sea between Cabo Blanco and Cabo Salinas. Small streams are very numerous.

Mallorca produces wheat, barley, and oats; wines of excellent quality; olive-oil in large quantities; hops, vegetables, fruits, particularly melons, oranges, and citrons, all of superior flavour; honey, hemp, wool, and a little silk. Mules and asses, sheep, goats, horned cattle, and pigs are bred in considerable numbers; poultry and game are abundant. Olive-oil, wine, brandy, fruits, saffron, flax, and hemp are exported. The imports are corn, salt-beef, iron, hardware, sugar, coffee, spices, tobacco, rice, cutlery, and other made goods, and articles of clothing. With the exception of a few foxes and hawks the island is free from beasts and birds of prey.

The geology of Mallorca is but imperfectly known. Granite and porphyry are said to be found, but the generality of the rocks are of secondary or tertiary formation. There is slate, fine marble of various colours, with abundance of sandstone, freestone, and chalk. Salt is procured by the evaporation of sea-water in the low grounds about Campos.

The manufactures of Mallorca are linen-cloths (coarse and fine), silk-stuffs, and woollen goods, as tapestry, blankets, sashes, and corded stuffs. Brooms and baskets are made of the leaves of the palm.

Palma, a city, is the capital of the island. It was one of the two principal towns in the time of Strabo, and is on the south-east of the island, picturesquely situated on a slope in the bight of a deep bay, 10 or 12 miles wide, formed by the capes Blanco and Cala Figuera. The population in 1845 was 40,514. The city, though walled and fortified, could not sustain a regular siege. The streets are in some parts narrow and mean, in others wide and regular; the houses are large and without external ornament, mostly in the Moorish style of architecture, and some are built of marble. Palma is the see of a bishop, who is a suffragan of Valencia. The cathedral, a large gothic edifice of much simple beauty, was built in the beginning of the 13th century by James of Aragon, surnamed the Conqueror, who is interred within its walls. Attached to the cathedral is a spire of such remarkable delicacy and airiness that it has received the name of the Angel's Tower. There are many other religious edifices in Palma, five parish churches, and numerous buildings which belonged to the conventual establishments, together with several hospitals and two colleges. Ferdinand V. founded a university here in 1483. The other public buildings are—the episcopal palace; the royal palace, a very ancient edifice, the residence of the captain-general or governor of the island, comprehending also an arsenal, a magazine, and a prison; the town-hall; and the house of contraction, or of mercantile assembly and judicature, a gothic edifice of remarkable beauty. Palma, though in the 13th century one of the chief markets of Europe, has now comparatively but little commerce. Its port is small, and will only admit vessels of little draught. Within and without the city are to be seen numerous evidences of the superior size, population, and commercial importance of Palma in past ages.

The other principal towns of Mallorca are the following:—*Alcudia*, on the north-east coast, on a neck of land between the two bays of Alcudia and Pollenza, stands on a rising ground, and is fortified with ancient walls of great height. Some centuries ago it was a large and flourishing city, but is now in a state of decay, with a population of only 1000. *Arta*, in the northern part of the island, on a range of hills which extend eastward to Cape Para: population 4000, who manufacture coarse linens and woollens, and are employed in fishing. *Llunyador*, 17 miles E.S.E. from Palma, is well built, and has manufactures of woollens and linens: population, 7112. *Manacor*, 30 miles E. from Palma, stands in a fertile plain. It is the see of a bishop. The population in 1845 was 9642. *Pollenza* (the Pollentia of Strabo), 28 miles N.E. from Palma, stands 2 miles W. from the Bay of Pollenza. The bay is large and well sheltered. The town contains a handsome church, and has manufactures of black woollen cloth: the population in 1845 was 6402. There are several other towns of smaller size, and numerous villages.

Castilian is spoken by the upper and middle classes, but the language of the lower orders is a mixed dialect of Castilian, Catalanian, and Arabic.

A sketch of the history of these islands is given in the article BALEARIC ISLANDS.

(Strabo, 167, *Casaub.*; Mariana, *Historia General de España*; Laborde, *Itinéraire Descriptif de l'Espagne*; Dalmeto and Mut, *History of the Balearic Kingdom*; St. Sauveur, *Travels through the Balearic and Pithiustan Islands*; Macgregor, *Commercial Statistics*.)

MALLOW, county of Cork, Ireland, a market-town, parliamentary

borough, and the seat of a Poor-Law Union, is situated on the river Blackwater, in 52° 8' N. lat., 8° 38' W. long.; distant 19½ miles N.N.W. from Cork by railway, and 20½ miles by road; 145 miles S.W. from Dublin by railway, and 150½ miles by road. The borough returns one member to the Imperial Parliament. The population in 1851 was 5436, besides 2034 inmates of the workhouse. Mallow Poor-Law Union comprises 21 electoral divisions, with an area of 154,358 acres, and a population in 1851 of 42,145. The suburb of Ballydaheen, on the right bank of the river, is connected with the town by a bridge of 15 arches. The principal part of the town lies on the left bank of the Blackwater, and consists of one leading street, with a number of smaller streets on either side. Many of the houses in the main street are well built, and some of a superior description stand at the west end. The town is lighted with gas and paved. Besides the parish church, a handsome edifice built in 1820, there are chapels for Roman Catholics, Independents, and Methodists; two National schools; a reading room, a public library; a neat spa-house, court-house, barrack, bridewell, infirmary, fever hospital, and Union workhouse. Saltworks, tanneries, and a brewery are in the town. There is a considerable resort of visitors to the mineral spring. Quarter- and petty-sessions are held in the town. Fairs are held five times a year. The market days are Tuesday and Friday. The Circular Drive, a road 5 miles in length, affords an agreeable view of the highly-improved environs on both sides of the river. The beautiful demesne of Mallow Castle, extending a mile below the town on the left bank of the river, contains besides the modern mansion, the ruins of the old castle of Mallow, which was erected by the Earl of Desmond.

MALMAISON. [SEINE-ET-OISE.]

MALMESBURY, Wiltshire, a market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Malmesbury, is situated in 51° 35' N. lat., 2° 4' W. long., distant 20 miles N. by W. from Devizes, and 96 miles W. by N. from London by road. The population of the parliamentary borough in 1851 was 6998. The borough is governed by an alderman chosen annually by the 12 capital burgesses, and returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Malmesbury Poor-Law Union contains 25 parishes and townships, with an area of 59,343 acres, and a population in 1851 of 14,907.

Malmesbury is a very ancient town. According to the 'Chronicles of the Kings of England,' by William, a monk of Malmesbury in the 11th century, a monastery was founded here before 670. The abbey suffered from the Danish invasions in the 9th and 10th centuries, when the town was twice burnt; but it recovered, and became one of the most important monasteries in the west of England. The abbot was mitred in the reign of Edward III. The borough appears to have had a charter as early as the reign of Athelstan. In the reign of Stephen a castle was built here, and the town was walled by Roger, bishop of Sarum, who was however obliged to surrender the castle to the king. In 1152, the town and castle were taken by Prince Henry, afterwards Henry II. In the civil war of Charles I. the Royalists had a garrison here, which was driven out by Sir William Waller, at the head of a parliamentary army, March, 1643. The Royalists recovered the place, but it was again taken by the Parliamentarians, who stormed it in 1645. The cloth-trade flourished in the middle ages, according to the testimony of Leland, who says that 3000 'clothes' (pieces of cloth) were made yearly. The abbey buildings were, at the dissolution, converted into a cloth factory.

The town stands on an eminence near the junction of the Avon with a stream from Tetbury, and consists of some streets irregularly laid out, but paved and lighted. Besides the Abbey church and St. Mary's, there are the tower and some ruins of a third, old St. Paul's. The abbey church was, at the dissolution, purchased by the inhabitants of St. Paul's parish, and made parochial. Part of the nave and aisles, the grand southern porch, and a wall belonging to the south transept, are the only perfect remains of this once magnificent structure. The architecture is partly Norman, and partly of decorated English character. In the interior, near the altar, is a screen inclosing a space in which stands an altar tomb, with an effigy in royal robes. The church of St. Mary Westport is a mean-looking building, erected nearly two centuries ago on the site of the old church, which was destroyed by Sir William Waller. An ancient cross stands in the market-place; and west of the abbey is a building called Chapel-house, supposed to have been originally the chapel of a nunnery. Some fragments of the town-walls remain. The Independents, Baptists, and Moravians have places of worship. There are a Free and an Endowed school for boys, and a savings bank. A new market-house has been erected. There are at Malmesbury four bridges—two over the Avon, and two over the Newtonwater.

Malmesbury has now little trade or manufactures. A mill lately employed in the clothing manufacture is now a silk mill. Tanning, brewing, and lace-making are carried on. The market is on Saturday, and on the last Tuesday of each month there are great cattle markets for horses, cattle, and sheep. Fairs are held on March 28th, April 28th, June 5th, and December 15th.

The borough has returned members to Parliament with little interruption since the time of Edward I. Previous to the passing of the Reform Act, it returned two members.

Three writers of eminence in their respective ages were connected with Malmesbury: St. Aldhelm, a Saxon writer of note in the 7th and 8th centuries, was for a time abbot of Malmesbury, where he was interred; William of Malmesbury, one of the best English historians of the middle ages, was, during the greater part of his life, a monk of the abbey; and Thomas Hobbes, sometimes designated the Philosopher of Malmesbury, was a native of the parish of St. Mary Westport.

MALMÖ, a sea-port town in Sweden, in the province of Skania, gives name to the Malmö-län. It is situated in about 55° 40' N. lat., near 13° E. long., on the widest part of the Sound, nearly opposite the town of Copenhagen, on level ground, and has a good and safe harbour for small vessels, protected by the fortress of Malmöhus. The town is well built, and has regular streets. In the middle is a handsome and spacious square. It was formerly surrounded by strong fortifications, but these have been demolished and the castle alone remains, which is now used as barracks and a prison. The inhabitants, about 9000 in number, carry on an active commerce in corn, as Malmö is the principal commercial town of the fertile and rich province in which it is situated. It may also be counted among the manufacturing towns of Sweden, as there are several manufactories in which cloth, stockings, hats, gloves, carpets, soap, leather, starch, and looking-glasses are made. Some of these manufactories are rather extensive. Steamers ply daily to Copenhagen, which is only two hours distant to the north-west and is visible from Malmö in clear weather. Malmö Län, one of the most level and most fertile provinces of Sweden, has an area of 1774 square miles, with (in 1845) a population of 234,207. Corn, potatoes, hemp, hops, tobacco, and some fruits are grown. Corn and cattle are the chief exports. In 1849 there arrived at the harbour of Malmö 621 vessels, and 596 departed.

MALO, ST. [ILLE-ET-VILAINE.]

MALPAS. [CHESHIRE.]

MALTA (anciently *Melitis* and *Melita*) is an island in the Mediterranean Sea, and a British settlement. The neighbouring island of Gozo is included under the same government, as well as the small island of Comino; there are besides the uninhabited islets of Cominotto and Filifa. The entire group lies between 35° 43' and 36° 5' N. lat., 14° 10' and 14° 35' E. long. Malta is 60 miles S.W. by S. from Cape Passaro, the most southern point of Sicily. The greatest length of Malta is 18 miles, the greatest breadth is 10 miles, and the circuit, as a boat would sail round it, is 50 miles. The area is 98 square miles. The population in 1849 was 115,864.

The Maltese Islands are masses of limestone rock. Monte Benjemma, the highest part of Malta, has an elevation of 590 feet. The island slopes from the southern side towards the northern. The rocks on the southern side rise perpendicularly from the sea to the height of 300 or 400 feet. A ridge crosses the island and divides it into two portions, of which the eastern contains all the towns and villages. The western portion however, though it has very few inhabitants, has much land under cultivation, and the wild thyme and other odoriferous plants which abound in that part, are frequented by the bees which produce the honey for which Malta has been long celebrated. About two-thirds of the surface of Malta is cultivated; the remainder is bare rock. There is much good soil in the valleys which has been converted into fertile fields; but a large portion of the surface has been rendered productive by the industry of the natives. The earth has been carefully collected from interstices and crevices of the limestone, and has been placed in layers on level spaces of loose broken-up rock. Innumerable low stone walls prevent these precious layers of soil from being washed away by the rains; and so favourable has this process been found to vegetation under the climate of the island, that the cultivator who is not sparing of manure raises two crops a year, without ever being obliged to let his land lie fallow. In summer the want of rain is supplied by a heavy dew which falls at night.

The climate of Malta ranges from a maximum of 90° Fahr. to a minimum of 46°, medium 63°. In the middle of summer the heat is sometimes very oppressive, especially at night. The sun remains so long above the horizon, and the stone-walls and rock absorb so much heat as to render the short nights as hot as the day. No regular sea-breezes or land-breezes are felt at Malta. The only winds which are deleterious are those between the south and east, which are called the scirocco of the Mediterranean. They are most prevalent at the end of August and during the whole of September. The winter, that is, from the beginning of October to the end of May, is very delightful, and is eminently suited for English invalids. For the greater part of the year the atmosphere is so clear as to give brilliancy to every object. The summit of Mount Etna, 128 miles distant, may be distinctly seen at sunrise or sunset.

There are no forest-trees in Malta, and the whole group of islands has a bare and naked appearance. There are no hedges, and the verdure being partial in extent and duration, the glare of the hard naked roads and rock, under a bright tropical sun, is very oppressive and injurious to the eyes. The carob-tree however is always green, as well as the Indian fig, and these afford an occasional relief to the sight.

There are no streams in Malta, and the springs are not numerous. In general the rain-water is collected in tanks which are excavated in the rock, and are lined with a cement of pozzuolana. In ordinary

seasons these tanks afford a sufficient supply for agricultural and household purposes. Valletta and the shipping in its harbours are supplied with water by an aqueduct, which brings it from springs on the southern side of the island. This great work was constructed by Vignacourt, grand-master of the Knights of Malta, in 1635. It is 8½ miles long, in some parts supported on arches, in others it runs under ground. The Fanara springs are also conducted by an aqueduct to Vittoriosa, Cospicua, and Genglea.

The produce of Malta consists of cotton (which is the staple), wheat, barley, pulse, potatoes, barilla, cummin-seed, honey, and sulla. Sulla, which in England is a garden-flower, known as the French honeysuckle, grows to the height of 4 or 5 feet, and furnishes a nutritious fodder. As there is no meadow-land much barley is cut green for draught animals, and the straw, which is very fine, is a good substitute for hay. The produce of corn is only sufficient for the subsistence of the inhabitants for about four months of the year. The fruits are generally good and in great variety, and the vegetables are excellent. No wine is made. The carob grows in abundance. There are no wild animals, and from the scarcity of pasture few cattle are kept. Meat is imported chiefly from Barbary. Horses are also imported; but some mules are reared, and the asses of Malta and Gozo have always been celebrated for strength and beauty. Goats are likewise bred, and are valued for the quantity of milk which they supply.

The roads in Malta and Gozo are generally good, and communicate with all parts of each island.

The natives of Malta are a dark-skinned athletic race, hardy and robust. The men are of middle stature, well-formed, erect, and active. The women are rather small, with delicate limbs and regular features, and many are handsome. The great bulk of the people who are not employed in field labour are stone-cutters. The Maltese are also excellent seamen, and are in request in all the ports of the Mediterranean. Workmen and artisans are numerous, and are expert in their respective trades.

The Maltese native language seems to be a dialect of the Arabic. Italian is spoken by the upper classes generally, and by many of the middle classes in addition to their native tongue. The English language is spoken and read by the educated classes, but is still unknown to most of the natives. The people are mostly Roman Catholics, and the clergy are very numerous. The Protestant places of worship are few and unassuming.

Malta is a crown colony, and is under the rule of a governor, assisted by a council of six persons nominated by the crown. The revenue in 1852 was 127,728*l.* 15*s.* 1*d.*; the expenditure for the same year was 123,086*l.* 8*s.* 8*d.* An expenditure of about 100,000*l.* a year is incurred by Great Britain for the military protection of Malta, and for its maintenance as a military depôt.

Valletta, the capital of Malta, stands on the eastern side of the island, in 35° 54' N. lat., 14° 31' E. long. Its fortifications are considered impregnable. Its port, which is one of the finest in the world, consists of two large harbours, separated by a rocky tongue of land a mile and a half long, and in the central parts 200 feet high. This rocky projection extends from south-west to north-east, having a harbour on each side, that on the south-east being the Valletta Harbour, or Great Harbour, and that on the north-west being the Quarantine Harbour, or Marsamuscato. The entrances are defended by forts on all sides. On the point of the projecting ridge is Fort St. Elmo, with one of the most brilliant lighthouses in the Mediterranean. Opposite to it on the left, at the entrance of Valletta Harbour, is Fort Ricassoli, and on a projecting promontory within is the Castle of St. Angelo. Again, opposite to Fort St. Elmo, on the right at the entrance of the Quarantine Harbour, is Fort Tigne, and within is Fort Manuel. On the front part of the projecting tongue of rock, immediately behind Fort St. Elmo, is built the city of Valletta, the streets in many parts rising by successive terraces from the sea on each side towards the central part of the ridge. The inner side of Valletta is defended by strong lines of fortification which extend across the ridge from harbour to harbour, and having a dry ditch cut in the rock to a depth varying from 90 to 140 feet. Outside this ditch is the suburb called *Floriana*, and beyond this suburb on the land side, is another series of fortifications. Valletta Harbour is divided by promontories projecting from the main land into four or five bays, within which are the naval hospital, the dockyard, arsenal, and victualling yard, and the suburban cities of *Vittoriosa*, *Cospicua*, and *Genglea*. Valletta is a clean, well-built, and handsome town. The principal street, called the *Strada Reale*, extends along the crest of the hill from Fort St. Elmo to the gate called *Porta Reale*; the other streets run parallel to this, and the communication from street to street is by flights of steps. The principal public buildings are the palace of the grand master, now the residence of the British governor, the cathedral of St. John of Jerusalem, the armoury, the post-office, the library, the university, the exchange, and the theatre. The military hospital was founded by the Knights of Malta, as an asylum for the sick and distressed of all nations. There are also two civil hospitals, one for males and the other for females. The English collegiate church of St. Paul was founded by the late Queen Adelaide at an expense of about 15,000*l.* The population of Valletta and its suburbs is about 60,000.

Città Vecchia, properly *Città Notabile*, formerly the capital of the

island, is situated on high ground in the interior of the island, about 6 miles W. from Valletta. It is still the seat of a bishop, and contains a handsome modern cathedral, built on the site of the ancient church, two large convents, and many good dwelling-houses. The city is walled, but is now of no importance as a fortification.

Besides Valletta, with its suburbs, and *Città Vecchia*, Malta contains between 20 and 30 casals, or villages; and besides the two harbours of Valletta, there are some bays on the coast of Malta which ships sometimes enter in stress of weather, such as *Marsa Scirocco*, *St. Thomas's Bay*, and *Marsa Scala*, south-east of Valletta, and *St. Julian's Bay*, *St. Paul's Bay*, and *Melleha*, north-west of Valletta.

The island of *Gozo* is 4 miles N.W. from Malta. It is of an oval form, about 10 miles in its greatest length, and 5 miles in its greatest width. The population is about 8000. The area is about 16 square miles. *Gozo* has a better soil than Malta, and is more highly cultivated. It contains a great quantity of game, and is consequently much frequented by sportsmen. The products are similar to those of Malta. On a lofty site near the centre of the island is the citadel. The chief town is *Rabat*, near the citadel. It is a large and populous place, with good houses, and several churches. The *Giant's Tower*, a massive ruin near the eastern coast, is a fine specimen of Cyclopean masonry. It is supposed to be the remains of two Phœnician temples. *Gozo* has been selected by some kind of tradition for the fabled island of *Calypso*, and a cave called *Calypso's Grotto* is shown, but is not worth a visit. The small island of *Comino*, with about 1000 inhabitants, lies between Malta and *Gozo*, as does also the islet of *Cominotto*.

Malta and *Gozo* are stated by *Diodorus* (v. xii.) to have been occupied by a colony of Phœnicians. The Greeks are said to have subsequently occupied Malta. It was afterwards in the possession successively of the Carthaginians, the Romans, and the Arabs. In 1120 Count Roger, the Norman conqueror of Sicily, expelled the Arabs, and Malta was then united to the government of Sicily. In 1516 Sicily and the Maltese islands passed to the emperor Charles V. as heir to the crown of Aragon. In 1530 Charles granted to the grand master and religious fraternity of St. John of Jerusalem, who had recently been expelled from Rhodes by the Turks, the ownership of Malta and *Gozo*, with complete jurisdiction. The Knights of St. John of Jerusalem thus became sovereigns of Malta, and were independent, with the exception of a trifling annual feudal acknowledgment of tenure to the King of Sicily. To protect the islands against the Turks and the pirates of the Mediterranean, the knights commenced those fortifications which remain to the present day. In 1798 a French expedition, under Admiral Brueys, obtained possession of the island, mainly through the treachery of some of the knights, and the order became from that time extinct. The French government was however found to be so oppressive that the inhabitants revolted, and the French were compelled to shut themselves up in the fortifications of Valletta. They were kept in a state of close blockade both by land and sea for two years. The natives were assisted by a British fleet, and in 1799 by troops under General Graham (afterwards Lord Lynedoch), and in 1800 by additional troops under General Pigot. On the 5th of September, 1800, the garrison being reduced to the last extremity of famine, surrendered to the British. The French were allowed to march out with the honours of war, the forts and city of Valletta were taken possession of by the British, and the French were conveyed home in English transports. The Maltese islands have remained in the possession of the British government. [See SUP.]

MALTON, NEW, North-Riding of Yorkshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on an eminence on the right bank of the river Derwent, in 54° 8' N. lat., 0° 48' W. long., distant 18 miles N.E. by N. from York, 217 miles N. by W. from London by road, and 24¼ miles by the Great Northern and York and North Midland railways. The population of the parliamentary borough of New Malton in 1851 was 7661. The borough returns two members to the Imperial Parliament. The living of New Malton is a perpetual curacy with the perpetual curacy of Malton, in the archdeaconry of Cleveland and diocese of York. New Malton Poor-Law Union contains 65 parishes and townships, with an area of 110,010 acres, and a population in 1851 of 23,129.

A stone bridge over the Derwent, which here forms the boundary between the North and East Ridings, connects New Malton with the suburb of Norton. St. Leonard's church has a tall truncated spire. St. Michael's is a fine specimen of late Norman architecture. The Wesleyan and Primitive Methodists, Wesleyan Reformers, Independents, Baptists, Quakers, Roman Catholics, and Unitarians have places of worship. There are National, British, and Infant schools. Old Malton Grammar school, held in the suburb of Norton, was founded in 1547, and has an income from endowment of about 100*l.* a year. In the town are a large market-place, including a town-hall; a corn-exchange; a neat theatre; a handsome suite of public rooms; a literary institute; a dispensary; and a savings bank. The town is well built, and is lighted with gas. A considerable trade is carried on. The market-day is Saturday, and there are fairs during the whole week before Palm Sunday, on the Saturday before Whit-Sunday, and on October 11th. Quarter sessions and a county court are held here. The borough has returned two members to Parliament since 1640.

Old Malton stands about a mile N.E. from New Malton, on the same side of the river. It has a very ancient church, dedicated to St. Mary, near which are the remains of a priory, founded in 1150, for Gilbertine canons. The town contains a Wesleyan chapel and several schools. Old Malton is noted for its lime-quarries.

Malton is supposed to have been one of the oldest Brigantian fortified towns in this part of Britain; and its importance as a Roman military station is indicated by six ancient roads pointing to it. The Romans called it *Camulodunum*, which the Saxons abbreviated to *Meldun*. Numerous Roman coins, urns, and other remains have been found here, and entrenchments are yet visible on the opposite side of the river. After the Norman conquest the baronial family of Vesey, or De Vesci, built a castle here, as well as the priory mentioned above. This castle was demolished by Henry II. The town, which was burnt down in a siege, was rebuilt in the reign of Stephen, and then received the name of New Malton. A noble castellated mansion was erected on the site of the ancient castle, about the close of the 16th century, by Ralph, Lord Eure; but in 1674 the greater part of the mansion was pulled down.

(Communication from New Malton.)

MALVERN, GREAT, Worcestershire, a watering-place in the parish of Great Malvern, is situated in 52° 6' N. lat., 2° 19' W. long., distant 8 miles S.W. from Worcester, and 119 miles N.W. by W. from London. The population of the parish in 1841 was 2911; in 1851 it was 3911. The living is a vicarage in the archdeaconry and diocese of Worcester. Great Malvern occupies a picturesque site on the eastern side of the Malvern Hills. It is much resorted to by invalids. The wells are between Great Malvern and Little Malvern, a small village about three miles to the south. The Malvern Hills afford extensive and beautiful views into Wales as well as the adjoining English counties. Edward the Confessor endowed a monastery at Great Malvern, the church of which, at the dissolution, was purchased by the inhabitants, and made parochial. The church is a fine gothic cruciform building, 170 feet long by 60 feet wide; the tower, 124 feet high, in the centre of the building, is surmounted with battlements and pinnacles. In Great Malvern are a chapel of the Countess of Huntingdon's Connexion, National and Endowed schools, and a dispensary.

MALWA. [HINDUSTAN.]

MALZIEU. [LOZÈRE.]

MAMERS. [SARTHE.]

MAN, ISLE OF, is situated in the Irish Sea, between 54° 4' and 54° 27' N. lat., 4° 17' and 4° 47' W. long., 28 miles W. by S. from St. Bees' Head in Cumberland, 16 miles S. from Burrow Head in Scotland, and 32 miles E. from the entrance of Lough Strangford in Ireland. Its length from north-east to south-west is about 34 miles; its breadth varies from about 8 to 13 miles, but is much narrower at its extremities; and its circumference is about 75 miles. The area of the island is about 220 square miles. The population in 1841 was 47,975; in 1851 it was 52,387. The Calf of Man is a small island situated nearly a mile S.W. from the island, and from 3 to 5 miles in circumference. The Kitterlins, another small rocky island, is situated between the Isle and Calf of Man. The Isle of Man is the *Monia* of Cæsar, the *Monapia* of Pliny, *Monada* of Ptolemæus, *Menavia* of Orosius and Bede, and *Eubonia* of Nennius.

The island is intersected by a ridge of mountains, which runs from north-east to south-west nearly through its whole length, and chiefly occupies the central parts. The heights that form this elevated mass compose three chains, separated from each other by high table-lands, and crossed by three very narrow openings. Snafield, the highest point, is 2004 feet above the level of the sea, and North Berrule rises to the height of 1804 feet. England, Scotland, Ireland, and Wales are visible from the summits of the mountains on a clear day. The Neb, Sulby, and other small streams which flow from the mountains, enter the sea at Peel, Laxey, Douglas, and Ramsey. The coast in many places is very precipitous.

Rocks of mica-slate and clay-slate compose all the mountains. These slates form also the coast at Spanish Head, where some precipices exceed 300 feet in height. The summit of one of the cliffs is crowned by a so-called Druidical monument. Mica-slate is found at Snafield, the rounded summit of which is covered with grass. The base of this mountain is rich in metals. The galena which is found here contains from 90 to 130 ounces of silver per ton. Copper pyrites has five ounces of silver per ton, and black-jack (sulphate of zinc) sells for 5*l.* per ton. Clay-slate forms the largest portion of the island, and nearly all the Calf. A stratified gray stone, which is used in building, is the second variety of clay-slate. The third variety, at Spanish Head, is used for lintels, &c. The roofing slate, drawing slate, and one of a vermilion colour near Braddah, make up the other varieties of clay-slate found in the island. The secondary slate formation, resting on the primary, consists of grauwacke, grauwacke-slate, and old red-sandstone, and forms the greater part of the rocky sea-coast of the island, but does not extend much inland. There is a belt along the west coast, about two miles in width, consisting of old red-sandstone, of which Peel Castle is built. Boulders of sienite, porphyry, and quartz are scattered from north to south, and the blocks of clay-slate and mica-slate, mixed with the quartz, prove it to belong to the island. Granite *in situ*, containing mica, felspar, and quartz, is found in blocks on the north side of South Berrule. The decom-

position of the felspar forms a fine powder, which is sold for polishing iron.

The soil in the south part of the island is a light clay formed by decomposition of the clay slate. The mountainous district is adapted only for pasture, and judicious culture alone can render the hilly parts productive. The soil however in the level country, extending from Kirk Michael to the north-eastern extremity of the island, consists of sand, clay, and peat, and contains excellent marl. The soil in the neighbourhood of Castletown is well adapted for wheat, and the abundance of lime supplies the farmer with a cheap manure. The climate is variable, damp, and windy, but temperate. The highest and lowest temperatures observed are about 77° and 26° Fahr. respectively; the mean annual temperature is about 49°. The annual fall of rain is about 37 inches. The harvests are frequently late. Wheat and in some years potatoes are exported. The largest part of the island is in the hands of yeomen, who farm their own estates, which are from 10 to 200 acres. The Houghton sheep, peculiar to the island, are long in coming to maturity; their wool is much used for making stockings. The cattle and horses of the island are very small.

The principal towns in the island are Castletown, DOUGLAS, Peel, and Ramsey. *Castletown*, population 2479 in 1851, situated on the south coast, is a neat town, with spacious regular streets, and an open well-built square. The houses are situated on the opposite sides of a small creek, opening into a bay in the shape of a crescent. *Castle Rushen*, in Castletown, was built, according to tradition, in the year 960, by Guttred, a Danish prince, who is said to have been buried here. The town possesses a neat chapel commenced by Bishop Wilson in 1698, and a college founded in 1668 by Bishop Barrow, which had 119 scholars in 1851. Courts of chancery and common law are held in Castletown, which is the residence of the governor. The House of Keys meets here.

Peel, formerly called *Holm Peel*, population 2342 in 1851, is on the west coast of the island. The castle, which is built on a small rocky island, incloses an irregular space of more than two acres, and is separated from the town by a narrow channel, scarcely a foot deep at low water. A strong wall, built as a security for the harbour, connects the island and castle with the mainland. St. Patrick's church, within the castle area, was probably built before the Norman conquest; St. Germain's, erected about 1245, is the cathedral church of the island, but is now only used for a burying-place. Peel has besides a parish church, a chapel for Methodists, and an Endowed school, founded in 1746, which had 20 scholars in 1852.

Ramsey, population 2701 in 1851, is situated on a spacious bay, where there is safe anchorage, on the north-eastern coast of the island. It is built in a straggling and irregular manner. In this town the courts of law for the north part of the island are held.

The only village of any considerable size is *Ballaasalla*, situated a short distance north of Castletown, on the road to Douglas. The names of the other villages on the island are Andreas, Ballaugh, Calf-of-Man Isle, Colby, Derbyhaven, Kiendroughad, Laxey, Michael, Port Erin, Port St. Mary, and Sulby.

The established religion is that of the Church of England. The island gives title to a bishop, whose seat is supposed to have been fixed at Sodor in the 9th century, but the site of this place is not now known. The bishop of Sodor and Man, whose authority is wholly confined to this island, is a suffragan of the archbishop of York. He has no seat in the House of Lords. The income of the see is 2000*l.* a year; the number of benefices is 25. The bishop has an archdeacon, vicar-general, registrar and secretary to assist him in managing the affairs of his diocese. In 1851 there were 132 places of worship in the island, of which 59 belonged to Wesleyan Methodists, 39 to the Church of England, 27 to Primitive Methodists, 4 to Roman Catholics, 2 to Presbyterians, and 1 to Independents. The total number of sittings provided was 32,985. The island possesses several local institutions. The House of Keys has both a legislative and judicial character; it consists of 24 of the principal commoners of the island. The two deans have equal jurisdiction, and are judges in civil and criminal cases. The Court of Chancery is held eight times in the year, where the governor acts as chancellor, with the assistance of the deans and other chief officers. The Court of Exchequer is generally held immediately after the Court of Chancery, and the governor, assisted by the dean, is sole judge. The common-law courts are held at different places for the different 'sheedings' into which the island is divided, called Glenfaba, Michael, Ayre, Garff, Middle, and Rushen. There is a general jail-delivery twice in the year. The high bailiffs, who act as magistrates in the five towns of the island, were established in 1777, and can hear and determine all causes under 40*s.*; it is their duty also to maintain the peace and apprehend offenders. There are no barristers, and the services of attorneys are in many cases rendered unnecessary by the party pleading his own cause.

The Manx language, a dialect of the Celtic, is spoken by the inhabitants; but English is generally understood. The elements of education are taught in parochial schools, which were established by Bishop Barrow in 1666. The number of day schools in 1851 was 126, with 6333 scholars, and of Sunday schools 87, with 6894 scholars.

Between 200 and 300 vessels, averaging about 10 hands each, and

of from 15 to 80 tons burden, are engaged in the herring fishery. The number of vessels registered as belonging to the island at the close of 1858 included 318 sailing vessels under 50 tons, with a total tonnage of 7422; 89 above 50 tons, with a tonnage of 2947; and 5 steamers above 50 tons, with a total tonnage of 1197. During 1853 the entries inwards included 1532 sailing-vessels (70,298 tons), and 219 steamers (25,360 tons); outwards, 731 sailing-vessels (23,044 tons), and 130 steamers (30,067 tons). Duties levied on imported goods, charges on vessels and boats trading to the island, the harbour dues, taxes on dogs, carriages, and public-houses, are the taxes of the island. The two last are expended in repairing harbours, roads, and bridges. Steam-vessels ply between the island and Liverpool, Dublin, Whitehaven, and Scotland.

The early history of the Isle of Man is obscure. It was governed by a succession of Norwegian kings until 1264, when Magnus, finding himself unable to preserve the Western Isles, sold them to Alexander III, king of Scotland. Soon after this Alexander reduced the Isle of Man, and appointed Regulus king. William de Montacute, with an English force, afterwards drove out the Scots, and it became the property of the kings of England. In 1307 Edward II. bestowed this island first upon the Earl of Cornwall, and then on Henry Beaumont. The Scots, under Robert Bruce, recovered and possessed it until 1340, when the Earl of Shaftesbury wrested it from Scotland in the reign of Edward III., and sold it to the Earl of Wiltshire, who was afterwards executed for high treason, and his estates confiscated. Henry IV. granted the island to Henry Percy, earl of Northumberland, after whose attainder in 1403 it was granted, with the patronage of the bishopric and other ecclesiastical benefices, to William Stanley and his heirs, afterwards earls of Derby. Thomas, earl of Derby, relinquished the title of King of Man, and took that of Lord. James I. made a new grant of the island to William, sixth earl of Derby, which the Parliament confirmed. James, earl of Derby, in consequence of his adherence to Charles I., was taken prisoner and executed at Bolton in 1651. The Parliament granted the island to Lord Fairfax. Charles II., on his accession to the throne, gave it to the Earl of Derby, the son of the earl who had been beheaded, from whom it passed to James, second duke of Athol, who was descended from the youngest daughter of the seventh earl of Derby. In 1764 the Duke of Athol sold his sovereign rights to the British government for 70,000*l.*, with his civil patronage, and the castles of Peel and Rushen. By a subsequent arrangement with the duke on the part of the English government (6 Geo. IV. c. 34), Great Britain now enjoys all the sovereign rights and privileges of the island.

No part of the kingdom abounds so much in Danish and other ancient remains. The various tumuli, barrows, weapons, coins, and Runic inscriptions afford clear evidence of the connection which the Northmen had with this island. Some stone circles have been discovered. The venerable remains of Rushen Abbey, which belonged to the Cistercian order, and of a nunnery near Douglas, show the influence of the Church during the middle ages. The tumulus at Tinwald, which is approached by turf steps on the east, presents the appearance of a truncated cone divided into three stages, which are raised about three feet above each other, and proportionally diminished both in circuit and width until they approach the summit, where the king of Man formerly sat on solemn occasions. The local laws of the island still continue to be read and promulgated here annually before the governor, two deans, keys, council, and various officers of state, and divine service concludes the solemnities of the day. The Tinwald Mount (which means either 'a fence for an assembly,' or 'a juridical hill') is situated near the intersection of the high road from Castletown to Ramsey with that from Douglas to Peel.

MANAAR PASSAGE. [CEYLON.]

MANACOR. [MALLORCA.]

MANAMA. [BAHREIN ISLANDS.]

MANCHA, LA. [CASTILLA LA NUEVA.]

MANCHE, a department of France, deriving its name from La-Manche, the French name for the English Channel, on the coast of which it lies, is bounded W., N., and N.E. by the Channel, E. by the departments of Calvados and Orne, and S. by those of Mayenne and Ille-et-Vilaine. Its form is that of an irregular rectangle, having its greatest length from north to south about 90 miles: its greatest breadth is about 39 miles, but the average width does not exceed 27 miles. Its area is 2291 square miles. The population of the department in 1841 was 597,334; in 1851 it was 600,882, giving 262,279 inhabitants to a square mile, being 87,695 above the average population to the square mile for the whole of France. The department comprises the peninsula of Cotentin and the district of Avranchin, parts of the old province and duchy of Normandy.

The department is traversed from south to north by hills of no great elevation, which branch off from the Armorican chain, and terminate northward in Cape La-Hague. These hills slope down gradually towards the coast on the eastern and western sides of Cotentin, in some places presenting bold cliffs towards the sea, in others subsiding into sands and benches of vast extent, which are always covered at full tide. Along the coast there are several harbours and roadsteads, the most important of which are—Cherbourg, La-Hougue, Granville, Regneville, Carteret, &c. Among the numerous islands that stand in near the coast, besides the Channel Islands, are—Mont-St.-Michel, the

Chaussey group, Pelée, north-east of Cherbourg; and Tatihou and St.-Marcouf, on the east coast of Cotentin. Most of these islands are fortified and garrisoned; many of them, traditions say, were once joined to the mainland.

The Chaussey group consists of one island about a mile long and half a mile wide, surrounded by several much smaller islets. The principal island stands in 48° 51' N. lat., 1° 47' W. long. It is uninhabited, except by persons who work in its granite quarries, which have supplied materials for constructing the harbours of Granville and St.-Malo. The granite is also sent to Paris. There is a grazing farm on the island. Rabbits are numerous.

From the nature of the surface the rivers must be all of short course. The largest is the Vire [CALVADOS], which rises in the department of Orne, and enters this department on the east side, whence it flows northward, just within and in one part on the boundary of the department, past St.-Lô into the English Channel. The whole length of the Vire is about 50 miles, for about 8 miles of which it is navigable. The Taute and the Douve, empty their united waters into the great sandy bay between Isigny and Carentan. The Ay, the Tienne, the Célune, and the See terminate on the western coast. The Couësson [ILLE-ET-VILAINE] in the lower part of its course separates La-Manche from Ille-et-Vilaine, and falls into the bay of St.-Michel. The department is crossed by 9 state, 25 departmental, and a great number of parish roads. The railway connecting Paris with Cherbourg, now in course of construction, crosses the department, but as yet (December 1854) no railroad is open in the department. The climate is mild but moist.

The department yields more of bread-stuffs than suffices for the consumption. Wheat, barley, rye, buck-wheat, black oats (cakes made of which form the chief food of the labouring class), and potatoes are the chief crops. Apple- and pear-trees are extensively cultivated for making cider and perry, the favourite beverages of the country. Of cider above 22,000,000 gallons are made annually; some of it, especially that made near Avranches, is of excellent quality. Hemp and flax are grown in considerable quantity on the eastern slopes of Cotentin. Fruits of various kinds are sedulously cultivated in the arrondissement of Avranches. Horses of the true Norman breed are numerous, and fetch the breeder good prices; they are much sought after as cavalry horses. The pastures are good and extensive, affording food for a great number of horned-cattle of large size and excellent fattening qualities. Excellent butter is made, and large quantities of it are exported from Isigny. A considerable number of sheep are fed on the sandy plains (locally called 'mielles') which extend between the sea and the cultivated land; they are small, and have sweet flesh. Game, water-fowl, and fish of all kinds are abundant.

Primitive rocks overspread the greater portion of the department, but a part of the eastern coast and of the country about Valognes, Carentan, and St.-Lô is occupied by later formations. Between Carentan and Valognes the elevated tract behind the low marshes that skirt the shore is composed of blue lias, which extends to a considerable distance inland. The new red-sandstone is abundant between Carentan and St.-Lô; between Carentan and Isigny it is yellowish mixed with red and gray, and is tolerably compact. Red-marl and red-sandstone belonging to this formation are found near Valognes and along the coast intermingled with gravel beds composed of the rocks of this formation, intermixed with quartz rock, on which in several places the new red-sandstone is found to rest. Nude quartz rock is found between Valognes and Cherbourg alternating with argillaceous slate. Argillaceous slate and grauwacke occupy the east of the department about St.-Lô. Granite, resembling that of Dartmoor, is found at St.-Vaast near Pointe-Barfleur. A bed of limestone, probably belonging to the supracretaceous rocks, is quarried between Carentan and Valognes, and another limestone of uncertain date is found in the immediate vicinity of the latter place. The department is rich in minerals. Iron, lead, and coal-mines are worked; granite and building stone are quarried; marble, slate, potters'-clay, and limestone are found. Mineral springs are numerous; there are a few salt-marshes along the coast.

Manufacturing industry is actively exerted in the making of iron, the working of zinc and copper, the fabrication of plate-glass, serge, calico, drugget, cutlery, woollen-stuffs, lace, tape, haircloth, porcelain, oil, hardware, cotton-yarn, paper, leather, soda made from kelp, basket-work, &c. Ship-building is actively carried on at Cherbourg and other towns on the coast. Cherbourg is the chief naval arsenal and naval station of France in the north; vessels of war and steamers of all sizes are turned out of its yards. The articles enumerated and the products of the soil support an active commerce and coasting-trade. The chief exports are fresh and salt fish, corn, cattle, horses, poultry, wax, honey, salt butter, feathers, salt, salt provisions, soda, &c. About 380 fairs and markets are held in the year.

The department contains 1,466,275 acres. Of the whole area 949,290 acres are under tillage; 227,483 acres are meadow and pasture land; 59,201 acres are covered with woods and forests chiefly of oak, beech, and birch; 50,063 acres are laid out in gardens, orchards, and plantations; 114,394 acres consist of heaths and moors; 46,299 acres are occupied as roads, streets, squares, &c.; 6657 acres are covered with waters; and 13,663 acres with houses and buildings.

The department is divided into six arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. St.-Lô	9	115	99,089
2. Coutances	10	138	130,475
3. Valognes	7	118	92,238
4. Cherbourg	5	73	85,397
5. Avranches	9	123	117,032
6. Mortain	8	73	76,641
Total	48	640	600,882

1. In the first arrondissement, the chief town is *St. Lô*, which is also the capital of the department. It is situated in 49° 6' 59" N. lat., 1° 5' 32" W. long., at a distance of 157 miles W. from Paris, and has tribunals of first instance and of commerce, a college, and 9156 inhabitants in the commune. The central part of the town stands on a rocky eminence above the Vire, from which the other streets, all irregularly and badly built, extend down the slopes in all directions. The square called *Champ-de-Mars* is prettily laid out with avenues of trees. The most remarkable structures are the church of *Notre-Dame*, in which are fine painted windows, the gift of Louis XI.; the church of *Sainte-Croix*, the best preserved edifice in the oldest Norman style in France; the church of *St. Thomas*, which is now a corn-market; and the tower in the garden of the prefecture, which is all that remains of the former defences of the town. The chief manufactures of *St. Lô* are druggot, woollen-yarn, tape, lace, linen, and leather. There is a considerable trade in horses for the French cavalry, in cattle, corn, small-wares, cloth, &c. The town has a museum, dye-houses, and bleaching establishments. Of the other towns named in this article, the population given in each case is that of the commune. *Carentan*, a town of 2990 inhabitants, is situated near the coast among unhealthy marshes on the left bank of the *Taute*. It was formerly defended by a strong castle, a great part of which remains; this castle was taken by Edward III. in 1346. *Percy*, S. W. of *St. Lô*, has a population of 3215. *Torigny*, S. of *St. Lô*, a small well-built town of 2186 inhabitants, is famous for its ancient castle.

2. In the second arrondissement the chief town *Coutances*, the capital of the old district of Cotentin, is built on a hill extending north and south about 4 miles from the sea, to which it is joined by the *Saule Canal*. It is generally ill-built, with narrow crooked streets, but the situation is very picturesque. The town is said to have existed in Roman times, and to have taken its name from *Constantius Chlorus*, who fortified it and built the aqueduct, now called *les-Piliers* from the Roman arches of it still remaining. The principal buildings are the cathedral, which is universally admired, the churches of *St. Nicholas* and *St. Pierre*, the prison, and the theatre. The tower of the cathedral of *Coutances* is over the point 49° 2' 54" N. lat., 1° 28' 32" W. long. *Coutances* is the seat of an assize court, of tribunals of first instance and of commerce; it gives title to a bishop, and has communal and theological colleges, and 7295 inhabitants. The industrial products are cutlery, parchment, druggot, mualin, &c.; the chief trade is in corn, butter, poultry, eggs, cattle, horses, hempen and flaxen thread, wool, feathers, &c. *Cerisy-la-Salle*, 7 miles from *Coutances*, has a population of 2327; there are several druidical monuments near it. *Gavray*, famous for its long resistance to *Du-Guesclin*, stands a few miles S. by E. from *Coutances*, and has 2014 inhabitants. *Périers*, N. of *Coutances*, has a population of 2356.

3. The third arrondissement is named from its chief town *Valognes*, which stands in a pretty valley a few miles S. by E. from *Cherbourg*, in 49° 30' 32" N. lat., 1° 28' 1" W. long., and has a tribunal of first instance, a college, and 5707 inhabitants, who manufacture lace and porcelain. The principal building is that in which the college and public library are established, and which was formerly a theological seminary. *Barfleur*, an important sea-port in the time of the Norman kings of England, stands on the eastern shore of the peninsula of Cotentin; it is now a mere fishing village with 1185 inhabitants, and has a harbour capable of admitting only small craft. Edward the Confessor and the early Norman kings of England used *Barfleur* as the port of communication with Normandy. *Briquebec*, situated in a forest of the same name W. of *Valognes*, has a handsome church, an ancient ruined castle, and 4484 inhabitants. There are several iron-mines and mineral springs near this town. North-east of *Valognes*, on the eastern coast of Cotentin, is the fortress of *La-Hougue*, which is built on the isthmus of a peninsula terminating in *Cape La-Hougue*, and defends the roadstead of *La-Hougue*. The roadstead is marked out by three lights, one of which is on the fort of *La-Hougue*. Off the cape on the 29th of May 1692 the French fleet, under Admiral *Tourville*, was completely defeated by the combined fleets of England and Holland. *Montebourg*, S.E. of *Valognes*, has 2502 inhabitants, who manufacture lace, cutlery, and leather. *Sainte-Merc-Eglise*, S. of *Montebourg*, on the road to *Carentan*, has a population of 2894. *St. Sauveur-le-Vicomte*, a well-built town prettily situated on an eminence above the *Douve*, has 2774 inhabitants.

4. In the fourth arrondissement the chief town is *Cherbourg*, which is the subject of a separate article. [CHERBOURG.] *St.-Pierre-Eglise*,

a small town E. of *Cherbourg*, has 2208 inhabitants, who manufacture linen and leather. *Les-Picqs*, a small place built on a hill near the west coast of Cotentin, is remarkable for the extensive view from it, in which are included the islands of Guernsey and Jersey, and 20 churches on the peninsula.

5. Of the fifth arrondissement the chief town is *Avranches*, which has been already noticed. [AVRANCHES.] *Brécey*, E. of *Avranches*, near the right bank of the *See*, has 2452 inhabitants. *Granville*, a sea-port and walled town N.W. of *Avranches*, has a tribunal of commerce, a naval school, and 8347 inhabitants. The town stands on a rocky promontory, and has a well-sheltered harbour, which however is always dry at low water. Works are now in progress for the improvement of the harbour generally, and for the construction of wet docks and quays. The streets of the town are narrow and steep; the only remarkable building is the parish church. The inhabitants of *Granville* are enterprising seamen, and are largely engaged in the coasting trade, and in the cod, herring, whale, and oyster fisheries. They export corn, flour, butter, cider, poultry, cattle, granite-blocks, &c.; and import wine, brandy, colonial produce, drugs, salt, hemp, soap, oak and deal planks, iron, &c. Ship-building is carried on. *Pontorson*, a town of 2000 inhabitants, stands near the mouth of the *Couésnon*, which separates Normandy from Bretagne. Near it is the isolated and fortified rock of *Mont-St. Michel*, on which stands the famous abbey dedicated to *St. Michael the Archangel*. The abbey-buildings, after the first French revolution, were made a prison for nobles and priests; it afterwards became and still is a central prison for several departments. The abbey-church, which springs from the centre of the other buildings, and crowns the summit of the rock, is greatly admired for the beauty of its gothic architecture. *St. James*, S. of *Avranches*, on the *Beuvron*, has a population of 3236, who trade in corn, cattle, flax, and hemp. *Villabek*, N.E. of *Avranches*, has 3763 inhabitants, who manufacture hardware and plated goods, lace, and leather.

6. The sixth arrondissement is named from its chief town *Mortain*, which is situated in the south-east of the department, and has a tribunal of first instance, a college, and 2221 inhabitants. The church of *Mortain*, founded in 1082, is a remarkable structure; the castle that formerly stood on the hill above the town is now a heap of ruins. *Barenton*, S.E. of *Mortain*, has a population of 3086. *St.-Hilaire-du-Harcouet*, near the confines of Normandy, Bretagne, and Maine, has large markets for the sale of the cattle, corn, and other produce of these provinces: population, 2994. *Sourdeval-la-Barre*, N. of *Mortain* on the *See*, has several paper-mills, manufactures of cutlery and hardware, and a population of 4389. *Le-Teilleul*, on the borders of *Mayenne*, 9 miles S. from *Mortain*, has 2539 inhabitants.

The department forms the see of the Bishop of *Coutances*, is included in the jurisdiction of the High Court and within the limits of the University-Academy of *Caen*, and belongs to the 16th Military Division, of which *Rennes* is head-quarters. It returns 4 members to the Legislative Body of the French empire.

Besides the communal colleges in the chief towns of arrondissements there are a diocesan seminary and a secondary ecclesiastical school in *Coutances*, a primary school at *St.-Lô*, and a naval school and academical society in *Cherbourg*. The Calvinists have two meeting-houses, one at *Cherbourg* and one at *Chéfrème*, near *Percy*.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

MANCHESTER, Lancashire, a manufacturing and market-town, a city, the seat of a bishopric, a municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Manchester and hundred of Salford, is situated on the river *Irwell*, distant 51½ miles S.S.E. from *Lancaster*, 31½ miles E. by N. from *Liverpool*, 183 miles N.W. by N. from *London* by road, and 188 miles by the North-Western railway via *Trent Valley*. The cathedral church of Manchester is situated in 53° 29' 5" N. lat., 2° 14' 35" W. long. The population of the city of Manchester in 1841 was 240,867; in 1851 it was 316,213. The population of the entire parish, which contains an area of 34,260 acres, and includes the city of Manchester and its suburb *Salford*, in 1841 was 353,390; and 452,158 in 1851. The city is governed by 16 aldermen and 48 councillors, of whom one is mayor; and returns two members to the Imperial Parliament. The living of Manchester is a rectory in the archdeaconry and diocese of Manchester. The parish of Manchester is divided into three Poor-Law Unions—Manchester, Chorlton, and Salford. Manchester Poor-Law Union contains an area of 1577 acres, with a population in 1851 of 186,987; Chorlton Poor-Law Union contains 12 townships and chapelrys, with an area of 11,560 acres, and a population in 1851 of 123,806; Salford Poor-Law Union contains 4 townships, with an area of 5308 acres, and a population in 1851 of 87,514.

Manchester is chiefly built upon low ground on the left bank of the river *Irwell*, by which it has a communication with the *Mersey*, *Liverpool*, and the ocean. Separated from the borough of Manchester by the *Irwell*, but really forming part of the town, is the municipal and parliamentary borough of *Salford*. Throughout this article the two boroughs are spoken of as one town. It is situated in a district which contains some of the best coal strata of England, a circumstance to which the place is in no small degree indebted for its prosperity. According to *Dr. Dalton* ('*Memoirs of the Manchester Philosophical Society*, 2nd series, v. iii. p. 483, et seq.), the mean height of the

barometer at Manchester is 29.85. The mercury is higher in the summer months than in the winter. The general annual mean of temperature is 49°. The mean annual fall of rain is 36.140 inches; while at Lancaster it is 39.714. The first six months of the year must be considered as dry months, and the last six months as wet months. April is the driest month in the year, and October is the wettest, or that in which the most rain falls, in a long-continued series of years, in the immediate neighbourhood of Manchester.

The drainage and sewerage of the town have been greatly improved under local acts. A few years back the corporation obtained an Act of Parliament by which it was empowered to purchase the old water-works, and to construct new works on the river Etherow, near Woodhead, at a distance of from 14 to 18 miles from Manchester, and thus insure a sufficient supply of good water. The streets are well paved, and there is an ample supply of gas of a superior quality. The gas as well as water supply is under the direction of the corporation.

Manchester has reaped an ample reward from that system of canal navigation to which it gave such impulse in its earlier stages. The achievements of Brindley were prompted by the desire which the Duke of Bridgewater had of sending his coal from Worsley to Manchester at a small expense; and the city now possesses the means of water-communication with almost every part of the country. In railway enterprise Manchester has held a prominent station. It furnished its full share of the capital employed in the formation of the Manchester and Liverpool railway; and is now the centre of a system of railways which radiate from it by numerous lines, connecting it with all the commercial towns of the kingdom. Along most of these lines the electric telegraph is in full operation.

Manchester was a Roman station, the Mancunium of the Itinerary of Antoninus. Under the Saxons Mancestre became the abode of a Thane. In the Domesday Book it is mentioned as possessing a church, that of St. Michael's. In the year 1301 Thomas de Grelley granted the Great Charter of Manchester. From the Grelleys the barony descended to the family of De la Warre, and John, the first of the line, was called to Parliament in the 9th year of Edward II. The manorial rights have been recently purchased by the corporation of Manchester.

In the civil wars Manchester ranged itself on the side of the Parliament, and sustained a siege conducted by Lord Strange. On the cessation of the contest, Presbyterianism replaced Episcopacy; Heyrick, the warden of the collegiate church, being himself instrumental in bringing about the change. The Rebellion of 1745 had many friends and supporters in Manchester. The desire for political reform arose at a very early period in Manchester, and immediately after the peace in 1815, it began to manifest itself in a very decided manner. By the Reform Act Manchester obtained the elective franchise. The great 'free-trade' movement received its mightiest impetus in Manchester by the formation of the 'Anti-Corn-Law League'; and the party which gives special attention to the interests of manufacture, as it had its origin in the town, has been generally recognised as the 'Manchester school.' In 1848 Manchester was made the seat of a bishopric. In 1852 it was constituted a city.

In the time of Henry VIII. and Edward VI. the town was distinguished for its manufactures. The more rapid expansion of trade began in the 17th century; and one who is known as a benefactor to the town, Humphrey Chetham, was among its most eminent tradesmen. The enormities of the Duke of Alva in the Netherlands, and subsequently the revocation of the edict of Nantes, brought many enterprising and skilful foreigners into the district. At first the woollen was the only branch of trade, but since the middle of the last century the cotton has nearly superseded the woollen manufacture. The series of brilliant inventions and discoveries applied, improved, or originated in the district of Manchester, comprising the steam-engine, the spinning-jenny, the mule-jenny, the fly-frame, the tube-frame, the mule, &c., have proved most effective instruments in developing the industrial power of the inhabitants. The early inventions which gave energy to the cotton manufacture were completed about 1788. The importation of raw cotton into this country in 1701 amounted to 1,985,868 lbs.; in 1751 to 2,976,610 lbs. In 1780 it had increased to upwards of 6,700,000 lbs.; in 1800 it reached 56,000,000 lbs. Since then it has gone on increasing with marvellous rapidity.

There are above 200 cotton factories within the limits of Manchester parish. Some of them are only spinning factories; others are both spinning and weaving; and many of them are on a scale of extraordinary magnitude. Bleach-works, dye-works, and print-works, all connected with the cotton manufacture, exist on a very large scale in and near Manchester: also chemical works, engine factories, and numerous other extensive establishments, as well as a very great number of small factories and workshops, which depend more or less on the staple manufacture of the town.

The processes of throwing and weaving silk were extensively carried on at Macclesfield several years before they reached Manchester. The silk-mill of Mr. Vernon Royle, erected in 1819-20, was the first brought into operation in Manchester. Since then the trade has rapidly increased; and there are now several very large mills, employing a great number of hands. Printing is another branch of the silk

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business, chiefly, if not exclusively, carried on at Manchester. Dyeing of silk is also extensively pursued.

Locomotive engines for railways, as well as the engines and machinery for cotton factories, are extensively made. There are besides manufacturing of woollens, small wares, hats, umbrellas, &c. There are numerous banking and other mercantile establishments. A chamber of commerce has been established. Property in the town has enormously increased in value; the application of capital has been on the grandest scale, and the habits of the manufacturers have undergone an entire change.

As to the intellectual and moral condition of the working classes, there is doubtless much to deplore. The prevalence of the factory system has broken up the old domestic manufacture, and thereby destroyed former domestic habits; it has also called from every district of the kingdom, and especially from Ireland, masses of people heterogeneous in their character, yet all more or less ignorant and uncultivated. Most of them have been much bettered in their circumstances without having found an equal increase of morally improving influences. Children by the amount of their wages have become independent of their parents: girls have been sent into the mill before they have learnt the rudiments of domestic duty, and mothers, whose presence in their own houses is indispensable, continue at work for ten hours in the day amid a mass of people, young and old, from whom they can derive little improvement. It is a painful consequence of so many married women working at the mills that a fearfully large number of infants are left barely cared for during the day: to meet, and in some degree to remedy, this evil, 'day nurseries' have been established, and have been found exceedingly useful. The Saturday holiday is a considerable boon to the industrial population of Manchester. Every Saturday at one o'clock factories and warehouses, as well as banks and other large commercial establishments and many shops, are closed, and the remainder of the day is given as a holiday to those employed in them.

Manchester has not been hitherto distinguished for architectural beauty; its chief streets are occupied with warehouses and shops. Recently however a great improvement has taken place in the building of warehouses and places of business; so much so indeed that the warehouses of Manchester promise to become a marked architectural feature of the town. They are spacious, constructed mostly of brick, with stone quoins and dressings, but many are wholly stone, and they are almost invariably in the Italian style. Under the sanction of Acts of Parliament much has been done for the improvement of the town, both in convenience and appearance. Market-street, the chief street, is wide and handsome. The Manchester Improvement Committee have applied the profits of the gas-works, which are very large, to the improvement of the town. Several new streets have been opened by them through dense masses of buildings. Great attention has also been given to the level of the roads in the approaches to the town.

The ecclesiastical edifices in Manchester are numerous. The cathedral is a spacious (collegiate) church of the perpendicular style, of very good proportions; it consists of a nave with two aisles, transepts, several mortuary chapels, and an elaborate western tower. This building serves as the cathedral of the see of Manchester. Among the recent churches one of the finest is that of the Holy Trinity in Stretford-road. St. Luke's church, Cheetham-hill, St. James's at Birch, Trinity church, Rusholme, and St. Matthew's church, are deserving of notice. Among dissenting places of worship, may be mentioned the handsome cruciform Congregational church in Stretford-road, the Scotch church, corner of Devonshire-street, the elegant Unitarian chapel in Brook-street, built by Sir C. Barry, and the handsome Roman Catholic church of St. Chads. Next to the cathedral the finest building in Manchester or Salford is the Roman Catholic cathedral in Salford. There are 42 places of worship belonging to the Establishment, and 110 in connection with the Dissenters in Manchester and Salford; of these the Wesleyan Methodists have 27, the Association Methodists 14, the Primitive and New Connexion Methodists 9, the Independents 17, the Baptists 9, Presbyterians 7, the Unitarians 4, the Roman Catholics 7, and the Quakers, Swedenborgians, and Greek Church one each. The Jews have two synagogues. There are three cemeteries in Manchester; one in Rusholme-road, one at Ardwick, and the third at Harpurhey.

The Manchester Free Grammar school was founded by Hugh Oldham, bishop of Exeter, in 1515. It is free to boys of whatever county or shire, from 5 years old to 20. The income is variable, but averages 5000*l.* It has several exhibitions to Oxford and Cambridge. The school is under the care of nine masters, and in 1853 had 400 scholars. Chetham's Hospital, or the College, was founded by charter in 1665, for 31 boys of Manchester and Salford, and other places in the vicinity; Humphrey Chetham, the benefactor, leaving the interest of 7000*l.* for their maintenance and instruction from 6 to 14 years of age, at which period they were to be put out to some trade. The number of scholars is now about 80. The school is conducted in a convenient old building, which also contains the college library, a fine collection of not less than 25,000 volumes, which have been accumulated out of the benefactions of the same H. Chetham: among the books are many rare and most valuable works. The library is open to the use of the public; books are not allowed to be taken out, but

a convenient reading-room is provided. There is also a museum connected with this institution. The Lancashire Independent college is for the education of students of the Independent denomination intending to enter the ministry, and the course of instruction pursued in it extends over a period of five years. It is in connection with the University of London. The number of students in 1852 was 29. Manchester New College, an institution belonging to the Unitarian body, was founded in 1786, and is in connection with the University of London. It has an income from endowment of about 800*l.* a year. The number of students in 1851 was 20. Owens College is so called from a Manchester merchant, Mr. Owens, who bequeathed the bulk of his property, amounting to nearly 100,000*l.*, for the endowment of a college in Manchester, wherein the usual course of collegiate instruction should be given, with the exception of theology. Owens college was opened in March, 1851, and is in connection with the University of London. In 1853 the number of students was 99. The Royal Manchester School of Medicine is the oldest and one of the most flourishing in the provinces; it also is in connection with the University of London. The Commercial schools under the management of the Manchester Church Education Society, are under the care of a head, second, and third master, and a teacher for each of the departments of French, German, drawing, and music. The school for the deaf and dumb, and the asylum for the blind, occupy a very handsome building near the botanical gardens, on the Stretford-road. The number of day schools in the city of Manchester in March 1851 was 368, of which 80 were public schools with 16,202 scholars, and 288 were private schools with 10,034 scholars. The number of day schools in Salford was 63, namely, 13 public schools with 3352 scholars, and 50 private schools with 1891 scholars. Of Sunday schools there were in Manchester 111, with 42,389 scholars, and in Salford 25, with 10,086 scholars.

The Blind Asylum is maintained from a bequest of Mr. Henshaw of Oldham, who left 20,000*l.* to be applied to the maintenance of an asylum for the blind, so soon as the inhabitants should furnish a suitable building. The Jubilee, or Ladies' Female Charity school, founded in 1806, is conducted in the house in Ducie-road, and educates 40 girls for the duties of domestic service. Among other benevolent and religious institutions are the Royal Infirmary, several dispensaries and lying-in-hospitals, the District Provident society, and the city missions.

Among the scientific institutions of the town, the Literary and Philosophical Society (founded in 1781) stands first in point of time. Its utility has been fully proved by the publication of its Transactions. The Royal Manchester Institution for the promotion of literature, science, and the arts, formed mainly under the auspices of G. W. Wood, Esq., M.P. for Kendal, has been of service in promoting the objects for which it was founded: above 30,000*l.* were laid out in the erection of the building. The Manchester museum, or natural history society, has a handsome hall in Peter-street. The council is empowered to open the museum to ladies, strangers, resident non-subscribers, schools, and the working-classes. Manchester also possesses an architectural society, a statistical society, a flourishing school of design, a choral society, &c.

Among the institutions in Manchester having an influence on the working-classes may be mentioned the athenæum, the mechanics institution in Cooper-street, the mechanics institution in Miles-Platting, the Ancoats lyceum, the Chorlton mechanics institution, the Salford free library and museum in Peel-Park, and the Manchester free library and museum, Camp-Field. The total number of literary societies in Manchester and Salford in 1851 was 24, with 6298 members, and 79,285 volumes in the libraries belonging to them. There are a botanical garden, two theatres, and a concert-hall. There are also several refreshment-rooms of very large size, some capable of holding above 2000 persons, in which music and singing and alight dramatic interludes are performed, and which are attended by great numbers of the youths employed in the factories. Three public parks were opened in 1846:—Queen's-Park, Harpurhey; Peel's-Park, Salford; and Philip's-Park, Bradford. Baths and wash-houses have been erected in different parts of the city.

Among the public buildings worthy of notice are the Royal Institution in Mosley-street, a handsome Grecian pile, designed by Barry; the Infirmary in Piccadilly; the Blind Asylum and Deaf and Dumb school already mentioned; the Town-Hall in King-street; the Royal Exchange, said to be the largest room used as an exchange in Europe; the Theatre Royal, Peter-street; the Branch Bank of England; and the Athenæum in Bond-street, erected by Barry, and one of the most elegant buildings in Manchester. From its size and its political associations the Free-Trade Hall may be specially noticed. It is frequently used for public meetings. There are several railway stations. A new borough jail, on the plan of the model prison at Pentonville, London, has recently been built at a great expense in the Gorton Road; it will contain 500 persons. The union-houses are spacious structures.

There are 10 market-places in Manchester. The provision-markets are open for the sale of goods every day except Sunday, but the regular market-days are Tuesday, Thursday, and Saturday for provisions and manufactures, the Tuesday market being the principal for manufactures, and the Saturday market for vegetables, &c.; Wednesday for pigs and cattle, and Tuesday and Saturday for corn. Fairs

are held in Manchester on Easter Monday and October 1st; and in Salford on Whit Monday and November 17th. A custom-house is maintained in Manchester, in order that the town and neighbourhood may have the privilege of possessing bonding warehouses; the cost of the establishment is borne in the first instance by the corporation, but ultimately by the Bonded Warehouse company. Courts of bankruptcy and county courts are held in the city.

MANCHURIA. [CHINA; MANDSHOORIA.]

MANDAL. [CHRISTIANSAND.]

MANDAVEE. [CUTCH.]

MANDSHOORIA constitutes a government of the Chinese empire under the name of Kirin-oola, or Ghirin-oola. It is the most eastern projection of the high lands of Central Asia, and lies between 42° and 58° N. lat., 120° and 142° E. long. Its surface is estimated at 650,000 or 750,000 square miles. On the north it borders on Siberia, from which it is separated by a mountain range, the Yablouoi Khrebet of the Russians, or the Khing-khan Tugwick of the Chinese. On the west it is divided from the Russian province of Da-uria by the river Kerlou, an affluent of the Amur, and from Mongolia by the river Khailar and the mountain range called Khing-khan-oola. On the south it joins the Chinese provinces of Pe-cheli and Leao-tong, the latter of which formerly belonged to Mandshooria, and has only been detached from it since the present imperial dynasty ascended the throne of Peking. On the east is Corea, from which it is divided by the Tai-yung-shan and Shan Alin, a high range; and farther north the Sea of Japan and the Gulf of Tartary, which separate the large island of Tarakai from Mandshooria.

Mandshooria may be considered as an immense valley inclosed by high and steep mountains, except at its south-western corner, where a broken and rather hilly tract divides it from the province of Leao-tong. The mountain chain of the Khing-khan-oola, which forms the western boundary, seems to be the highest. Towards its southern extremity, between 42° and 43° N. lat., is the peak of Pecha, which is thought to rise to more than 15,000 feet. There are other elevated and snow-capped summits farther north. The Yalo Pass, the only one traversed by Europeans, is near 49° N. lat., and even in April is covered with deep snow. The mountain region of the Yablouoi Khrebet does not attain the snow-line; and its mean elevation probably does not exceed 2500 or 3000 feet above the sea-level. Along the Gulf of Tartary the coast is formed by an exceedingly steep mountain range, rising to 4000 or 5000 feet, and coming close up to the sea, so that only a few level spots of inconsiderable extent intervene between the range and the water. On the eastern declivity of this range there is a tribe which seems to belong to the same race as the inhabitants of Japan: they are called Ainos or Kechen, and live on the produce of their fishing. This mountain range seems to allow no passage, as the Ainos have no intercourse with the Mandshoo, who inhabit the country west of the range. At its southern extremity (43° N. lat.) this maritime range is probably connected with the Shan Alin and its continuation the Tai-yung-shan, which appears to run in a south-south-west direction, until it terminates on the Hoang-hai, or Yellow Sea, in a long promontory, the most southern extremity of which is called the Regent's Sword. The huge mountain mass of the Shan Alin rises above the snow-line.

The interior of Mandshooria contains, towards its southern extremity, an extensive and nearly level plain, called Cortchin. It lies on both sides of the Siren-muren, or Leao-ho, and seems to stretch northward to the banks of the rivers Nonni-oola and Songari. It greatly resembles the desert of the Gobi, which is separated from it only by the Khing-khan range, being mostly covered with sand, and having no water, or only salt-lakes; but the grassy spots are more common and more extensive here than in the Gobi, and afford better pasturage to the numerous cattle of the Mongols, who occupy this part of Mandshooria, which is also called the Eastern Gobi. In some parts the surface is covered with salt incrustations. The remainder of Mandshooria is supposed to consist of a succession of valleys and mountain ranges of various elevation. The mountains however are not bare, but covered with forests nearly to the top. The valleys are said to be fertile, and wide along the principal rivers south of the Amur, and so far it appears that agriculture extends. But that large part of the country which extends from the last-named river to the Yablouoi Khrebet is too cold for agriculture, and its inhabitants live on the produce of their herds and of the chase. Though the climate of Mandshooria is not equal in severity to that of the Gobi, it must be very cold, as we may infer from its geographical position and its elevation.

The principal river is the Amur, which has numerous tributaries. [AMUR.] Through the southern districts runs the Sira-muren, or Leao-ho, which flows about 500 miles; it rises in the Khing-khan range north of the Peak of Pecha, and runs for nearly 400 miles east, and the remainder of its course south-west, until it falls into the Gulf of Leao-tong. It seems to be navigated nearly up to the place where it turns to the south-west.

Agriculture is common south of the river Amur. Wheat, rye, barley, and buckwheat are cultivated extensively, as well as hemp and cotton. The forests, which cover the greatest part of the surface, are partly composed of oak and lime trees, and partly of different kinds of pines, fir, and birch. On the mountains towards Corea rhubarb and ginseng grow in abundance; both are collected by the natives, and

constitute, with corn, the principal articles of export. All domestic animals common to the countries of central Asia are kept in considerable numbers; there are also reindeer in the districts north of the Amur, and camels in many places south of it. Wild animals are numerous, especially those that yield furs, in the forests which clothe the eastern declivity of the Khing-khan, where sables, ermines, bears, wolves, and foxes are found. Among the wild animals peculiar to this and the neighbouring countries are the 'argali,' or wild sheep, and the 'dashigetai,' or wild ass. Fish abound in the rivers, especially the sturgeon and salmon. Pearls are said to be found in some of the streams. The mineral riches of Mandshooria are not known.

The population is very vaguely estimated at two millions, but it is probably much underrated. All the people, with the exception of the Mongols, who inhabit Cortchin, belong to the wide-spread race of the Tungooses, of which the Mandshoo form a subdivision. The most widely-spread tribe is the proper Tungooses, who seem to occupy the whole or nearly the whole country north of the Amur, and also the greatest part of that between the Nonni-oola and Songari rivers. The Tungooses are numerous also in Siberia. This race differs considerably from the Mongols, who inhabit the country farther west, in the form of their body, being tall and of a slender make. The languages of all the tribes of this race have a great similarity in words and construction; and it appears that there is a relationship between them and the language of the Mongols and Turks, as well as some languages of eastern Europe, especially that of the Finlanders. They lead in general a nomadic life, subsisting on their herds of cattle or reindeer. The Taguri, or Da-ures, live on the river Nonni, and are agriculturists. Among them are settled the Yakutes, about 6000 families, which emigrated in 1787 from Siberia. The Mandshoo occupy the south-eastern part of the country: though not the most numerous of the tribes they are the most important, their sovereign family having ascended the throne of China. They began their incursions into the northern provinces of the Celestial Empire about 1610. Their progress at first was slow, but it afterwards became so rapid that in 1662 they proclaimed the son of their valiant chief Taytsong emperor of China, under the name of Kaughi, and he completed the conquest of the empire with singular success. His family still occupies the throne of China. The Mandshoo are agriculturists, but pass a great part of their life in hunting: many Chinese families have settled among them, and have improved their modes of cultivation. Members of the Tungoose tribes have been well received by the Mandshoo dynasty in China, where they serve as soldiers and attain military honours, the civil employments being reserved for native Chinese.

The governor of the province resides at Ghirin-oola, a place of some importance. Ninguta, on the Hurka-pira, an affluent of the Songari River, is the ancient residence of the chiefs of the Mandshoo, and is held in great veneration by the court of Peking and the whole nation. Other towns of some importance are Naun-koten, on the Nonni, and Sakhalien, on the Amur.

(Du Halde, *History of China*; Broughton, *Voyage of Discovery in the Northern Portion of the Pacific Ocean*; La Pérouse, *Voyage round the World*; Ritter, *Erkundung von Asien*.)

MANFREDONIA. [CAPITANATA.]

MANGALORE. [CANARA.]

MANI. [LACONICA.]

MANILLA. [PHILIPPINE ISLANDS.]

MANITOULIN ISLANDS. [CANADA.]

MANNHEIM, the capital of the circle of Unter-Rhein, in the grand-duchy of Baden, is situated in 49° 29' N. lat., 8° 28' E. long., in a very fertile plain, at the junction of the Neckar with the Rhine, and has 25,000 inhabitants. Over both rivers there are bridges of boats. Mannheim is built with great regularity; it consists of several squares and of broad straight streets that cross each other at right angles. The houses are all of two stories, except those at the corners, which have three stories. The principal street leads from the Neckar Gate to the palace of the grand-duke, which is a very magnificent building, and one of the finest of the kind in Germany. The right wing contains a gallery of pictures, a cabinet of natural history, a collection of plaster casts of the most celebrated antiques, and a library of 60,000 volumes. Among the other public buildings the most worthy of notice are the observatory, the merchant's hall, and the splendid church formerly belonging to the Jesuits, the theatre, three hospitals, &c. Mannheim has a gymnasium, a botanic garden, a mercantile school, an academy of painting and sculpture, and other establishments for education. The fortifications having been entirely demolished by the French, and the site subsequently converted into gardens, the inhabitants enjoy the benefit of beautiful promenades, besides the fine park of the palace, which is nearly 200 acres in extent. The town has a considerable transit trade. There are manufactories of tobacco, shawls, linen, and playing cards, besides bleaching-grounds and tanneries. In the environs there are numerous gardens, and hops are extensively cultivated. Mannheim has communication by railway with all the principal towns of Germany; it is joined to the railroad along the right bank of the Rhine, by a branch line 12 miles in length, which joins the former at Heidelberg, and by the railway from Mayence to Forbach and Metz, which runs up the left bank of the Rhine opposite Mannheim, it is connected with the Paris-Strasbourg and the French lines.

Mannheim was only a village till 1606, when the elector palatine, Frederick IV., laid the foundation of a fortress and a town. In the Thirty Years' War it was taken by Tilly, duke Bernhard of Weimar, the French, and the Bavarians. In 1688 it was taken by the French general Melac. In 1699 the elector Frederick William had the city fortified on Coehorn's system. His successor Charles Philip removed hither from Heidelberg in 1720, with his court and all the public offices, on account of the religious disputes with the Protestants. The first stone of the splendid palace was laid in 1720, and the building was completed in 1731. The next elector, Charles Theodore, having succeeded to the electorate of Bavaria on the death of Maximilian Joseph, without issue, in 1788, removed his court to Munich. Mannheim was taken by the French in 1795, by the arch-duke Charles in 1799, afterwards re-occupied by the French, and assigned to Baden by the treaty of Luneville in 1801.

MANNINGTREE. [ESSEX.]

MANORHAMILTON, county of Leitrim, Ireland, a small post and market-town and the seat of a Poor-Law Union, is situated on the Owenmore, an affluent of the Bonnet River, in 54° 19' N. lat., 8° 7' W. long., distant by road 24½ miles W. by S. from Enniskillen, and 125½ miles N.W. from Dublin. The population in 1851 was 1227. Manor-hamilton Poor-Law Union comprises 22 electoral divisions, with an area of 144,847 acres, and a population in 1851 of 34,804. The town, unattractive in itself, but lying in a well-cultivated valley, forms part of a landscape singularly varied, and is closed up by lofty mountains. In the town are the parish church, a Roman Catholic chapel, a bride-well, district dispensary, and Union workhouse. A large castle, built in the reign of Elizabeth, stands on an eminence near the town. Quarter and petty sessions are held. There are eight fairs yearly.

MANOSQUE. [ALPES, BASSES.]

MANRESA. [CATALUÑA.]

MANS, LE, the capital formerly of the province of Maine, now of the department of Sarthe in France, stands on the right bank of the Sarthe, here crossed by three bridges, in 48° 0' 35" N. lat., 0° 12' 4" E. long., at a distance of 115 miles in a straight line, and 132 by railway through Versailles and Chartres, S.W. from Paris, and has 24,568 inhabitants in the commune. The old part of the town, which is situated near the river, is ill-built, with narrow, crooked, dirty streets, running parallel to each other, and connected by still narrower and dirtier lanes. The new quarter stands on a hill, and although not regularly laid out, it is on the whole agreeable and well-built, with cut-stone houses roofed with slates. The principal streets of this quarter abut on a fine square called Place-des-Halles. There are two fine promenades, one called Des-Jacobins, the other Du-Greffier; this last runs along the Sarthe, the banks of which are lined with quays. The cathedral of St-Julien, famous for its choir and painted windows, and dating from the 13th century, contains the tomb of Berengaria, Cœur-de-Lion's queen. The church De-la-Couture, which dates from the 12th century, and that of Notre-Dame-du-Pré, from the 11th century, are very remarkable buildings. The church De-l'ancienne-Visitation, opened in 1737, is also a beautiful structure. The other objects of notice in the town are the prefect's hotel, which contains a public library of 40,000 volumes, a museum, &c.; the theatre; the theological and communal colleges; the corn-market buildings; and several ancient houses, among which are shown those of Queen Berengaria and Scarron.

Le-Mans gives title to a bishop; it has tribunals of first instance and of commerce, and several learned and benevolent societies. The manufactures consist of coarse woollens, lace, linen, soap, hosiery, blankets, woollen yarn, paper, and leather. There are also marble works and bleach-mills. The articles enumerated, together with iron, salt, rags, wine, brandy, chestnuts, corn, oil, cattle, sheep, pigs, poultry, and clover-seed, support a considerable commerce.

Le-Mans was the birth-place of Henry II., the first of the Plantagenet kings of England.

A town called *Suindinum*, existed here in the time of the Romans. It was the capital of that division of the Auleri called *Cenomani*, or *Cenomanni*, from whom it took in the 4th century the name of *Cenomanni*, a fragment of which remains in its modern designation. In the age of Charlemagne it was considered one of the principal cities of France, and became afterwards the chief town of the province of Maine. It is said to have been besieged twenty-four times between the reign of Clovis and that of Henri IV., inclusive. It was occupied by the royalists of Vendée in A.D. 1793, to the number of 60,000. They were driven out by General Marceau after a desperate resistance. It was surprised by a party of Chouans in 1795.

(*Dictionnaire de la France*.)

MANSFIELD, Nottinghamshire, a market-town and the seat of a Poor-Law Union, in the parish of Mansfield, is situated in 53° 8' N. lat., 1° 11' W. long., distant 14 miles N. by W. from Nottingham, 138 miles N.N.W. from London by road, and 147½ miles by the North-Western and Midland railways. The population of the town in 1851 was 10,012. The living is a vicarage in the archdeaconry of Nottingham and diocese of Lincoln. Mansfield Poor-Law Union contains 18 parishes and townships, with an area of 54,665 acres, and a population in 1851 of 30,156.

Mansfield is seated in a valley near the little river Mann, or Maun, from which it probably takes its name; and is surrounded by the

ancient forest of Sherwood, the scene of Robin Hood's chief exploits. The principal streets are lighted with gas, and paved. The parish church, dedicated to St. Peter, is a commodious structure; parts of it are Norman, but it has been repaired at different times in various styles. Wesleyan and Primitive Methodists, Independents, Baptists, Quakers, and Unitarians, have places of worship. The Royal Free Grammar school of Queen Anne has an income of 250*l.* a year, and had 56 scholars in 1852. In the town are—Brunt's Charity school, Clarkson's Charity school, a subscription library and news-room, a mechanics library, and a savings bank. A railway, 7 miles in length, connects Mansfield with the Cromford Canal. The more prominent buildings are the market-house, the moot-hall, the town-hall, the railway station, and the saw-mills of Mr. Lindley. A handsome monument to the memory of the late Lord George Bentinck stands in the market-place. There are extensive cotton-mills, besides manufactories of cotton and silk hosiery. Lace is extensively made. The market-day is Thursday; cattle-fairs are held on the 5th of April, 10th of July, and the second Thursday in October.

MANSURAH. [EGYPT.]

MANTES. [SEINE-ET-OISE.]

MANTINEIA, a city of the Peloponnesus, was situated on the little river Ophis, in the east part of Arcadia, in an elevated plain of considerable extent, which was bounded on the north by the plain of Orchomenus, and on the south by that of Tegea. [ARCADIA.] The inhabitants of Mantinea originally dwelt in four or five separate districts (Xen., 'Hell.,' v. 2, § 7; Strabo, p. 337); but were afterwards collected into one city. The Mantineans had a democratical form of government, and were closely connected with Argos. Their political constitution has received great praise from Polybius and Ælian. Their form of government and their connection with Argos led them to oppose the Lacedæmonian interests. In B.C. 418 they formed an alliance with Elis and Argos against Sparta, but were entirely defeated, and obliged to sue for peace. (Thucyd., v. 64-74, 81.)

In B.C. 385 the Spartans again took Mantinea (Xen., 'Hell.,' v. 2, § 1-7; Paus., viii. 8, § 5; Diod., xv. 5), and destroyed it; compelling the inhabitants to live apart in four hamlets, as in ancient times. After the battle of Leuctra the Mantineans again rebuilt their city; and it was in the vicinity of their town that the battle was fought, B.C. 362, between the Spartans and Thebans, in which Epaminondas fell. Mantinea, in later times, joined the Achæan league; but in consequence of the massacre of a garrison of Achæans the city was taken by the Achæans in connection with Antigonus Doseon, who sold all the male population as slaves. In honour of Antigonus the name of the city was changed to Antigoneia, which it retained till the time of Hadrian, who restored its original name. (Paus., viii. 8, § 6.) Pausanias has devoted a considerable part of his eighth book to a description of Mantinea and its works of art. The ruins of Mantinea, called *Paleopoli*, are still considerable. The circuit of the walls is entire, with the exception of four or five towers on the eastern side. The form of the city was slightly elliptical, and about two miles and a quarter in circumference. There were ten gates. The entire circuit of the walls is protected by a wet ditch. One of the eparchies, or sub-prefectures, of Arcadia is now called Mantinea.

(Leake, *Travels in the Morea*, i. pp. 103-105.)

MA'NTOVA, a province of Austrian Italy, is bounded E. by Verona and Rovigo, N. by Brescia and the lake of Garda, W. by Brescia and Cremona, and S. by the duchies of Modena and Parma. The province of Mantova extends along both banks of the Po. The other rivers are the Mincio and the Oglio, both affluents of the Po. The Mincio issues out of the lake of Garda at Peschiera, and for about ten miles marks the limits between Verona and Mantova, after which it flows across the territory of the latter, forms the lagune in the midst of which stands the city of Mantua, and then enters the Po below Governolo. The length of the province from north to south is about 36 miles, and its breadth about 32 miles. The area is 903 square miles, and the population in 1850 was 270,100. The territory of Mantova is noted for its fertility. It contains many fine pastures well adapted for the grazing of cattle, and irrigated by numerous streams and canals; vines and mulberry-trees also abound. Landed property is very valuable in this district, which labours however under two disadvantages, namely, the danger of the inundations of the Po, to prevent which the dykes and sluices are kept in constant repair at a great expense, and the unwholesomeness of the air in summer. The chief products are wheat, rice, maize, silk, flax, hemp, fruits, and wines. The country is bare of timber. Cattle and horses are reared in considerable numbers. There is no town of any importance except the capital, which is noticed in the next article.

MA'NTOVA (or MANTUA), the capital of the province and of the old duchy of Mantua, stands on an island about five miles in circumference, in the middle of a lagune formed by the Mincio, and is joined to the mainland by causeways, the shortest of which is about 1000 feet in length. The town is strongly and regularly fortified. It is well-built, with wide streets and squares, and contains many handsome structures. The principal buildings are—the cathedral, one of the finest in Italy; the church of Sant-Andrea; the churches of San-Maurizio and San-Sebastiano; the house of Giulio Romano, whose works as a painter and an architect form the greatest glory of the

city; the church of Santa-Barbara, rich in paintings; the public library of 80,000 volumes, and the museum, in which is a valuable sculpture gallery; the ducal palace, an old vast irregular structure, partly rebuilt by Giulio Romano, which contains some good paintings; and the gates and bridges of Mantua, especially the gate dei Mulini, by Giulio Romano. A palace outside of the town, called Palazzo del Tè, was originally intended for stables for the dukes Gonzaga, but under the direction of Giulio Romano it grew into a vast palace. The town of Mantua contains about 25,000 inhabitants, 3000 of whom are Jews. It is a bishop's see, and has a lyceum and a gymnasium. There is a branch railroad from Mantua which joins the Milan-Venice line at Verona. The town and province are infested in summer and autumn with gnats and mosquitoes.

Two miles below Mantua on the banks of the Mincio is the village of La Pietola, which a vague tradition reports to be the same as Andes, Virgil's birthplace. The dukes of Mantua had a palace here, called La Virgiliana, which still exists, though much dilapidated.

The origin of Mantua is lost in the obscurity of ante-Roman times. Virgil ('Æn.,' x. 201) boasts of its Etruscan origin, its former power, and says it was inhabited by three different races; and Pliny the elder (iii. 19) observes that it was the only relic of the Transpadane Etruscans, from whom it passed into the power of the Cenomani Gauls, and afterwards became subject to Rome with the rest of Cisalpine Gaul. After the fall of the Western empire it was successively subject to the Goths, the Longobards, the Franks, and the German emperors. In the 12th century it asserted its freedom as an independent municipality, like the other Lombard cities, but afterwards became subject to marquises of the house of Gonzaga, who were feudatories of the empire. Frederick II., the last marquis of Gonzaga, was created duke of Mantua by Charles V., in 1530. His states comprised the duchy or province of Mantua, and a large portion of Montferrat. Charles IV., the last duke, having joined the party of Philip V. in the war of the Spanish succession, was put under the ban of the empire, and his duchy annexed to the states of the house of Austria, with the exception of Montferrat, which was annexed to the duchy of Savoy. The duchy and town were taken by the French in 1797, and incorporated in the Cisalpine Republic. It afterwards formed the department of Mincio in the so-called kingdom of Italy till 1814, when it again came into the hands of Austria. The city of Mantua was taken and sacked by the imperialists in 1630, when its population (it is stated) was reduced from 55,000 to 13,000. The French attacked it unsuccessfully in 1735; but Bonaparte took it in 1797. The Austrians recovered it in 1799, but were obliged to surrender it to the French in 1801.

MANTUA. [LOMBARDO-VENEZIAN KINGDOM; MANTOVA.]

MANTIGUEIRA, SIERRA DE. [BRAZIL.]

MANZANARES. [CASTILLA LA NUEVA.]

MANZANILLO. [CUBA.]

MAPLESTEAD. [ESSEX.]

MARACAIBO. [VENEZUELA.]

MARAGHA. [PERSIA.]

MARAKAH. [DONGOLA.]

MARANHAO, Province of. [BRAZIL.]

MARANHAO, or SAN LUIZ DO MARANHÃO, a town on the northern coast of Brazil, is situated in 2° 3' S. lat., 43° 50' W. long., on the western shore of the island of Maranhão. This island, which is nearly twenty miles long, extends along the shore of the continent, from which it is separated by a shallow channel, called Rio do Mosquito. The channel is, on an average, only 100 yards wide, and terminates in two large bays, the Bahia de San José on the east, and the Bahia de San Marcos on the west. The island is generally low and swampy, and almost entirely covered with wood.

The town is built on the north shore of a small peninsula, formed by two small inlets, the Rio de San Francisco on the north, and the Rio da Bacanya on the south. It is divided into two sections. The Bairro da Praia Grande extends along the shores on a broken surface. The streets are crooked, uneven, and badly paved. The houses have two or three floors, and are mostly built of sandstone. In this part of the town is a large square, surrounded by the palace of the governor, the college of the Jesuits, the town-hall, and the prisons, which are substantial buildings. Besides the public buildings already mentioned the most remarkable are the episcopal palace, and the theatre. At the back of this section lies the other, called Bairro de N. Senhora da Conceição, which consists of small houses, many of which are surrounded by gardens and plantations. Each division has its own parochial church, besides which there are three other churches, two chapels, and four churches belonging to four convents. The town is defended by three small fortresses. Maranhão is the residence of the governor of the province, and has a lyceum, and schools of navigation. The harbour is good and safe, but the entrance is difficult, on account of a bank to the north of the town, on the east and west of which however are deep channels leading into the harbour. The tide rises 18 feet in the harbour, and 12 feet outside of it. The mean annual temperature is 80° of Fahrenheit. The climate of the town is considered healthy. The population amounts to about 30,000. The imports consist of wine, brandy, oil, flour, fruits, silk, cotton and linen goods, hardware and metals, all from Europe or North America, and articles brought from the East Indies, as spices, &c., and drugs. The exports

are cotton, rice, tanned and raw hides, &c. Sugar and coffee are imported from Pernambuco, Bahia, and other parts of Brazil. The province of Maranhao is noticed under BRAZIL (vol. ii. cols. 108, 109). The name is sometimes written *Maranhã*.

MARANON. [AMAZONAS.]

MARANS. [CHARENTE-INFÉRIEURE.]

MARATEA. [BASILICATA.]

MA'RATHON, a small plain in the north-east part of Attica [ATTICA], about 5 miles in length and 2 miles in breadth, which is chiefly memorable for the victory which the Athenians under Miltiades gained over the Persians here B.C. 490. Marathon was the first place in Attica that was occupied by Pisistratus and his partisans, after he had been compelled to retire to Eretria in Euboea. (Herod., i. 62.) The town of Marathon originally belonged to one of the four towns which formed the Tetrapolis, which consisted of Ceneo, Marathon, Probalinthus, and Tricorythus; but the name was afterwards applied to the whole district. Marathon is about three miles from the sea, and is said by Plutarch to have derived its name from the hero Marathos. It is mentioned in the 'Odyssey' as a place of considerable importance (viii. 80); and it was near this place that the Athenians are said to have defeated Eurystheus when they took up arms in defence of the Heraclidae. It is 18 miles in a direct line from Athens to the village of Marathon.

The plain of Marathon was watered by a small stream, called Asopus by Ptolemy, which forms marshes near the sea, in which, according to Pausanias (i. 32, § 6), a great many of the Persians perished. The Athenians who fell in the battle were buried in the plain; and also, but apart from the Athenians, the Plataeans, Boeotians, and slaves. A large mound of earth still rises from the centre of the plain; and near the sea there are two others, much lower than the former.

MARAZION, Cornwall, a market-town in the parish of St. Hilary, is situated on the coast of Mounts Bay, in 50° 7' N. lat., 5° 28' W. long.; distant 29 miles S.W. from Truro, and 230 miles W. by S. from London. The population of the chapelry of Marazion in 1851 was 1379. The town is governed by a mayor and corporation. The living is a perpetual curacy in the archdeaconry of Cornwall and diocese of Exeter.

The town of Marazion is built on the slope of a hill, which rises towards the north and shelters it from cold winds. The mildness of temperature thus induced renders the place inviting to invalids, although this advantage is to some extent counterbalanced by the falling of a large quantity of rain. In the town are the parochial chapel, a very ancient edifice, chapels for Wesleyan Methodists and Baptists, and a school built in 1851 by Lady Mary Cole. A market is held on Saturday. A fair is held on Michaelmas-day. The chief trade of the town consists in the importation of timber, coals, and iron for the use of the neighbouring mines. A station of the Penzance and Truro railway is at Marazion.

Opposite the town of Marazion is St. Michael's Mount, which is connected with the main land by the sands and a narrow causeway of pebbles when the tide is out, but is insulated when it is high water. It is supposed that St. Michael's Mount was the *Insula* of Diodorus Siculus, the depot for the tin refined and cast into ingots by the Britons. Specimens of tin ore are said to be plentiful all over the Mount, which is principally composed of granite. Previous to 1044 a priory of Benedictine monks had been established on the island. The Mount is said to have been regarded with religious reverence as early as the 5th century. In the middle ages it was much resorted to as a place of pilgrimage, and Marazion became in consequence a place of considerable trade. The Mount was regarded also as a stronghold, and a castle was built on it. In the War of the Roses the castle was seized by the Earl of Oxford; the Yorkists besieged the place for several months, and at last took it by capitulation. It was several times the subject of contest during the civil wars. In 1726-27 Sir John St. Aubyn rebuilt the pier. On September 6th, 1846, Queen Victoria visited the Mount.

The island, containing the Mount and a level piece of ground at its foot, is about a mile in circumference, and comprehends 70 acres of surface. In 1851 the population was 147. The Mount is about 200 feet in height from the level of the sea to the platform of the chapel tower. The ascent is steep, and is defended by two small batteries; the summit is occupied by the remains of the monastic buildings, which have been repaired and converted into a dwelling-house.

MARBELLA. [GRANADA.]

MARBLEHEAD. [MASSACHUSETTS.]

MARBURG, the capital of the province of Upper Hesse, in the electorate of Hesse-Cassel, is situated in 50° 50' N. lat., 8° 47' E. long., 60 miles N. by E. from Frankfurt-am-Mayn by the Frankfurt-Cassel railway, and has about 8000 inhabitants. It is built on the banks of the Lahn, which divides it from the suburb of Weidenhausen. The town is situated on the side of a hill, and the streets are very steep. On the top of an eminence overlooking the town there is a large castle, which was formerly well fortified and was the residence of the landgraves of Hesse. The town is partly surrounded by a wall, in which there are five gates. Marburg has a university, which was founded in 1527 by the landgrave Philip the Generous. This university has very considerable revenues, and all the usual appendages of

the German universities, with a library of 100,000 volumes. The university has faculties of Protestant theology, law, medicine, and philosophy, and 62 professors and teachers. The number of students in 1850 was 263. Marburg has also a gymnasium, with about 200 pupils; one Calvinist, one Roman Catholic, and two Lutheran churches; one hospital, two infirmaries, an orphan asylum, a school of industry, &c. The church of St. Elizabeth contains the fine monument of St. Elizabeth, which was however much damaged under the Westphalian government. Marburg has some manufactures of woollen, linen, cotton, hats, tobacco, and pipes.

MARCA D'ANCO'NA, an old denomination of a geographical division of the Papal States, whose limits correspond partly with those of ancient Picenum, and which is now subdivided into the three administrative delegazioni, or provinces, of Ancona, Fermo ed Ascoli, and Macerata e Camerino. This fine region extends from the frontiers of Abruzzo to the boundaries of the former duchy of Urbino, now the province of Pesaro e Urbino, and from the Apennines to the Adriatic, along which sea it occupies a line of coast more than 60 miles in length. It has been called *La Marca*, 'the March,' since the time of the Carolingian emperors and kings of Italy, from being governed by marchiones, or marquises. *March* ('Mark,' in German) meant originally a frontier district, but the term was afterwards applied rather capriciously, and the number of marquisates was multiplied in various parts of the revived Western empire. In the time of the Longobards the country, afterwards called *Marca*, was called *Pentapolis*, from its five principal towns, Ancona, Faano, Pisaurum, Auximum (now Osimo), and Numana. The name of *Marchia Anconae* is found in a diploma of the emperor Frederick I., of 1162. His son Henry VI. united it to the duchy of Ravenna. Innocent III. conquered the March, and placed it under the allegiance of the Roman see. During the troubles of the middle ages it was divided among several petty princes. Cesare Borgia subdued the country, which was annexed to the papal territories. It was then generally called *Marca d'Ancona*, from its principal town; but the south-east part of it was also sometimes called *Marca di Fermo*, and the two together were often designated, in the plural number, '*Le Marche*,' or *The Marches*. [ANCONA; FERMO-ED-ASCOLI; MACERATA.]

MARCELLIN, ST. [ISÈRE.]

MARCHE, Isle of Ely, Cambridgeshire, a market- and post-town in the parish of Doddington, is situated on the old river Nene, in 52° 33' N. lat., 0° 5' E. long., distant 32 miles N. by W. from Cambridge, 79 miles N. by E. from London by road, and 87½ miles by the Eastern Counties railway. The population of the town of March in 1851 was 4171. The living is a chapelry in the archdeaconry and diocese of Ely.

The town consists principally of two streets. The river Nene is crossed by a bridge at the junction of the two streets. The church stands at the southern extremity of the town; it is a handsome structure, erected in the middle of the 14th century. The Baptists and Independents have places of worship, and there are National schools. A county court is held in the town. There is a commodious town-hall. The market is held on Friday; and there are several fairs. Some trade in agricultural produce is carried on by means of the river Nene.

MARCHE, LA, one of the provinces or military governments into which France was divided in pre-revolutionary times. It was bounded N. by Berri, E. by Auvergne, S. by Limousin, and W. by Poitou and Angoumois. Its name, which denotes a frontier district, was derived from its situation on the border of Limousin (of which province it was formerly accounted a subdivision, being sometimes called *La Marche du Limousin*) towards Poitou and Berri. It was subdivided into *La Haute Marche* on the east side, of which Gueret was the capital, and *La Basse Marche* on the west side, of which Bellac was the chief town. *La Haute Marche* now constitutes the department of CREUSE; *La Basse Marche* is comprised in the arrondissements of Limoges and Bellac, in the department of Haute-Vienne. [VIENNE-HAUTE.]

MARCHIENNES. [NORD.]

MARCILLAT. [ALLIER.]

MARDIN, a town of Northern Mesopotamia, built on a steep hill on the southern slope of the Mardin Hills, the ancient Mount Masius, which divides the basin of the Upper Tigris from that of the Euphrates. Mardin is a considerable though poor town, and is said to contain 20,000 inhabitants, two-thirds of whom are Moslems, and the rest Christians, with some Jews. The Christians are divided between Syrians of the Greek Church, Nestorians, and Armenians. The Syrians, who are the most numerous, have two churches in the town and two convents in the neighbourhood. They read their church service in the Syriac language, the vulgar tongue being the Arabic.

The circuit of the town including the castle, which is built on the summit of a limestone rock, which rises perpendicularly from the platform of the hill, is about 2 miles. The houses rise one above another on the eastern and southern sides of the hill; the streets run along the slopes forming successive terraces, the cross streets that connect them being literally flights of steps. The houses are built of stone, generally small, with flat roofs, on which in summer the inhabitants commonly sup and sleep. Mardin has eight mosques, several bazaars, and some public baths. The castle, which is strong by its

situation, is now in ruins. The town of Mardin is nearly half-way between Diarbekr and Mosul, and on the road from Constantinople to Baghdad. The platform of the rock on which the town is built is about 2300 feet above the level of the sea. The prospect from it over the vast and beautiful plain to the southward is very striking.

Mardin is said to be an ancient town and to have been originally called Marde or Meride. It was taken and plundered by Tamerlane. Hulakou, grandson of Genghis Khan, attacked it without success. Osman Beg made himself master of the place in the beginning of the 14th century.

(Niebuhr; Buckingham; Ainsworth, in the *London Geographical Journal*.)

MAREMME, the name given in Italy to the unwholesome lowlands which extend along the coast of the Mediterranean. The name is especially applied to the lowlands of Tuscany and the Papal States, which last are the most extensive. The Maremma may be divided into basins. The first basin begins north of Lucca, and extends along the sea-coast as far as Leghorn, south of which town the ridge of Montenero projects as far as the sea-coast. This basin extends inland from 10 to 12 miles to the hills east of Pisa; it also includes the lowest part of the course both of the Serchio and the Arno, and is called Maremma Pisana. The next basin is that of the Cecina, a river which enters the sea about 18 miles south from Leghorn. This basin, which is called the Maremma of Volterra, is of small extent, for the hills again approach close to the sea a few miles south of the mouth of the Cecina. The third basin begins at Piombino, and extends as far as Monte-Argentaro, a distance of about 60 miles in a direct line. It stretches from 10 to 20 miles inland, and includes the lower course of the rivers Cornia, Bruna, Ombrone, and Albegna, and the lakes or marshes of Castiglione and Orbetello. This large tract is called Maremma Senese, because it forms part of the province of Siena. It is also called the Maremma of Grosseto, from the town of that name which is situated in the midst of it.

The Roman Maremma, which is a continuation of that of Siena (for there is no interruption of hills near the coast between the one state and the other), begins at the river Pescaia, which marks the boundary of the two countries, and extends as far as Terracina on the frontiers of Naples. The whole of this tract, of more than 120 miles in length, is low and unhealthy; but its depth inland is very unequal, owing to various offsets of the lower Apennines, and also to detached ridges which approach the sea without coming close to it, and which partly inclose the lowlands. The Roman Maremma may therefore be divided into three basins:—First, that of the Lake of Bolsena, including the banks of that lake and the course of its outlet, the river Marta, as well as the rivers Fiora, Arone, and Mignone. The mountains of Santa-Fiara, on the borders of Tuscany, bound this basin on the north-west; and Mount Cimino, which is of volcanic formation, on the south-east, divides it from the basin of the Tiber. The lower steps of the ridge of Cimino approach the sea at La-Tolla, near Civitavecchia. This basin, which is generally called the Maremma of Corneto, includes the districts of Corneto, Montalto, Canino, Castro, and Civitavecchia.

The second basin, that of the lower Tiber, extends from Civitavecchia to Anzo. The volcanic ridge of the Alban Mount divides it on the south-east from the basin of the Pomptine Marshes. A description of both, with some account of the various phenomena of the soil and atmosphere, is given under CAMPAGNA DI ROMA. The Maremma are of two kinds; some are marshy, and others dry, but both are unwholesome in summer and autumn.

The name of Maremma is not commonly used in the kingdom of Naples to designate the unhealthy lowlands of that country, which are also extensive, but the synonymous word Paduli, a corruption of paludi (marshes), is used instead.

The Tuscan government has effected great improvements in the Maremma; parts of the Tuscan marshes have been drained, lakes embanked, the ground has been brought into tillage, and colonies established. It is remarkable that, although to spend a single night in the Maremma during summer and autumn is commonly dangerous, and in some instances and places fatal, persons may sleep in open boats close in shore with perfect impunity.

MARENCO. [ALESSANDRIA.]

MARENNES. [CHARENTE-INFÉRIEURE.]

MAREOTIS. [BIRKET-EL-MARIOUT.]

MARGARETTING. [ESSEX.]

MARGATE, Kent, a sea-port and market-town, and a watering-place, in the parish of St. John, Isle of Thanet, is situated in 51° 24' N. lat., 1° 22' E. long., distant 15 miles N.E. by E. from Canterbury, 72 miles E. by S. from London by road, and 101 miles by the South-Eastern railway. The population of the parish of St. John in 1861 was 9107. The living is a vicarage in the archdeaconry and diocese of Canterbury.

Margate is a member of the cinque-port of Dover. The town is situated on the north coast of Kent. The principal streets are regularly constructed and well paved; the town is lighted with gas, and is well supplied with spring-water. The public buildings, parades, esplanade, squares, &c., are of a superior description. The shore is well adapted to sea-bathing. Since the formation of railways to the watering-places on the south coast, the popularity of Margate has

somewhat declined, but it is still resorted to by large numbers of visitors. The old church of St. John's has suffered greatly from alterations. Trinity church, erected in 1825, is a handsome edifice, with a tower 135 feet high, which serves as a sea-mark; the Trinity Company having contributed largely towards its erection for that purpose. The Wesleyan Methodists, Independents, Baptists, Countess of Huntingdon's Connexion, and Roman Catholics, have places of worship; and there are National and British schools, and a literary institution. The Royal Sea-Bathing infirmary at West-Brook, near Margate, was established for the benefit of poor people, chiefly from London and its vicinity. In the town are Draper's hospital for decayed housekeepers, and a dispensary. There is a considerable fishery, and the fishermen add to their income by assisting vessels in distress.

The assembly-room has externally a wide colonnade of coupled Doric columns. The principal room, which is 87 feet long and 43 feet wide, is handsomely fitted up. There are a theatre, baths, libraries, bazaars, &c. The town-hall contains several portraits. The pier was erected under the superintendence of Messrs. Reunie and Jessop, at an expense exceeding 100,000*l.* It is of stone, 900 feet long, and at its extremity is a lighthouse. There is a wooden jetty longer than the pier. The Droit-office, at the foot of the pier, is rather an ornamental structure. The custom-house is a plain building. The market-house is commodious. Wednesday and Friday are the market-days. The Marine-terrace is an excellent sea-side promenade, 1500 feet long.

MARGHERITA. SANTA. [GENOA.]

MARGUERITES. [GARD.]

MARIA ISLAND. [VAN DIEMEN'S LAND.]

MARIANE ISLANDS. [LADRONES.]

MARIANO. [COMO.]

MARIE-AUX-MINES, SAINTE. [RHIN, HAUT.]

MARIE-GALANTE, an island in the Caribbean Sea, belonging to France, lies about 15 miles S. from Guadaloupe. It is of a circular form, and about 14 miles in diameter. This island was discovered by Columbus in 1493, and was first settled by the French in 1647. It is a dependency of Guadaloupe. The surface of Marie-Galante is of moderate elevation, and rises gradually towards the north; the western side is flat. The shores are rocky, and without good harbours. The soil is productive, and yields abundantly coffee, sugar, cotton, and cocoa. The population is about 14,000. The only town, Basseterre, or Grand Bourg, stands on the south-west point of the island, in 15° 52' N. lat., 61° 22' W. long.

MARIENBERG, a small town in the circle of Zwickau in Saxony.

MARIENBURG. [DANZIG, Government of.]

MARIENWERDER, one of the two governments into which West Prussia is divided, is bounded N. by the government of Danzig, E. by that of Königsberg, S. by Poland and Posen, and W. by Brandenburg. Its area is 6759 square miles, and the population in 1847 was 613,300. The government is divided into 13 circles. The surface is level, in parts marshy. The principal rivers are the Vistula and its feeder the Brahe. At a little distance from the left bank of the Vistula the Berlin-Königsberg railway runs down from Bromberg to Danzig. Steamers ply on the Vistula.

Marienwerder, the capital, situated on the Liebe and the Little Nogat, 2 miles E. from the Vistula (over which there is a pontoon-bridge 2700 feet in length), has 5000 inhabitants. It is a very neat town, with four suburbs. It is the seat of the provincial courts and the government offices. There are manufactories of woollens, hats, soap, and leather. The breweries and distilleries are very considerable. The gymnasium of *Marienwerder* had 14 masters and 248 pupils in 1850. The other towns are Thorn, Culm, and Graudenz. *Thorn*, the birthplace of Kopernik (Copernicus), is a fortified town, 52 miles S. by W. from *Marienwerder*, on the right bank of the Vistula, here crossed by a long bridge, and has 10,000 inhabitants. It consists of an old and a new town, and has several convents, and manufactories of linen and woollen goods, hosiery, and leather. The gymnasium had 13 teachers and 248 pupils in 1850. *Thorn* was taken from the Poles in 1703 by Charles XII., of Sweden, after a four months' siege. *Culm*, or *Kulm*, on the right bank of the Vistula, with a population of 7000, and some cloth-factories, stands 24 miles N. by W. from *Thorn*. It has a Catholic gymnasium, with 13 masters and 277 pupils (in 1850); Catholic and Lutheran churches; and a military school. *Graudenz* also stands on the right bank of the Vistula, here crossed by a bridge of boats, and has about 7000 inhabitants, who manufacture woollen cloths and tobacco, and trade in corn. The town is surrounded by a wall, and defended by a strong fortress which commands the course of the Vistula. At *Konitz*, a small town of about 3000 inhabitants, on the Brahe, 55 miles W. from *Marienwerder*, there is a Catholic gymnasium with 15 teachers and 439 pupils (in 1850). [PRUSSIA, Province of.]

MARIESTAD. [SWEDEN.]

MARINO, SAN. [SAN MARINO.]

MARITZA, the modern name of the Hebrus, the principal river of Thrace. The basin of the Hebrus is inclosed between the chain of Hæmus, or the Balkan, on the north, and Mount Rhodope, the modern Despot, on the south; the first divides it from the basin of the Danube, and the other from that of the Strymon. The Hebrus rises at the foot of Mount Rhodope, in about 42° N. lat., 24° E. long., and

flows in an easterly direction for more than 100 miles, receiving numerous affluents from both chains of mountains: it passes by Tatar Bazardjik, Philippopolis, and Chirmenli (the ancient Assus), where it diverges to the south-east until it reaches Adrianople, where it is joined by two large streams—the Toonja, or Tonzus, from the north, and the Arda, or Harpessus. After passing Adrianople the Hebrus turns to the south, receives the Erkeneh (the ancient Agrianes), coming from Kirkliseh and the Balkan, flows by Demotica, and after numerous windings enters the Gulf of *Ænos* by two mouths, opposite the island of Samothrace. The whole course of the Hebrus is above 300 miles. It is navigable for small craft as far as Adrianople, about one-third of its course. [BALKAN MOUNTAINS; THRACE.]

MARKET BOSWORTH. [BOSWORTH.]

MARKET DRAYTON. [DRAYTON.]

MARKET HARBOROUGH, Leicestershire, a market-town and the seat of a Poor-Law Union in the parish of Bowden Magna, is situated on the left bank of the river Welland, which divides the county from Northamptonshire, in 52° 29' N. lat., 0° 56' W. long., distant 15 miles S.S.E. from Leicester, 88 miles N.W. from London by road, and 100½ miles by the North-Western and Rugby and Stamford railways. The population of the town in 1851 was 2325. The living is a perpetual curacy in the archdeaconry of Leicester and diocese of Peterborough. Market Harborough Poor-Law Union contains 41 parishes and townships, with an area of 62,978 acres, and a population in 1851 of 15,764.

Market Harborough consists of a principal street and several smaller ones, which are lighted with gas and paved. In the main street is the town-hall, a building of which the under part is occupied as shops. The chapel, a commodious edifice of the 14th century, consists of a nave, two aisles, and chancel, with a fine tower and a lofty octangular spire, crocketed. Wesleyan Methodists, Independents, and Baptists have places of worship. There are National and British schools, a Free school, a dispensary, and a savings bank. The preparation of wool for carpets is carried on. The market for cattle and corn is held on Tuesday. Fairs are held in April and October. A branch from the Leicestershire and Northamptonshire Union Canal extends from Foxton to Harborough.

MARKET HILL. [ARMAGH.]

MARKET RASEN. [LINCOLNSHIRE.]

MARKINCH. [FIFESHIRE.]

MARLBOROUGH, Wiltshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Kennet, in 51° 25' N. lat., 1° 43' W. long., distant 18 miles N.W. from Devizes, and 75 miles W. by S. from London. The population of the municipal borough of Marlborough in 1851 was 3908; that of the parliamentary borough was 5135. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Wilts and diocese of Salisbury. Marlborough Poor-Law Union contains 14 parishes and townships, with an area of 39,220 acres, and a population in 1851 of 9374.

There was a castle at Marlborough in the time of Richard I. A parliament or assembly was held here in the time of Henry III., the laws enacted in which were called the 'Statutes of Malbridge,' one of the older forms of the name, which in Domesday is written *Marlberge*. The site of the castle is covered by a large house, which was a seat of the dukes of Somerset, was afterwards used as the Castle Inn, and is now a part of the college.

The town of Marlborough consists chiefly of one wide street lined with brick houses irregularly built. The market-house for cheese, butter, and corn, is an ancient building, having in its upper story a council-chamber, assembly-rooms, and court-house. St. Mary's church is an old edifice, having a freestone tower at the west end, with a Norman doorway: the church of St. Peter and St. Paul has a lofty square tower. There are some remains of an Augustinian priory. Wesleyan Methodists and Independents have chapels. Marlborough College was incorporated in 1845. The number of pupils is not to exceed 500, of whom two-thirds must be sons of clergymen, who are charged a much smaller sum yearly than other pupils. In August 1852 the number of pupils was 398. The establishment is under the care of a head master and numerous assistant-masters. An excellent library was presented to the college by F. A. M'Geachy, Esq., one of the council. The Royal Free Grammar school, founded by Edward VI. for the sons of tradesmen and other inhabitants, had 12 free scholars and 23 boarders in 1853. There are also National, British, and Infant schools. There is a savings bank. The trade of Marlborough is chiefly in coal, corn, and malt. Before the opening of the Great Western railway it was one of the chief posting towns between London and Bath and Bristol. There is a small market on Wednesday, and a more important one on Saturday. Fairs are held on July 11th, August 22nd, and November 23rd. A county court is held.

MARLE. [AISNE.]

MARLOW, GREAT, Buckinghamshire, a municipal and parliamentary borough, in the parish of Great Marlow, is situated on the left bank of the Thames, which forms the southern border of the county, in 51° 34' N. lat., 0° 46' W. long., distant about 23 miles S. by E. from Aylesbury, and 31 miles W. by N. from London. The population of the parliamentary borough in 1851 was 6523. The

living is a vicarage in the archdeaconry of Buckingham and diocese of Oxford.

The situation of the town is pleasant and picturesque, and the scenery of the Thames here is very agreeable. There are two principal streets and three smaller ones. The parish church is a handsome structure of modern erection, with a lofty spire. Wesleyan Methodists, Independents, Baptists, and Roman Catholics have places of worship. The Free School, founded in 1624 for the education of 24 poor boys of Marlow and two neighbouring parishes, had 24 scholars in 1852. There are a National school, and almshouses for six poor widows. The suspension-bridge erected over the Thames in 1835, has a span from pier to pier of 75 yards. There are two large paper-mills and two breweries at Marlow; a good trade is carried on in corn, coals, and timber, and lace caps are made. A large horse and cattle fair is held on October 29th. Races are held in August, and the town is much resorted to in the season by anglers.

MARLY. [SEINE-ET-OISE.]

MARMANDE. [LOT-ET-GARONNE.]

MARMORA, or MARMARA, SEA OF, the *Propontis* of the ancients, is situated between the Grecian Archipelago and the Black Sea, communicating with the former by the Dardanelles, the ancient Hellespont, and with the latter by the Strait of Constantinople, the ancient Bosphorus. Towards the east it terminates in the long and narrow Gulf of Ismid, and towards the south-east in the Gulf of Mudanieh. These were respectively the *Astacenus* or *Olbianus Sinus* (afterwards the Gulf of *Nicomedia*) and the *Cianus Sinus* of the ancients. The Greek geographers, before the time of Ptolemy, represent its greatest length in a direction nearly north and south, instead of east and west, placing the Thracian Bosphorus and the Hellespont on the same meridian.

Herodotus gives the length of the *Propontis* at 1400 stadia, and its breadth at 500 stadia (iv., 85); he allows 400 stadia as the length of the Hellespont. Strabo (p. 125, Casaub.) gives 1500 stadia as the length of the *Propontis* from Byzantium to the Troad, and reckons its breadth nearly the same. He also places the Hellespont and the Bosphorus under the same meridian, and it is not until the time of Ptolemy that we find the *Propontis* beginning to assume an inclination from west to east, and even then the error in its position received but a slight correction.

The Sea of Marmora is comprehended between 40° 18' and 41° 5' N. lat., 26° 40' and 30° 5' E. long. Its extreme length, from west to east, including the Gulf of Ismid, is about 160 geographical miles; from strait to strait, in a west-south-west and east-north-east direction, 110 miles; and its greatest breadth is 43 miles. Its shores are described by modern travellers as highly cultivated and picturesque, with a greater boldness of character on the Asiatic than on the European side. The depth of this sea is in many parts very considerable, 133 fathoms about 5 miles north-east of Marmora Island, and about the same distance due north of it no bottom at 355 fathoms; from which we may infer that the depth is very much greater midway between the two shores. There is no tide in the Sea of Marmora; but a current sets through it from the Bosphorus, varying its velocity according to the season and the prevailing winds, and continuing its course through the Dardanelles to the Archipelago. Its navigation is by no means difficult; it is generally free from dangers, and good anchorage may be found all along its northern shore, under its various islands, and inside the peninsula of Artaki, or Erdek.

The most remarkable islands in this sea are, Marmora (from which the sea takes its name), Rabi, and Liman-Pasha, occupying its western division; Paps, or Kalolimno, off the Gulf of Mudanieh; and the group called *Demonesi*, or the Princes Islands, near the Asiatic shore, about 10 miles south-east of Constantinople. The Princes Islands are nine in number, two of which, *Oxea* and *Rata*, are uninhabited. Of the others, *Prinkipos* (the ancient *Pityusa*) and *Kalki* (the ancient *Chalcitis*) were once distinguished for their copper-mines. Their scenery is described as being very beautiful, and the Frank merchants of Pera and others have their summer residences on them.

The remarkable peninsula of Artaki was formerly an island, on which stood the once flourishing city of *Cyzicus*, the ruins of which are still to be seen, and which confirm the historical testimony of its opulence. The modern town of Artaki, or Erdek, which gives its name to the peninsula, and which is thought to occupy the site of the ancient Artace, is said to contain about 4000 inhabitants, and has some trade in wine, oil, and silk.

In addition to Constantinople, at the entrance of the Bosphorus, and Gallipoli, at the entrance of the Dardanelles, the principal towns of the Sea of Marmora are, Rodosto, Erekli, and Silivri, on the northern, and Kemer, Karabughaz, Panormo, and Mudanieh, on the southern shore. There is also Ismid, at the head of the gulf of that name, and *Gumehlek*, or *Kemlik*, at the head of the Gulf of Mudanieh. The chief rivers which enter this sea are the *Tchorlu* and the *Iatidji*, in Europe, and the *Kojah-chai* (the ancient *Granicus*), the *Ghonen-chai* (the ancient *Æsepus*), and the *Edrenos* (the ancient *Rhyndacus*), in Asia. There are two other rivers on the European side, the *Karasu* and *Taali*. [ANATOLIA.]

MARMORA, or MARMARA (the ancient *Proconnesus*), is an island in the Sea of Marmora. It was early celebrated for its marble quarries, from which *Cyzicus* and other neighbouring cities were

supplied with materials for their edifices. (Strabo, p. 588.) More recently Constantinople has been partly indebted to these quarries for the embellishment of its mosques, fountains, and other public buildings; but the marble is now principally used for the sepulchral monuments of the Turks and Armenians. It is said to have abounded with deer, from which circumstance the Greek names Proconnesus and its earlier appellation Elaphonnesus are said to be derived.

It has a mountainous range of moderate height and sterile aspect, and is poorly inhabited. The chief town, which is also called *Marmora*, is situated on its south-west side, and is built of wood. The island has several villages, and its inhabitants are chiefly Greek Christians. Some wine is produced in the island.

MARNE, a department in the north of France, is bounded N. by the departments of Aisne and Ardennes, E. by those of Meuse and Haute-Marne, S. by that of Aube, and W. by Seine-et-Marne and Aisne. It lies between 48° 28' and 49° 23' N. lat., 3° 25' and 5° E. long. Its form is irregular. The greatest length from north-west to south-east is 74 miles; from north-east to south-west 81 miles. The area is 3158.6 square miles. The population in 1841 was 356,632; in 1851 it amounted to 373,302, which gives 118-185 inhabitants to a square mile, being 56-399 below the average per square mile for the whole of France. The department is formed out of the central part of the old province of Champagne, and is named from one of its principal rivers.

The department presents a bare plain, sloping generally towards the west, and broken here and there by steep isolated hills, which nowhere exceed 1200 feet in height or 2 miles in length. From the centre of the department almost to its extremities the arid and almost barren soil consists of a thin layer of sandy earth not two inches in depth, and resting on a chalk bottom; bushes are rare; the villages far apart. Between Reims and Fismes the land is good, and along the western border, and in the valley of the Marne, there is some strong deep land. Again in the Perthois district in the south-east of the department, along a considerable margin from Vitry to Sainte-Ménéhould, and in the valley of the Aisne, the soil is in general rich and productive.

The department takes its name from the river *Marne* (the *Matrona* of Julius Cæsar), which rises in the department of Haute-Marne, about 3 miles south from Langres, and flowing nearly north past St.-Dizier, then sweeps round to the west and enters the department of Marne: here its course is north-west past Vitry and as far as Châlons, whence it flows west, and continues in this general direction across the south of the department of Aisne, the north of Seine-et-Marne, and to its junction with the Seine at Charenton, in the department of Seine-et-Oise. Its whole length is 217 miles, of which 147, from St.-Dizier to its mouth, are navigable. Its principal feeders on the right bank are the Rognon, the Saulx (which receives the Ornain), and the Ourcq; on the left bank the Blaise, the Collé, the Some-Soude, the Grand-Morin, and the Petit-Morin. The north-east of the department is drained by the AISNE; the north and north-west by the Suippe and the Veale, feeders of the Aisne; the south is skirted by the Seine, and crossed by the AUBE, both of which rivers are navigable in this department. By the Saulx, the Ornain, the Planche-Coulon Canal from the Ornain to the Chée, the Chée, and the Revigny Canal, barges ply between the Marne and Bar-le-Duc, in the department of Meuse, and by other works finished in 1853 the water communication between the Marne and the Rhine was completed, uniting the valleys of the Marne, the Meuse, the Moselle, the Meurthe, and the Rhine. The line of the navigation is 250 miles long, including rivers and canals, and in the distance are many tunnels, cuttings, aqueducts, and 150 locks. The department is crossed by 8 state, 15 departmental, and a great number of parish roads; it is also traversed by the Paris-Strasbourg railway, which passes through Epernay, Châlons, and Vitry-le-Français. A branch line joins Reims with the main line at Epernay, and another branch runs from Blesme, a small village on the Saulx east of Vitry-le-Français, to St.-Dizier, in the department of Haute-Marne.

The climate is temperate and the air pure, except along the eastern and western borders of the department, where in the low, rich, and sometimes marshy bottoms fogs are not unfrequent at certain seasons of the year. The common bread-stuffs are grown; rye and oats are produced in quantity more than enough for the consumption. Fruit-trees are extensively cultivated in the arrondissement of Sainte-Ménéhould; that of Châlons is famous for its melons; other crops are cow-cabbage, onions, which are grown in great quantities, artichokes, &c. The department contains several large forests; and within the last twenty years a considerable portion of the shallow chalky soil above-mentioned has been planted with pines. Along the Marne, the Aisne, the Aube, and the Seine, there is some fine grass land, and a good deal of hay is made.

But the vine for the production of the famous Champagne wines is the chief object of the landholder's care all through the department, more especially in the arrondissements of Reims and Epernay, wherein the white wines of Sillery, Ai, Mareuil, Pierry, Epernay, and Dizy; and the pink wines of Verzenay, Verzy, Bouzy, Taisy, Cumières, Ai, Hautvilliers, Mareuil, Dizy, and Pierry, all of the first class, differing and distinguishable from one another by certain inexpressible elements of excellence, are produced from the hungry chalky soil, on which little else than the vine-bush will grow. The excellent qualities of the

Champagne wines are owing however not wholly to the peculiarity of the soil, but in a great degree also to the unremitting care of the growers in the selection and management of their vines, and in the manipulation of the wines, which experience teaches them to make so as to suit the different palates of the lovers of Champagne in the various countries of the world. The best white Champagne wines are made from black grapes. These are suffered to remain on the vine till they attain perfect maturity; when gathered they are put in the wine-press, and the first pressings are set apart for wine of the first quality. The juice thus obtained is put into a tun, where it remains from 20 to 30 hours, after which time it is put into sulphured casks, and these are deposited in cool cellars. During the frosty weather the wine is transferred into other casks, and clarified by means of isinglass; this process is repeated once or twice (if necessary) after an interval of a fortnight each time. From the 20th to the 30th of March the bottling process for the effervescing wines begins, but this is sometimes delayed even to the end of May, as the greatest attention must be paid to the temperature of the air, otherwise the delicacy of the wine and its effervescence would be materially injured. The bottles are placed in deep cellars, so as to have the most equable temperature possible, in order to diminish the chance of loss by breakage, which however, when the wines become brisk in the autumn, often amounts to 20 per cent. The quantity of wine of all kinds made in the department annually amounts to about 15,400,000 gallons. The wines are roughly distinguished as 'vin de rivière,' or the wine grown along the Marne, which is chiefly white, and 'vin de montagne,' or wine grown on the hills, most of which is red. The proprietors of the vineyards in this the true Champagne country are greatly injured by the competition of a fictitious Champagne (or champagnised) wine, manufactured in several other departments of France, and sold at a much lower price than the true and great Champagne wine.

The domestic animals of the department are small and of bad breed; sheep are numerous; game is abundant; deer and wild boars are met with in the forests; the rivers and ponds yield abundance of fish; poultry is plentiful; bees are carefully tended.

The western side of the department is occupied by the supracretaceous formations of the Paris basin, and the rest of the department by the chalk itself, except just along the eastern border, where the formations that underlie the chalk crop out. Chalk, flint, millstone of the best quality, building-stone, potters' and brick-clay, and turf are the chief mineral productions.

The chief manufactures are woollen stuffs of all kinds, and cotton hosiery, which centre chiefly at Reims. There are also several tanneries, dye-houses, paper-mills, glass-works, potteries, rope-walks, oil-mills, soaperies, and establishments for the making of Spanish white.

The most important article of commerce is Champagne wine, the great marts for which are Reims and Epernay. Other articles of trade are corn, flour, brandy, the articles previously named, together with timber, hides, and firewood, of which great quantities are sent for the supply of Paris. About 670 fairs and markets are held in the year.

The department contains 2,021,496 acres. Of this area 1,519,320 acres are more or less capable of cultivation; 95,025 acres are grass-land; 45,701 acres are under vine culture; 231,106 acres are covered with woods and forests; 22,927 acres are laid out in nurseries, orchards, gardens, &c.; 41,913 acres consist of heath- and moor-land; 15,749 acres are covered with rivers, marshes, ponds, canals, &c.; and 46,766 acres are occupied by roads, streets, and buildings.

Divisions and Towns.—The department is divided into 5 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Châlons-sur-Marne	5	108	52,562
2. Epernay	9	180	93,090
3. Reims	10	181	138,031
4. Sainte-Ménéhould	3	80	36,246
5. Vitry-le-François	5	123	53,373
Total	32	677	373,302

1. In the first arrondissement the chief town is CHÂLONS-SUR-MARNE, which is also the capital of the department. The population given with the following places is that of the commune. *Swippes*, an improving and well-built little town, of 2353 inhabitants, stands E.N.E. of Châlons, on the Suippe, a feeder of the Aisne, and has important manufactures of coarse woollens, woollen-yarn, and leather, besides dye-houses, and a considerable trade in corn, cattle, hemp, and wool. *Vertus*, an ill-built town at the foot of a high vine-clad hill, W. by S. of Châlons, has 2200 inhabitants. About 5 miles E.N.E. from Châlons, near the left bank of the Veale, is the village of *Epine*, celebrated for its magnificent gothic church of Notre-Dame-de-l'Epine, which for the vast number of its sculptured ornaments has few equals in Europe.

2. Of the second arrondissement the chief town, *Epernay*, stands in a rich vine district, near the left bank of the river Marne, which is here crossed by a bridge of seven arches, 15 miles by railway west from Châlons, in 49° 2' 52" N. lat., 3° 57' 10" E. long. The town is well-built, clean, and well-paved. It has tribunals of first instance and of commerce, a college, and 7386 inhabitants, who manufacture

hosiery, pottery, refined sugar, and leather; and trade largely in bottles, corks, wire, champagne wines, &c. *Dormans*, a small town west of Épernay, on the left bank of the Marne, has 2148 inhabitants, who send large quantities of wood and charcoal to Paris by the Marne. *Père-Champenoise*, south of Épernay, the scene of the defeat of Marshals Marmont and Mortier by the Austro-Russian army under Schwartzberg (March 25, 1814), stands on the Pleurs, and has 2118 inhabitants. *Montmirail*, situated on a hill near the right bank of the Petit-Morin, a feeder of the Marne, has a population of 2545. Napoleon I. defeated a large force of Russians and Prussians here February 11, 1814. *Sézanne*, an ancient and well-built town, is situated on the slopes of a hill, partly in Brie, partly in Champagne, and has 4440 inhabitants, who manufacture coarse woollens, tiles, bricks, lime, pottery, flour, oil, and leather. Sézanne was formerly fortified, and stood several sieges; the site of its defences is now laid out in gardens and public walks.

3. In the third arrondissement the chief town is REIMS. *Ay*, or *Aÿ*, near the right bank of the Marne, and nearly opposite to Épernay, from which it is only 2 miles distant on the railway to Reims, has 3130 inhabitants, who are chiefly engaged in the culture of the vine, and in the distillation of brandy. *Fismes*, in the north-west of the department, on the left bank of the Vesle, is a well-built walled town with 2368 inhabitants, who manufacture woollen-cloth, and trade in flour, wine, hemp, wool, &c.

4. Of the fourth arrondissement the chief town, *Sainte-Ménéhould*, situated in a pretty well-wooded country on the Aisne, in the east of the department, in 49° 5' 27" N. lat., 4° 53' 57" E. long., 450 feet above the level of the sea, has a tribunal of first instance, a college, and 4137 inhabitants, who manufacture hosiery, leather, and small wares. In the environs there are several iron-forges, glass-works, and potteries.

5. The fifth arrondissement is named after its chief town, *Vitry-le-François*, or *Vitry-sur-Marne*, a well-built fortified town on the right bank of the Marne, 21 miles by railway S.E. from Châlons, and has a tribunal of first instance, a college, and 7796 inhabitants. *Vitry-le-François* stands in 48° 43' 34" N. lat., 4° 35' 23" E. long., 331 feet above the level of the sea. The town is modern; it was founded in 1545 by François I., after the destruction of *Vitry-en-Perthois*, or *Vitry-le-Brulé*, by Charles V. The streets are wide, straight, clean, and provided with foot-pavements; the houses are mostly of wood; the supply of water is from 27 fountains, from which also streams run through all the streets. The central square, on one side of which is an unfinished church of large dimensions, is adorned with a handsome fountain, and planted with a double row of lime-trees. The manufactures are hosiery, cotton-yarn, oil; the chief trade is in corn, wool, wood, and charcoal.

The department, with the exception of the arrondissement of Reims (which with the department of Ardennes is included in the see of the Archbishop of Reims), forms the see of the Bishop of Châlons. It is comprised in the jurisdiction of the High Court and within the limits of the University-Academy of Paris; and belongs to the 4th Military Division, of which Châlons is head-quarters. It returns 3 members to the Legislative Body of the French empire. There are at Reims an archiepiscopal seminary, a secondary ecclesiastical school, and an endowed college; at Châlons a diocesan seminary, a preparatory ecclesiastical school, and a communal college; and communal colleges also in Épernay, Sainte-Ménéhould, and Vitry-le-François.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers.*)

MARNE, HAUTE, a department in the north-east of France, is bounded N. by the departments of Marne and Meuse, E. by that of Vosges, S. by Haute-Saône and Côte-d'Or, and W. by the department of Aube. It lies between 47° 35' and 48° 40' N. lat., 4° 38' and 5° 52' E. long. Its form approximates to an oval. Its greatest length from north-north-west to south-south-east is 78 miles; and its greatest breadth, at right angles to the length on the Meuse is 48 miles; but the average width is only about 37 miles. The area is 2401.5 square miles. The population in 1841 was 257,567; in 1851 it amounted to 268,398, which gives 111.76 inhabitants to a square mile, being 62.82 below the average number per square mile for the whole of France. The department is formed out of the southern part of Champagne and small portions of Bourgogne, the duchy of Bar, and Franche-Comté; and it is named from the circumstance that it comprises the basin of the Upper Marne (Haute-Marne).

The department is hilly, in parts mountainous. The plateau of Langres and the Faucilles Mountains (which with the hills of Côte-d'Or form a continuous chain that unites the Cévennes to the Vosges Mountains) cover the southern part of the department. The Faucilles Mountains surround the sources of the Meuse and the Saône, and form part of the watershed between the Atlantic and the Mediterranean, thence two branches run northward screening the narrow valley of the Upper Meuse and ultimately uniting with the Ardennes Hills. The more westerly of these branch ranges is called the Faucilles Mountains, which cover the east of the department, and form part of the watershed between the basins of the Seine and the Meuse. From the plateau of Langres also numerous ramifications run north-eastward between the Marne, the Aube, and their earliest tributaries. The mountains rise near Langres to about 2500 feet above the sea; they diminish in height as they advance northward. The valleys extend

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mostly north and south. In the arrondissement of Vassy, in the north of the department, there are some fine valleys and extensive plains. Here and there all through the department, outlying hills, either singly or in groups, give variety to the surface. More than one-third of the department is covered with forests, in which oak, beech, ash, maple, birch, and poplar are the principal trees.

The principal rivers are—the MARNE and its feeders, and the MEUSE, which rises in the department, and flows northward across the eastern boundary into the department of Vosges. The Marne is navigable from St-Dizier, so that the department has the advantage of a share in the extensive system of inland water communication mentioned in the preceding article. The south-west of the department is drained by the AUBE and its feeder the Aujon; the Amance and the Vingeanne rise on the south-eastern side of the plateau of Langres, and flow to the Saône. The Rognon, the Suize, and the Triere, all feeders of the Marne, have their whole length in this department; the Blaise, another considerable feeder of the Marne, rises and has most of its length in Haute-Marne. Except three or four miles along the Marne, below St-Dizier, the department has no internal navigation. It is crossed by 6 state and 8 departmental roads. The only railroad is the short branch which unites St-Dizier to the Paris-Strasbourg line at the Blesmes station mentioned in the preceding article. It is proposed to continue the line from St-Dizier up the valley of the Marne, through the plateau of Langres to Gray, on the upper Saône.

The climate is very healthy; the air is pure and keen in the mountains, where the winters are very cold. In many of the valleys, especially in those that open into the basin of the Saône, the temperature is warm and equable.

The common breadstuffs are produced in quantity sufficient for the consumption. Kitchen vegetables, pulse of all kinds, mustard, hemp, cherries, filberts, &c., are grown. The vine is extensively cultivated in favourable situations, and about 13,000,000 gallons of wine are made, two-thirds of which are consumed on the spot, and the rest is exported to Switzerland and to the departments of Vosges and Haut-Rhin. The milch cattle of the department are of good breed; horses and sheep are small; goats are numerous; poultry and game of all kinds are plentiful.

The department is entirely occupied by the strata that occur between the chalk and the saliferous sandstone. It is rich in iron-ore; several mines are worked; the metal is smelted and manufactured into bars, utensils, and tools in 114 furnaces and foundries, in which wood charcoal is the fuel chiefly used. Building-stone, marble, alabaster, gypsum, &c., are quarried. Marl, brick-earth, fuller's-clay, and turf are dug. Besides ironmongery and cutlery, the industrial products include brandy, vinegar, cotton- and woollen-yarn, druggut, woollen stockings, leather gloves, cast-iron tubes, paper, leather, beer, &c. The commerce in the products before named, and in timber, planks, fire-wood, oak-staves, oil, honey, &c., is considerable. About 225 fairs and markets are held annually.

The department contains 1,537,012 acres. Of the whole area 829,343 acres are capable of cultivation; 88,413 acres are grass land; 32,461 acres are under vines; 524,327 acres are covered with woods and forests; and 69,115 acres consist of heaths and moors.

Divisions and Towns.—The department is divided into three arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Chaumont . . .	10	195	88,571
2. Langres . . .	10	211	106,424
3. Vassy . . .	8	145	73,403
Total . . .	28	551	268,398

1. Of the first arrondissement and of the whole department the chief town is *Chaumont-en-Bassigny*, which stands on a hill at the junction of the Marne and Suize, in 48° 6' 47" N. lat., 5° 8' 42" E. long., 150 miles S.E. from Paris, and has tribunals of first instance and of commerce, a college, and 6088 inhabitants in the commune. The site of the town is 1063 feet above the level of the sea. The town is pretty well built, with wide clean streets; some of them however are very steep. It still retains some portion of its old fortifications. The supply of water is from twelve wells and four fountains, to which last the waters of the Suize are raised by an hydraulic engine. The principal buildings are—the church of St-Jean, the college buildings, the hospital, the remains of the castle of the counts of Champagne, and the town-hall, an elegant modern structure. The manufactures are woollen stockings, gloves, serge, druggut, common woollen cloth, cotton- and woollen-yarn, leather, beet-root, sugar, &c. *Château-Villain*, 12 miles W. by S. from Chaumont, stands on the left bank of the Anjou, and has iron-forges and smelting furnaces, and 2068 inhabitants. *Nogent-le-Roi*, 12 miles S. by E. from Chaumont, near the right bank of the Triere, is the centre of a considerable cutlery manufacture, and has 2979 inhabitants.

2. In the second arrondissement the chief town is LANGRES, the site of which is 1551 feet above the level of the sea. *Bourbonne-les-Bains*, celebrated for its warm springs, is situated on the southern

slope of the Faucilles Mountains, and on the Apance, a feeder of the Saône. It is frequented chiefly by persons troubled with paralysis and with gun-shot wounds, and has a military hospital with 545 beds, 40 of which are for officers. The regular season is from May to October; but the baths are frequented more or less during the whole year. *Fayl-Billot*, S.E. of Langres, has 2505 inhabitants. *Montigny-le-Roi*, a small town of 1300 inhabitants, deserves notice on account of its situation near the source of the Meuse.

3. Of the third arrondissement the chief town, *Vassy*, is prettily situated on the right bank of the Blaise, in 48° 30' 2" N. lat., 4° 57' 11" E. long., 591 feet above the level of the sea, 28 miles N. from Chaumont, and has a tribunal of first instance, a college, and 2826 inhabitants, who manufacture calico, druggot, ironmongery, pottery, and leather. There are several iron-forges and smelting works near *Vassy*. *Joinville*, situated on the Marne, at the foot of a hill, on the summit of which formerly stood the castle of the Sires de Joinville, has several iron-works, and 3196 inhabitants. The Duke of Orléans, father of Louis Philippe, king of France, had the castle demolished in 1790; the church remained till 1792, when it was destroyed, with the tombs of the lords of Joinville and all the curious relics it contained. In 1841 such of the remains as had been preserved or recovered were solemnly deposited in the cemetery of the town, and a tomb, with a suitable inscription, was erected over them at the expense of Louis Philippe. Woollen hosiery, druggot, tartan, linen, woollen-yarn, and serge are manufactured in this town. *St-Dizier*, a well-built town, with wide regular streets, stands on the right bank of the Marne, which here begins to be navigable at a distance of 9 miles north from *Vassy*, and has a tribunal of commerce, a college, and 5705 inhabitants. The town-hall and the remains of an ancient castle are the most interesting structures in the town. Its chief industrial establishments are iron-forges and foundries, boat-building yards (which turn out a great number of river and canal boats, commonly of about 100 tons burden), and cotton factories. There is also a considerable trade in planks, ship timber, and in wine casks. A branch railway, 11 miles long, connects *St-Dizier* with the Paris-Strasbourg railway, which it joins at the Blesmes station.

The department forms the see of the Bishop of Langres; is included in the jurisdiction of the High Court and within the limits of the University-Academy of Dijon, and belongs to the 7th Military Division, of which Besançon is head-quarters. It returns 2 members to the Legislative Body of the French empire.

There are at Langres a diocesan seminary and a preparatory ecclesiastical school; and communal colleges in Chaumont, Langres, *St-Dizier*, and *Vassy*.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers.*)

MARNHULL. [DORSETSHIRE.]

MAROCCO, called by the natives *Mogh'rib-el-accâ* ('the farthest west'), or briefly *Mogh'rib*, whence the inhabitants are called *Mogh'ribins*, is an empire in Northern Africa, which extends from south to north between 27° and 36° N. lat., the most northern districts forming the southern coast of the Strait of Gibraltar, and from east to west between 1° 20' and 11° 30' W. long. It is bounded N. by the Mediterranean, W. by the Atlantic Ocean, S. by the Sahara, and E. by Algérie. Its surface is estimated at 274,000 square miles, and its population at 8,500,000.

Surface and Soil; Coast.—The surface of this extensive country is extremely diversified by mountains, hills, plains, and valleys. The Atlas traverses it in its greatest length, running, at some distance from its southern and eastern boundary, from Cape Nun on the Atlantic Ocean to Cape dell' Acqua, west of the mouth of the river Mulwia, on the Mediterranean. The general direction of the Atlas is from south-west to north-east; south of 32° N. lat. it is called the Greater Atlas, and north of it the Lesser Atlas. [ATLAS.] The Greater Atlas, towards its southern extremity, consists of two ranges, both beginning near the Atlantic; the southern, commencing at Cape Nun (south of 29° N. lat.), is called Mount Adrar, and the northern, commencing at Cape Gher (south of 31° N. lat.), or Ras Aferai, bears the name of Mount Bebauan. The two ranges unite about 31° N. lat., and about 100 miles from the shore, forming the *Jebel Telge*, commonly called the Great Atlas. Between these two ranges is the plain of *Tarudant*, or *Sus-el-accâ*. Both the ranges, as well as the remainder of the Greater Atlas, are covered with snow for several months in the year, but probably none of the summits attains the limit of perpetual congelation. The Greater Atlas is not very wide, being generally traversed in two or three days. Two mountain passes lead over Mount Bebauan, one called *Bebauan*, not far from Cape Gher, and another called *Belavin*, about 60 miles farther east, which connects the town of *Tarudant* with *Fruge*, in the plains of Morocco. A third pass leads from the town of *Tatta* in *Drah*, or *Daraa*, to the city of Morocco. The interior of the range consists of ridges and valleys, and sometimes also mountain plains: it is well cultivated in some parts, and in others it serves as pasture-ground; towards the southern declivity it is nearly a bare rock.

Between 31° and 32° N. lat., and near 5° W. long., where the range turns more to the north, and takes the name of the Lesser Atlas, the width of the range increases considerably, and as most of the large rivers rise in this part of the Atlas, it is probable that the highest

summits occur here. *M. Caillié* however, who traversed this part of the Atlas a little west of 4° W. long., does not mention any elevation of the summits, nor does he speak of snow on the mountains. The Lesser Atlas, though, according to appearances, much less elevated than the Greater Atlas, probably occupies a greater width, sending lateral branches to the east and west, between which there are fertile valleys. Near 34° N. lat., 4° W. long., the Lesser Atlas divides into two branches, of which the eastern runs north-east and terminates at Cape dell' Acqua; the other, called *Er-Riff* (the *Riff*, the coast population of which region are addicted to piracy), turns first north-west, then west, and again north-west, until it terminates in the high and mountainous coast which forms the southern shore of the Strait of Gibraltar, between *Punti di Africa*, near *Ceuta*, on the east, and *Cape Spartel* on the west. The country which is included between these two lateral ranges of the Lesser Atlas and the Mediterranean Sea is the most extensive mountain region in Morocco. Though the mountains do not rise to a great elevation, the whole tract is covered with masses of bare rock, with narrow valleys between them. The whole coast line along the Mediterranean, which from *T'wunt*, or *Tawunt*, to *Cape Spartel* is about 320 miles, is high and rocky. Level tracts of inconsiderable extent occur at the mouths of the small rivers only. *Mount Abyla*, opposite the rock of Gibraltar, rises to a considerable height. [CEUTA.]

The elevated and rocky coast continues along the Atlantic nearly as far south as the mouth of the river *El Khos*, or *Luccos*. The country adjacent to the coast is rather hilly than mountainous, though a few rocky masses rise to 2500 feet; the soil is mostly gravelly, and sustains only a scanty vegetation, with a few trees. The river (*wadi*) *El Khos* traverses an immense plain called *M'shiara-er-Rumla*, which extends eastward to the ranges of the Lesser Atlas, and southward to the banks of the river *Seboo*. Its surface is partly level, and partly traversed by low ranges of hills. Its slope towards the Atlantic appears to be gradual, as the rivers make numerous bends in the plain and have a gentle course. On its western border the sea has formed a range of sandhills, by which several small rivers are prevented from reaching the ocean, and form along the shores two lakes, the smaller of which, *Muley Buselham*, is 5 miles long, and the larger, *Murja Kas-el-Dowla*, 20 miles long by a mile and a half broad. The range of sandhills which separates these lakes from the sea is about 250 feet high. The harbours along this low coast are nearly filled up with sand, and can only be entered by small vessels. The plain of *M'shiara-er-Rumla*, though the soil is light, is very productive in corn, and contains excellent pasture-grounds. It is also connected on the east with the fertile valley that extends east of the town of *Fez*, between the offsets of the Lesser Atlas.

The plains continue south of the *Seboo* River to the banks of the *Oom-er-Begh*, or *Morbeya*, and still farther south; but they gradually change their character, and their fertility greatly diminishes. The country also rises from the sea-shore, which in many places is rocky and inaccessible, and extends in wide plains ascending like terraces one above the other, the eastern being always some hundred feet higher than that immediately west of it, until at the base of the Lesser Atlas they probably attain an elevation of 4000 feet. The inferior fertility of these plains seems to depend more on the climate than the soil, which chiefly consists of a light loam. Water is found only at the depth of from 100 to 200 feet. The rivers run in channels several feet below the surface of the plains. Only isolated spots are cultivated, and there are no trees except stunted palms.

A range of hills, rising between 500 and 1200 feet above the plains, divides them from the southern plain, which extends along the base of the Greater Atlas. Where the town of Morocco is situated, from which it obtains the name of the Plain of Morocco, it is about 25 miles wide, but it grows still wider as it advances westward. This plain, which is drained by the river *Tensift*, is about 1500 feet high near the town; but it grows lower towards the sea, and terminates, between *Cape Cantin* and *Mogadore*, in a low shore, generally sandy, and sometimes rocky. In fertility it is much superior to the central plains. An isolated mass called *Hadid*, or *Iron Hills*, rises 2200 feet in height near the coast between the mouth of *Tensift* and *Mogador*.

The plain of *Tarudant*, which is the most southern, lies between the ranges of the *Bebauan*, or *Western Atlas*, and *Adrar*, or *Southern Atlas Mountains*. It appears to be traversed nearly in the middle by a range of hills which divide it into two wide valleys. The northern is level, and of great fertility, as the extensive woods and plantations of olive-trees show, but the greater part of it is uncultivated. It is drained by the river *Sous* which rises on the south side of the *Western Atlas*, and is joined near *Tarudant* by a tributary which flows from the *Southern Atlas*: from *Tarudant* the river flows west to its mouth in the Atlantic, a few miles south of *Agadir*. The southern valley is drained by the *Messa* and the *Nourvar Wad-al-Aksa*. To the south of the mouth of the *Messa* the shore is formed by a hilly ridge surmounted by many lofty peaks, terminating to southward in a plateau about 800 feet high, to the north of which is the projection of *Cape Nun*, and an extensive sandy waste which here intervenes between the hills and the sea northward as far as 29° N. lat. The river *Nun* flows into the Atlantic along the southern base of the table-land, and forms part of the southern boundary of Morocco.

The countries east of *Mount Adrar* and south of the Greater Atlas,

are known under the names of Draha or Daraa, Taflet, and Segelmeza, and are parts of the Bilud-ul-Gerid, or the 'country of the palms.' They consist of valleys and small plains, inclosed by low and sterile hills. The valleys and plains are also frequently rocky, and exhibit a scanty vegetation; but some parts are cultivated or covered with extensive groves of date-trees.

That portion of the empire of Morocco which lies east of the Lesser Atlas and west of the main range called Jebel Tedla, which runs north-eastward into Algérie, comprehends the basin of the river Mulwia; the southern part of it, near the sources of the river, contains some fertile plains or valleys, which are good pasture-grounds; but the northern districts are said to be occupied by two sterile regions, the deserts of Aduhra and Angad. The Jebel Tedla is supposed to be the ancient Mount Durdus, a name probably derived from the same source as Dyrin, the native name for the Atlas.

Rivers.—The Mulwia, or Muluya (the ancient Mulucha, or Malva), which rises at or near the southern extremity of the Lesser Atlas, and runs northward into the Mediterranean Sea, has a course of about 400 miles; but as it traverses a country which has not been visited by Europeans, its peculiarities are not known. It is the most considerable river in Morocco which falls into the Mediterranean. Seven rivers fall into the Atlantic Ocean. The most northern, the El-Khos, rises in the range of Er-Riff, and in its course of nearly 100 miles is used to fertilise the adjacent country by irrigation. Farther south is the Seboo River, which rises in numerous branches on the western declivity of the Lesser Atlas, and is joined by several affluents which descend from the southern declivity of the range of Er-Riff. After a course of about 230 miles it enters the Atlantic, near the town of Mehedia. Though a considerable river, with rather a large volume of water when compared with other rivers of this country, its mouth does not afford a harbour; a bar of sand a quarter of a mile from its outlet extends almost across, and is nearly dry at low water of spring-tides. Inside the bar there are from 3 to 4 fathoms of water, and the tide rises 7 or 8 feet. The waters are used for irrigating the adjacent country.

Bu-Regreb is an inconsiderable river running hardly more than 100 miles; but its waters are used for irrigation, and its mouth forms the harbour of the towns of Salé or Sla, and Rabatt or Arbat. A bar about one-eighth of a mile from the entrance runs almost across in a west-south-western direction, with three or four feet of water on it at low water, leaving a channel at each end. The north-eastern channel is that which is used. The tide rises from 9 to 10 feet; inside the harbour is sheltered, and has sufficient water for a frigate.

The Oom-er-Begh, or Morbeys, the largest of the rivers that fall into the Atlantic, likewise rises in several branches in the western declivity of the Lesser Atlas, and probably runs more than 800 miles. In the upper part of its course it fertilises several valleys; but in its course through the plains it runs between high banks of sandy clay, and cannot be used for the purpose of irrigation. At its mouth is the small town of Azamor, which has no commerce. A bar of sand which lies across the mouth of the river is almost dry at low-water, and boats alone can enter it.

The Tenaift, which waters the plain of Morocco, rises in a subordinate range of high hills about 40 miles E. from the town, and runs nearly 150 miles with a winding course. It is very probable that the mouth of this river also is closed by a bar.

Through the plain of Tarudant, or Sus-el-Acââ, flows the river Sus, noticed above. It may be considered as the southern boundary of the empire, the Arabian chiefs who govern the country south of it being only nominally subject to the emperor of Morocco.

The most southern river which falls into the Atlantic is the Draha, or Daraa, which was formerly supposed to lose itself in the Sahara; but according to a statement in the 'London Geographical Journal' (vol. vii.) it reaches the sea 82 miles S.W. from Cape Nun, where it is called on most maps Akassa. If this statement is true the Draha, which rises on the southern declivity of the Greater Atlas, south-east of the town of Morocco, must have a course of more than 500 miles; but nearly the whole of it is unknown. It is however said that it flows through the productive districts of Draha and El-Harib; and that two considerable towns, Tatta and Akka, stand on its banks.

From the southern declivity of the Jebel Tedla, or Mount Atlas, descend three other rivers, the Fileli, Ziz, and Ghir, which run southward, and are lost in the sands of the Sahara.

Climate.—The climate is not so hot as might be expected from the position of this country. A great part of the empire is subject to the alternation of the sea and land breezes, and those districts which lie beyond their reach are cooled to some extent by the winds which blow from the mountains. Frost and snow only occur on the mountains. Along the sea the thermometer never falls below 39° or 40°; and even in the hottest places, at Agadir, or Santa Cruz, and Tarudant, it generally does not rise above 84°, and rarely to 90°. The seasons are divided into the dry and wet: the wet season happens in our winter. Abundant rains fall towards the end of October, and last for about three weeks: these rains are followed by some dry weather, but they set in again about the middle of November, and showers are frequent till the month of March, when the dry season begins, which is rarely interrupted by showers. The rains are less general and frequent south of the river Seboo, and also less certain, which is probably the

cause of the inferior fertility of these districts, as they are subject to frequent drought. Little is known of the climate south of Mount Bebauan, except that the heat is very great, and that the southern declivity of Mount Atlas has no rain, being exposed to the dry and hot winds that blow from the Sahara and disperse the few vapours which occasionally rise.

Productions.—The soil is in many parts very fertile, but it is rudely cultivated. Besides wheat and barley, which are extensively raised in most of the districts of the plains, rice, maize, and dhurra are cultivated; the last-mentioned grain constitutes the principal food of the lower classes. Other objects of cultivation are cotton, tobacco, sesamum, hemp, saffron, and different kinds of beans and peas. The plantations of olive-trees and almond-trees are very extensive. The fruit-trees of southern Europe are also common, especially the fig and the pomegranate. The date-tree is cultivated on the southern declivity of Mount Atlas, and the best come from Draha and Taflet. Lemons, grapes, oranges, almonds, &c., are among the fruits. The sugar-cane thrives where cultivated. In the districts south of the Oom-er-Begh there are large plantations of henna. The southern declivities of Mount Atlas are bare, but on the northern there are extensive forests, consisting of the olive, carob, walnut, acacia, cedar, stunted palms, and rose-trees, and also cork-trees. The timber is fine, but not large. Oak and white cedar also grow on the mountains.

The wandering life of the shepherd is preferred to the occupation of farming very generally throughout Morocco. Domestic animals of every kind are numerous. The horses are distinguished by their beauty, those of the native breed as well as those of Arab origin; the sheep, which are considered as indigenous, and are supposed to have spread from the declivities of the Atlas over all the world, produce a wool not inferior to any for softness, fineness, and whiteness; sheep and goats are more numerous than any other domestic animals. Goat-skins constitute one of the most important articles of export. Cows, asses, mules, and camels are also reared in considerable numbers. In the large uncultivated tracts wild animals abound, as lions, panthers, hyenas, wolves, and several species of antelopes and deer, as well as monkeys and wild boars. Wild boars are abundant in all parts, but most of the other ferocious animals are limited to the southern regions. Ostriches are found in the desert bordering on the southern and eastern districts, and their feathers constitute an article of export. Cranes and storks abound. Locusts sometimes lay waste the provinces bordering on the deserts. Bees are common, and wax is exported.

The mineral wealth of Morocco, as far as known, comprises iron, lead, tin, copper, antimony, and salt. Metals seem to occur in the greatest abundance on the southern declivity of Mount Atlas, especially in those parts which surround the plain of Sus-el-Acââ, where gold and silver occur, but not in abundance; the latter occurs in the river Draha. Copper, which in Strabo's time was worked in these countries, is still abundant; the richest mine is near Teseleht, in Sus-el-Acââ, but there are others in the neighbourhood of Tarudant. Lead is found in Mount Adrar and in the Lesser Atlas. Iron is worked in several places; and there is also antimony. Rock-salt is also said to be abundant. The several small lakes which lie along the sea-shore are natural salt-pans, which produce this useful article in abundance. Fuller's-earth occurs in several places.

Inhabitants.—The population of this empire is composed of Amazirghis, Arabs, Jews, and blacks. The Amazirghis comprise 2,300,000 Berbers, and 1,450,000 Shelluhs. The Arabs comprise 3,550,000 Moors, Ludayas, and other mixed tribes, and 740,000 Beduins and others of pure blood. The Jews number about 339,500; and the negroes about 120,000, consisting of slaves and freemen from Soudan, Foulahs, Mandingoes, &c.

The Amazirghis, or Mazirghis, are the most ancient inhabitants of northern Africa, and one of the most widely-spread nations of that continent. Dialects of their language are spoken by the tribes which extend from the Nile to the Atlantic, as the Tibboos and Tuzicks of the desert, the Filelis in Segelmeza and Taflet, and the different Shelluh tribes on the Atlas and Mount Bebauan. Most of the tribes occupying the southern districts of Tunis and Algiers also speak the same language. The Amazirghis in Morocco are divided into Berbers and Shelluhs. The Berbers occupy exclusively the mountain region which extends along the Mediterranean, where they are called Riffins, from inhabiting the mountains of Er-Riff, and are divided into several tribes. Such of them as live along the coast have been always addicted to piracy. The Shelluhs occupy the Greater Atlas and its great branches Mount Bebauan and Mount Adrar. The Berbers and Shelluhs differ somewhat in their physical character and customs. The Berbers are nearly white, of middle size, well formed, and rather robust and athletic; their hair is frequently fair, resembling that of the northern people of Europe rather than any nation of Africa, and they have very little hair on their chins. They live generally under tents, or in caves situated on steep and nearly inaccessible mountains. They pay little regard to the orders of the sultan, and obey only their hereditary princes or chosen magistrates. In the plains they build houses of stone or wood, but always inclose them with walls. Their chief occupation is that of huntsmen and herdsmen, yet they cultivate some patches of ground, and rear bees.

The Shelluhs are chiefly agriculturists, and exercise several trades;

their houses are always built of stones and covered with tiles or slates. They are less robust than the Berbers; their colour is sallow, and they resemble in some respects the Portuguese, from whom some authors think they are descended. They are much more advanced in civilization than the Berbers.

The Moors are the most numerous of the nations that inhabit Morocco. Their language, which is called Moghreb, is a dialect of the Arabic; but it is intermixed with many words from the language of the Amazirghis, and still more with Spanish words. The latter circumstance may be ascribed to the emigration of their ancestors from Spain after the conquest of Granada. These emigrants settled in the towns and plains along the Atlantic.

The Moors of Morocco are of middling size, and rather slender when young, but they grow stout as they advance in years. Their colour varies between yellow and black, which is principally to be ascribed to their frequently marrying black women from Sudan. They are the only nation of Morocco with which the Europeans have an immediate intercourse, and they are the principal inhabitants of the towns; they fill the high offices of government, and form the military class.

The Arabs are the descendants of those who emigrated at the time when the Mohammedan religion was diffused from Arabia. A few families live in the towns, but the Beduins are dispersed over the plains, where they adhere to their wandering life, living in tents, and following the pastoral occupation. They are a hardy race, slightly made, and under the middle size. Their language is the Koreish, or Arabic of the Koran, which they pretend to speak in its purity.

The Jews are intermixed among all these nations: their condition is best among the Berbers, where they follow different trades; but among the Shelluhs and Moors they are much oppressed, and exposed to the most ignominious treatment. They are very numerous in the sea-ports and commercial towns.

The negroes, who are imported as slaves, frequently obtain their liberty; and as they are distinguished by fidelity they form the emperor's body-guard, which is the only standing army of the empire.

Manufactures.—As the inhabitants dress chiefly in wool, the manufacture of woollen-cloth is general; in some of the towns there are manufactories on a large scale. In the town of Fez the red caps are made which are used in all the countries that border on the Mediterranean, besides several kinds of silk goods, linen, and leather. The inhabitants of Fez are also distinguished as goldsmiths, jewellers, and cutters of precious stones. Tanning is well understood. Very good leather is made in the neighbourhood of the towns of El Kasar and Mekinez. The tanyards in the city of Morocco are very extensive, and the leather which they produce is superior to any made in Europe. The tanners possess the art of tanning the skins of lions and panthers, and giving them a snow-white colour, with the softness of silk. The Morocco leather of the capital is yellow, that made in Tafilet green, and in Fez it is dyed red. Their bright colours are considered inimitable in Europe. Very good sole-leather is made in Rabatt and Tetuan. Silks, embroidered goods, and leather are the staple manufactures of the capital. Carpets are chiefly made in the province of Ducalla, south of the river Oom-er-begh, and are known in Europe by the name of Turkey carpets.

Political Division and Towns.—The empire of Morocco is composed of the two kingdoms of Fez and Morocco, of which the former occupies the basin of the Mulwia and the countries north of the river Oom-er-begh; the kingdom of Morocco comprehends the remainder, with the exception of the countries south of the Greater Atlas and Mount Beban, which are considered as a separate kingdom, called that of Taflet. At present the whole country is divided into 30 governments, of which 15 belong to Fez and 15 to Morocco. In the latter the country between Mount Beban and Mount Adrar is included. The countries of Draha, Taflet, and Segelmesa are divided into two other governments.

Along the coast of the Mediterranean the Spaniards possess Melilla, near Ras-ul-dir, or Cape Tres Forcas, and farther westward Alhucemas and Peñon de Velez, three small fortresses, which have no communication with the interior.

Not far from the Strait of Gibraltar is *Tetuan*, built on the declivity of a hill, about half a mile from a small river (Martil) which falls into the Mediterranean about five miles from the town: the mouth of the river forms a harbour for vessels of middling size. It carries on a considerable commerce with Spain, France, and Italy, exporting wool, barley, wax, leather, hides, cattle, mules, and fruits, of which the valley of Tetuan produces abundance of the finest quality. The streets are narrow and unpaved: the population is 20,000.

Near the eastern entrance of the Strait of Gibraltar is the Spanish town of *Ceuta* [CEUTA], and near the western entrance the town of *Tangier*, where European consuls reside. Tangier is built on a hill, near a spacious bay, 14 miles W. from Cape Spartel, and its harbour is defended by three small fortresses. The streets are wider and straighter than in other towns of the empire; but except the houses of the European consuls, and a few belonging to rich persons, they are all small and inconvenient. The Jews have here several synagogues, and the Roman Catholics have a church, the only Christian establishment of this kind in the empire. The commerce of this place is limited

to some trade with Gibraltar and the opposite coast of Spain: the population is about 10,000.

Along the Atlantic, from north to south, are the following towns:—*El-Araish*, or *Larash*, at the mouth of the river El Kos, containing 4000 inhabitants, has a good harbour; the bar at the mouth of the river has 16 feet of water at spring-tides, and spacious anchoring-ground within, with water enough for frigates. *Sla*, *Salé*, or *Sallee*, and *Rabatt*, are separated from each other by the river Bu Regreb, which forms their common harbour: they contain together 30,000 inhabitants. Salé, formerly noted for the boldness of its pirates, is badly built and partly in ruins; but Rabatt is a thriving town, and has some good streets. Salé is still the principal commercial port of Morocco, though a portion of its trade has been transferred to Mogadora. The principal articles of exportation are—wool, corn, and wax, and the manufactured goods of Fez and Mekinez. The European and East India goods, destined for Fez and the northern provinces, are imported through this town. *Saffi*, or *Asif*, farther south, not far from Cape Cantin, is between two hills in a valley, and is subject to inundations. It formerly exported many products of the country, as its roadstead affords excellent anchorage; but since the rise of Mogadora it has been on the decline: the population is 12,000, including 3000 Jews.

Mogador, or *Suera*, as the Moghrebins call it, the port of the town of Morocco, lies on the sea-shore between Cape Cantin and Cape Gher. It was founded in 1760. The town is built on a low shore, consisting of moving sand, which extends from 5 to 15 miles inland, where a fertile country begins. It is regularly built, the streets being straight but somewhat narrow. The Europeans settled here have erected several large buildings in the African style. The town is divided into two parts, one of which is called the Fortress, and contains the custom-house, the palace of the pasha, the other public buildings, and the houses of Europeans; the other part is only inhabited by Jews. The harbour is formed by a small island lying south-west of the town, and about two miles in circumference. At low tides there are only 10 or 12 feet of water in the harbour, and large vessels are obliged to anchor without, at a distance of about two miles. The commerce of this place is considerable: the population is stated to amount to 30,000. The towns of Mogador, Tangiera, Sallee, and Rabatt, suffered severely in 1844, when they were bombarded by the French fleet under Prince de Joinville. [ALGÉRIE, vol. i. col. 212.]

Agadir, or *Santa Cruz*, farther south, has a good harbour, and formerly carried on a considerable trade, which however was transferred to Mogador by order of the government.

In the interior there are several populous towns, of which the following are the principal:—*Taza*, or *Taza*, on one of the upper branches of the Sebou River, in a very fertile country, has 10,000 or 12,000 inhabitants, some manufactures, and a considerable trade with Tlemcen in Algiers (being situated near one of the most frequented passes of the Lesser Atlas), and with Fez. *At Kasar* or *Ksar*, on the El Kos River, is well built, and has some manufactures, with about 8000 inhabitants.

Fez, or *Fas*, the most industrious and commercial town of the empire, is situated in a valley which is drained by one of the upper branches of the Sebou River. It contains upwards of 100 mosques and 7 public schools. The mosque called El Karubin is a magnificent building, and that of Mula Driss, the founder of the town (807), is the object of many pilgrimages, and is an asylum for thieves and murderers. The imperial palace, with the buildings and gardens annexed to it, occupies a great space. The number of persons employed in manufactures is considerable. Every trade is carried on in a separate street; generally only one kind of goods is sold in each shop. The commerce of this town with the sea-ports, especially Rabatt, and by means of the caravans with Tunis, Kahira, and Sudan, is very great. The streets are narrow, and, owing to the great height of the houses, also dark; there are numerous extensive caravansaries: the population is variously estimated at from 20,000 to 88,000.

Mekinez, or *Miknas*, west of Fez, a large town built on a hill in a wide and fertile plain, has also narrow crooked streets. It has many manufactures, especially of leather. The imperial palace is more than two miles in circuit, and has large orchards and gardens annexed to it: the population is 56,000. A large portion of the imports into Sallee is sent to Mekinez, where there are large magazines of the principal products of Morocco and the neighbouring states.

Tefza is situated in one of those fine valleys which are watered by the numerous branches of the Oom-er-begh, not far from the base of the Atlas. It has large manufactures of woollen-cloths, some of which are exported to Italy and elsewhere: the population is 10,500.

Demnet, or *Dimnit*, a considerable place east of the town of Morocco, near the base of a branch of Mount Atlas, carries on a considerable trade. The caravans which go from Morocco to Draha and Sudan here begin to ascend the mountain-pass which leads to Tatta.

Morocco, the capital of the empire and the residence of the sultan, is situated on level ground 4 miles S. from the river Tensift, and is surrounded by a strong wall 30 feet high, with square turrets at every 50 paces. The walls, which are pierced by 11 gate-entrances, are near 6 miles in circuit; but the area inclosed is far from being covered with buildings, there being several large gardens and many spaces unoccupied or covered with ruins. The streets are narrow, irregular, filthy, and in many cases crossed by walls with arches and gates, separating the

different quarters and subdivisions of the city in the same manner as described in the article *KAHIRA*. Several open places, which cannot be called squares, are used as market-places. The houses, which are only of one story, have flat roofs and terraces, and the rooms open upon a court, which is sometimes surrounded by arcades and embellished by a fountain. The houses, which are mostly constructed with clay and lime, have no windows, no fire-place, and no furniture, except a cushion or two. Large aqueducts, which convey the water of the river Tensift to the city, surround it; some of them are 10 or 12 feet deep, and partly ruined. These aqueducts supply the fountains, which are numerous, and some of them have traces of delicate sculpture. On the south of the town, but without the walls, is the imperial palace: a wall of a quadrangular form, inclosing a space about 1500 yards long by 600 yards wide, is equal in strength and height to the walls of the town. The inclosed space is divided into squares, laid out in gardens, round which are detached pavilions, forming the imperial residences. The floors of the rooms are tessellated with various coloured tiles, but otherwise they are plain, the furniture consisting of a mat, a small carpet at one end, and some cushions. There are 19 mosques, 2 colleges or medrasses, and 1 hospital in the town. The principal mosque, El Kontubia, is distinguished by a lofty tower 220 feet high, a masterpiece of Arabic architecture. The bazaar, or kaisseria, is a long range of shops, covered in and divided into compartments, in which the agricultural and manufactured productions of the country, as well as goods from China, India, and England, are exposed for sale. There are manufactures of silk, leather, and embroideries: the population is about 100,000, of which number about 5000 are Jews, who inhabit a separate quarter of the town. Outside the city (as in all Mohammedan towns) are the cemeteries, which are extensive.

In the province of Sus-el-Acsâ is *Tarudant*, once the capital of a separate kingdom, about 60 miles from the sea-port of Agadir or Santa Cruz. It is built in the middle of an extensive plain, and its walls, which are now in a ruinous state, are very extensive. The houses are low and built of earth, and each of them is surrounded by a garden and wall, so that the place rather resembles a well-peopled country, than a town. The inhabitants are industrious, and the woollen dresses and marocco leather made here are much esteemed; copper and saltpetre are abundant in the neighbourhood, and a considerable quantity of the copper is made into domestic utensils in this town. The population is 22,000.

In this province are also the towns of *Tedai*, with 15,000 industrious inhabitants, and *Tagavost*, which is said to be more populous. Farther to the south-west, near the banks of the river Draha, is the village of *Nun*, 50 miles from the sea, with 2000 inhabitants. It is one of the points from which the caravans depart for Sudan.

On the southern declivity of Mount Atlas are Taflet and Tatta, two other places from which the caravans start on their route to Sudan. The former, a considerable place with 10,000 inhabitants, seems to be the collective name of an assemblage of villages, in one of which the governor of the province of Taflet resides. Caillié in traversing this country neither saw nor heard of any town of the name of Taflet.

Education.—The Moors send their children to school at the age of six years. The elementary schools, which are very numerous, both in the towns and in the country, are either private or public establishments. In these schools reading, writing, and correct pronunciation are taught; the children also learn by heart some passages of the Koran. Boys sometimes remain in these schools until they know the whole of the Koran by heart, when they pass for their further education into the higher schools (*mudaris*) where they are prepared for the university of Fez, called *Dar-el-ilm* (or the House of Science), and other colleges. In the colleges they are instructed in grammar, theology, logic, rhetoric, poetry, arithmetic, geometry, astrology, and medicine. The commentaries and traditions relating to the Koran, the laws, legal procedure, and all the formalities to be observed in the courts, are also explained. As there are no printing establishments, calligraphy is enumerated among the sciences.

Commerce.—The Moghrebins carry on a very active commerce with Sudan, Egypt, and Arabia by caravans, and with several parts of Europe by sea. Caravans set out from Tetuan, Fez, Marocco, and Taflet, each consisting of about 150 persons and 1000 or 1500 camels; when they unite at Tatta or Akka, on the Draha River, the point where they enter the desert, they consist of about 500 or 600 persons, with 16,000 and even 20,000 camels. Towards the southern border of the desert they come to the oases of Touadenni and El-A'rauan, where there are immense deposits of rock-salt, of which they buy large quantities for the market of Sudan. From Timbuctoo, as a central point, the merchants traverse the adjacent countries, exchanging their goods for those of Sudan. They import into these countries rock-salt, woollen-cloth and dresses, scarfs, tobacco, Turkish daggers, and blue cloth, and take in return ivory, rhinoceros' horns, incense, gold in bars and powder, ostrich feathers, gum-arabic, cotton, assafetida, indigo, and slaves; two-thirds of the imports, which are valued at 10 millions of Spanish dollars, are again exported.

The caravans which go to Mecca are chiefly composed of pilgrims, and are much more numerous. They depart only once in the year, and follow two routes. The northern route leads from Fez through Teza over the Lesser Atlas, traversing the northern districts of Algiers

and Tripoli, in which latter country it may be said to terminate at Kairoan. Hence it passes southward through Gadamis and Fezzan to Alexandria and Cairo, and ultimately to Mecca. The southern road passes from Marocco to Tefza, and thence through the southern districts of Algiers and Tunis to Gadamis and Fezzan, whence it leads to Alexandria and Mecca. Indigo, cochineal, ostrich-feathers, skins, and leather, with the woollen articles manufactured in Fez, Tefza, and Taflet are exported by these caravans, and they import the cotton and silk goods of India, some Persian silk-stuffs, rose-oil, amber, musk, balsam, and spices, but particularly cotton, wool, and raw silk.

European vessels visit the harbours of Tetuan, Rabatt, Saffi, and Mogador, and export the produce of the empire to Italy, France, Spain, England, and Holland. The principal imports are tissues of cotton, wool, and silk; hemp, flax, and raw silk; sugar, metals, spices, drugs, dyes, hardware, tea, specie, &c. The exports by sea comprise fruits, wool, and woollen tissues, olive oil, wax, hives, grain, oxen, gums, bark, leeches, ostrich-feathers, ivory, specie, &c. The principal part of the trade is in the hands of the English and French. Among the less important articles exported are scarfs of wool and silk, marocco leather slippers and shoes, the black cloaks of Tarudant, and the shawls of Fez and Tefza.

In 1839 the number of foreign ships that entered the ports of Marocco was 372; the departures numbered 456. The former brought cargoes valued at 581,680*l.*; the latter took away goods to the value of 484,000*l.* The trade of Marocco is greatly clogged by monopolies. The cultivation of the soil is free, but none of the products can be exported till a duty has been paid to the emperor by those who have the monopoly of the export trade. The monopoly is renewed every year, and accorded to those who agree to pay the highest export duty. The duties therefore are constantly varying, and are all arbitrarily imposed. The import duties amount to about 10 per cent. on the value; they are sometimes arbitrarily raised, and often corruptly levied.

Government.—The government is absolutely despotic, even more so than in the Turkish empire; the people are much oppressed, and the Christian merchants exposed to great losses by capricious ordinances.

(Graberg, *Specchio Geografico e Statistico dell' Impero di Marocco*; Jackson, *History of Marocco*; London *Geographical Journal*; Caillié, *Travels through Central Africa*, &c.) [See SUPPLEMENT.]

MARPLE. [CHESHIRE.]

MARPURG. [MARBURG.]

MARQUESAS ISLANDS were so called in honour of the Marquis Mendoca de Canete, by Mendoca de Neyra, who discovered them in 1595. They are situated in the Pacific, and extend about 200 miles in a north-west and south-east direction, between 10° 30' and 7° 50' S. lat., 138° and 140° 20' W. long.

The largest islands of the southern group are Santa Dominica, or Hiwaoa, Santa Christina, or Tahuata, and Hood's Island, or Tiboa. They are about 10 miles long from south-south-west to north-north-east. The principal islands of the northern group are Noukahivah, Uahuga (sometimes called Washington Island), Uapoa, and Ohivaoa. Noukahivah, the largest, is nearly 20 miles long from south-east to north-west, and 70 miles in circumference.

An elevated ridge of rocky mountains traverses each island lengthways, and in the larger one rises to an elevation of 2000 or 3000 feet. The mountains have on both sides high offsets, which extend to the shores, and thus divide the lowland along the shores into valleys. The mountains in the interior are mostly bare, rugged, and inaccessible. The coast is rocky, abrupt, and beaten by a surf. Noukahivah is of volcanic origin, which may be the case with the rest also. The soil is rich; in the valleys it is clay, mixed with vegetable mould, but on the lower declivities of the hills it is thin, and covered by coarse grass in tufts. There are numerous harbours, and many of them very safe, as Resolution Bay, on Tahuata; and the three harbours, Anna Maria, or Tayo-Hoae, Cho-Ome, or Comptroller's Bay, and Hapoa, or Tshitahagoff, on Noukahivah.

The climate is rather warm. The thermometer seldom descends below 64° or 68°. In May it ranges between 72° and 77°, and in June about 80°. Winter is characterised by abundant showers of rain. Sometimes however not a drop of rain falls for nine or ten months, the consequence of which is famine. The prevailing wind is the eastern trade-wind, which blows strongest in autumn. The south-west wind prevails in winter, and the north wind is frequent in summer. Thunder-storms are of rare occurrence. The climate is very healthy, and diseases are rare. The fruit-trees are chiefly the cocoa-nut, bread-fruit, and papaw. The inhabitants also cultivate bananas, plantains, sweet-potatoes, and taro. From the bark of the mulberry-tree they make their garments. The wild cotton is superior to that which is cultivated in some other islands, and the sugar-cane is abundant, large in growth, and of excellent quality. Tobacco is extensively cultivated. There are no animals except hogs and rats. Fish is abundant, and constitutes one of the most common articles of food.

The inhabitants belong to the same race that peopled the Society and Sandwich Islands. Their complexion is of a dark copper. The men vary in height between 4 feet 10 inches and 6 feet, and many of them are said to be remarkable for their symmetrical forms. They

tattoo the body. The inhabitants were formerly reported to be cannibals. The Marquesas are now under the protectorate of France with the exception of Huahine, Raiatea, and Borabora, which were excepted from the protectorate by the convention of June 19, 1847. The total area of the French part of the group is estimated at 508 square miles, and the population at 20,200. The Marquesas are also called the *Mendana Archipelago*, from the discoverer Mendana.

(Cook; Krusenstern; Langsdorf, *Voyages*; *London Geographical Journal*, iii. and vii.)

MARSA'LA, a fortified sea-port town at the western extremity of Sicily, built near the site of the ancient Lilybœum. The ancient port is filled up, but there is good anchorage, sheltered by a small island which lies off the coast, and which is mentioned in the history of the siege of Lilybœum by the Romans. The town was built by the Saracens, and contains about 10,000 inhabitants. It is inclosed by bastioned walls, and contains a cathedral, several convents, a gymnasium, cavalry barracks, and an old castle. The country around produces very good white wine, which is prepared for exportation by English mercantile houses established there, and is known by the name of Marsala. It is exported in large quantities to Malta, and also to England. Other exports are corn, cattle, oil, and salt. There are very few remains of antiquity, except some traces of former aqueducts and tombs scattered about the country.

MARSAN, a subdivision of Gascogne, in France, now included in the department of Landes. Mont de Marsan was its capital. [LANDES.]

MARSEILLE, a sea-port and city in France, capital of the department of Bouches-du-Rhône, is situated on the coast of the Mediterranean, 410 miles in a direct line S.S.E. from Paris, in 43° 17' 4" N. lat., 5° 22' 26" E. long., and had 185,082 inhabitants in the commune according to the census of 1851. The city is connected with Paris by railway through Avignon, Lyon, and Dijon, which is now (Dec. 1854) completed, with the exception of the section between Lyon and Valence.

Marseille was founded about B.C. 600 by the inhabitants of Phocæa, a Greek town which was a member of the Ionian confederation. The Phocæans founded several colonies in the western part of the Mediterranean, of which Massilia, or Massalia, was perhaps the earliest. The leader of the colony, Euxenus, married Petta, daughter of Nanos king of the Segobrigians, a tribe probably of Ligurians, and obtained permission to found a city. (Athenæus, *Δειπνοσοφισταί*, lib. x.; Justin, 'Hist.' c. xliii.)

The new colony was early involved in hostilities with the native tribes, Ligurian and Celtic, over whom the Massilians obtained several victories, and established new settlements along the coasts, in order to retain them in subjection. The surrounding barbarians acquired from the new settlers some of the arts of civilised life: they learned to prune and train the vine, and to plant the olive. The Massilians had also to contend with the power of the Carthaginians (the commercial rivals of the Greeks in western Europe), whom they defeated in a sea-fight of early but uncertain date. The town it is said received a new accession of Greek citizens when the Phocæans finally left their native seat in Asia Minor, to avoid subjugation by the Persians, B.C. 544. (Thucyd., lib. i. c. 13.)

The Massilian constitution was aristocratic; their laws and their religious rites were similar to those of the Ionians of Asia. The worship of the Ephesian Artemis, or Diana, was cherished with peculiar reverence, both in Massilia itself and in its colonies. The governing body was a senate of 600 persons, called Timuchi, who were appointed for life. This senate had fifteen presidents, who formed a sort of committee, by which the ordinary business of the government was managed. Of this committee three persons possessed the chief power. The Timuchi were chosen from among those who had children, and in whose families the right of citizenship had been possessed by three generations. (Strabo, lib. iv.)

The Massilians, like the Phocæans, were a naval people; they had several colonies or posts on the coasts both of Gaul, Spain, and Italy: as Emporium, now Ampurias, in Spain; Rhœ Agatha, now Agde; Tauroeis, or Tauroentium, now Tarente, near La-Ciotat; Antipolis, now Antibes; Olbia, perhaps the port and castle of Leoube, between Hieres and St. Tropez; and Nicæa, now Nice. They early and steadily cultivated an alliance with the Romans. In the civil war of Pompey and Cæsar they embraced the party of the former; and receiving L. Domitius, one of his most zealous partisans, within their walls, and appointing him governor of the city, they closed their gates against Cæsar, under pretence of preserving neutrality (B.C. 49). Cæsar, hastening into Spain against Afranius and Petreius, after building and equipping a squadron with marvellous celerity, left his lieutenant C. Trebonius with three legions to carry on the siege, and appointed D. Brutus to command his fleet. The townsmen were twice defeated at sea during the siege, which continued till Cæsar's return from his victory over the Pompeians in Spain, when they surrendered to him. Cæsar did not reduce them to entire subjection, but left two legions in garrison while he marched forward into Italy. (Cæsar, 'De Bell. Civ.' i. and ii.)

The municipal government of Massilia remained unaltered, but its political independence was virtually overthrown. The attention of the Massilians was now more directed to literature and philosophy, of which indeed they were already diligent cultivators. Their city became

to the west of Europe what Athens was to the east, and the most illustrious of the Roman youth resorted thither. (Cicero, 'Pro. Flacco'; Livy, xxxvii. 54; Tacitus, 'Agricola,' c. 4.)

For more than three centuries the history of Massilia presents no event of interest. In the troubles which followed the abdication of Diocletian and Maximian, the latter (A.D. 310) attempted to resume the purple at Arles, to the prejudice of the emperor Constantine, his son-in-law; but being baffled in his attempt, fled to Massilia, which he vainly attempted to defend. The city surrendered, or was taken by Constantine, and Maximian became his own executioner.

In the reign of Honorius, Massilia repelled the attempt of the Visigothic king Ataulphus to take possession (Photii, 'Biblioth.'): but it afterwards became the prey of Burgundians, Visigoths, and Franks. It was taken from the Franks by Theodoric the Ostrogoth king of Italy. While under the Frankish sceptre the town suffered from the Lombards, who sacked it (A.D. 576), and from the Saracens, who seized it, but were quickly driven from it by the Franks, about the middle of the 8th century. In the division of the empire of Charlemagne among his descendants (856), Marseille was included in the kingdom of Provence, under Charles, younger son of the emperor Lothaire; and afterwards it made part of the kingdom of Provence, or Bourgoigne Cis-jurane, under Boso (879). The union of this kingdom with that of Bourgoigne Trans-jurane under Rudolph II. (930), and the subsequent acquisition of the united kingdoms by the emperor Conrad le Salic (1032), brought Marseille into the condition of a remote dependency of the German empire. During these changes, from the 10th century Marseille was under the immediate dominion of its own viscounts.

The Marseillois appear to have been actively engaged in the Crusades; and in the third Crusade, several armaments sailed from their port. The commerce of the town at this time was great, and the townsmen were in league with some of the great trading cities of Italy for the purposes of trade or of defence. In the beginning of the 13th century they freed themselves from feudal subjection to their viscounts and to the counts of Provence, and organised themselves into a municipal republic, under a chief magistrate called the podestat; but in a few years they were deprived of many of their privileges by Charles of Anjou, count of Provence, brother of Louis IX. It was from Marseille that Charles set sail for the conquest of Naples.

In the year 1421 Marseille was taken by the king of Aragon, and a considerable part of it sacked and burned. Upon the retreat of the Aragonese (1423), it was further plundered by marauders from the surrounding country. The town recovered however from this severe blow, and became the ordinary residence of René, duke of Anjou and Lorraine, who died here in 1480. Upon the death of Charles, count of Maine, successor of René, Marseille came directly under the government of the French crown, to which it has ever since remained subject.

The Constable De Bourbon at the head of an army of Imperialists besieged Marseille (1524), but was bravely repelled by the townsmen. In the year 1536 the town was again unsuccessfully attacked by the Imperialists under Charles V. in person and the Duke of Alba. In the reign of Louis XIV. the municipal privileges of the city were diminished, and forts were built, as much probably to control the townsmen as to defend the place. In 1720, 40,000 or 50,000 of the inhabitants were swept away by pestilence. Belzunce, bishop of Marseille, the municipal officers of the town, and three physicians of Montpellier, distinguished themselves by the courageous performance of their duties at this trying season. In the first French revolution a band of political fanatics went to Paris, and were among the leaders in the attack on the Tuileries, in August 1792. The townsmen attempted, but in vain, to support by an insurrection the Girondists against the party of the Mountain.

The city of Marseille is built on the coast of the Mediterranean, which here runs north and south. The harbour is formed by a small inlet of the sea, running eastward into the very heart of the city, which is built round it. Its immediate site is a rich valley or hollow inclosed on the land side by hills, of which the highest is that of Notre-Dame de la Garde, on the south, surmounted by a fort. From the summit of the hill of Viste, on the north side of the town, over which the road from Paris leads, 3 miles distant, a fine view is obtained of the town and of the numerous country houses (said to be 6000 or 6000 in number) which occupy the surrounding part of the valley. The town was once fortified, and there are some remains of its walls and bastions. The entrance from Paris is by a fine broad planted road or wide street, called 'Le-Cours,' which extends into the heart of the town, and is prolonged in a direct line, by a street of less width, quite through the town. To the east of this street is the old town, occupying a triangular point north of the harbour. The principal streets in the old town are the Rue Sainte-Marthe and the Grande Rue, which traverse it from east to west. These are cut nearly at right angles by the streets Belzunce, Négrel, and de-l'Évêché, and a number of others. All these streets are narrow, and on each side rise rows of very high and massively built houses. There are several large and regular squares in the old town, of which the principal are the Place Neuve, and those called des Grands-Carmes, du Palais, de Luiche, de Jauguin, de l'Observance, and La Place-Vivauz.

West of the Cours lies the new town, which consists of broad straight streets, provided with paved foot-paths and lined with high well-built houses. The street of Aix traverses the new town from north to south, and abuts on the Place Castellane. It is elegantly built and above a mile long. But the finest street in the new town is the Rue Cannabiere, combining great width with elegance of structure, and commanding a view of the harbour, the shipping, and the hills behind. A quarter of the town, inclosed by canals cut from the harbour, and called 'quartier-du-canal,' consists of well-built streets, the lines of which intersect in a well-built square. The squares of the new town are all regularly built and tastefully ornamented; in the principal are the Place Royale, and those of St-Feréol, Monthion, du Grand Théâtre, and de la Port-de-Rome. The port, an oval of more than half a mile long and about a quarter of a mile broad, and capable of containing 1200 vessels, is surrounded by fine quays. There are several promenades, the finest of which are the Esplanade of Tourrette, on the shore in the old town, and the Boulevard des Dames. The course, which connects the streets of Aix and Rome, also forms a fine central promenade: it is bordered with trees and ornamented with fountains and lined with elegantly constructed houses. The town-hall, built by the architect Puget, faces the harbour; the ground-floor is used as the exchange; the great council-chamber has some fine paintings. A new exchange was commenced in 1852. There are a new market-house supported by thirty-two columns of the Tuscan order, a fish-market, and other markets; a lazaretto on the shore, north of the city, one of the finest and best managed in the world. There are also a mint; two theatres, the chief of them one of the finest in France: a splendid hospital; a triumphal arch, a column, and several handsome public fountains. Water is brought from the little rivers Huveaune and Jarret by an aqueduct almost entirely subterranean, and recently an aqueduct (one of the most stupendous works of the kind in the world) has been constructed to convey the water of the Durance to the city. A notice of this aqueduct is given in the article BOUCHES-DU-RHÔNE. Many houses have wells.

Marseille is the third city in France for population, being exceeded only by Paris and Lyon. It has always depended for its prosperity on commerce. The harbour is perfectly safe. A lighthouse on Planier Island (43° 11' 54" N. lat., 5° 13' 59" E. long.) and buoys mark the approach from the south to the harbour, which is frequented by vessels of all nations. Opposite the mouth of it, which is narrow, not permitting the entry of more than one ship at a time, are the three small islands of If (having a castle, once used as a state prison, and numerous batteries), Ratonneau, and Pomègue, which are both fortified. The islands of Pomègue and Ratonneau are connected by a dyke, or break-water, so as to form, with the addition of a jetty, a quarantine harbour for vessels coming from places suspected of contagion. This harbour is called Port-Dieu-Donné; its shores are lined with quays and ship-building yards, and it is altogether a busy place, which bids fair to become of great importance. The entrance to the port is defended by the cross-fire of two forts: Fort St-Jéan on the north, and Fort St-Nicholas on the south. Very extensive docks for the accommodation of shipping have been recently constructed.

The port is liable to be filled by the mud brought down by the rain from the neighbouring hills, but dredging machines are continually at work to keep it clear. Frigates enter with difficulty; ships of the line anchor in the road between the islands of Ratonneau and Pomègue, near the quarantine harbour. This anchorage is secure. The total number of vessels that entered and left the port in 1852 amounted to 15,366, measuring 1,672,323 tons, and worked by 133,960 men. Six screw-steamers ply regularly to Liverpool; two screw-steam companies trade with Italy; a steam company trades to Morocco and Spain, another with Algérie, and another employs its vessels in the coasting trade. The trade of Marseille has greatly increased since the conquest of Algérie by the French. The French trade with the Levant is entirely carried on from the port of Marseille. The imports are of raw cotton, sugar, coffee, dye-woods, corn, coal, linen, thread, manufactured goods, hides, wool, tallow, timber, colonial products, &c. The exports are of wines, brandy, corn, dried fruits, perfumery, oil, soap, hosiery, damask and other linens, woollens, silks, leather, madder, hides, and colonial produce. In 1843 the imports and exports amounted in value to about 8,000,000*l.* sterling each. The customs duties of the port in the same year amounted to 1,200,000*l.* sterling. Since 1848 the trade has more than doubled.

The chief manufactures are soap, marocco and other leather, glass, porcelain, hats, caps, starch, gunpowder, snuff, alum, sulphur, vitriol, nitre and other chemicals, glue, wax-candles, straw-hats, and cutlery. The refining of sugar and salt; calico-printing; the distillation of brandy, essences, and liqueurs; cork-cutting; and the preparation of anchovies, salt provisions, dried fruits, olives, and wine for exportation, are carried on. The city is, from its commercial character, the resort of foreigners of all nations; and the variety of costume, continual bustle, and medley of languages which this occasions are among the most striking features of the place.

Marseille abounds with hotels and has public baths and handsome coffee-houses. The mistral, a keen, parching, and often tempestuous wind, blights all verdure, and its blasts are interchanged with the scorching rays of an unclouded sun; swarms of gnats infest every

corner night and day, and the scorpion is often found in the houses, occasionally in the beds.

Marseille has a custom-house, a stamp-office, an exchange, and a board of trade; tribunals of first instance and of trade, and a council of Prud'hommes. Among its educational establishments, which are numerous, are an academy of sciences and belles-lettres, an atheneum, a medical society, a school of hydrography of the first-class, an endowed college, a secondary school of medicine, a school of music, a diocesan seminary, and a preparatory theological school. It has also a botanical garden, a school for deaf-mutes, a public library of 50,000 volumes and above 1000 manuscripts, a picture gallery, collections of coins and natural history, and an observatory. The observatory is a large and lofty building, the top of which commands a fine view of the town, the harbour, and the neighbouring country. The ground-floor is occupied by the naval school, the school of geometry, and the school of practical mechanics. Astronomy and navigation are favourite studies at Marseille.

The parish and other Catholic churches and chapels are 20 in number. The Calvinists have a consistorial church and the Jews a consistorial synagogue. There are several hospitals and other charitable institutions. The most ancient church is that of La-Major, which has however been so altered and repaired that it has generally the appearance of a modern edifice. It contains an altar with a bas-relief of the 11th century. The church of the monastery named after St. Viator, who suffered martyrdom here under Diocletian (July 20, 303), and whose remains are here buried, is also an ancient structure, but of no architectural pretensions. The church is the only part left of the monastery. The Carthusian church outside of the town is a fine ecclesiastical edifice, superior to any church in Marseille. There is a new cathedral being built, which promises to be a splendid structure. Beyond a few pieces of ancient sculpture, and the remains of one or two ancient monasteries, Marseille is singularly deficient in external evidence of its remote origin. The hotel occupied by the prefect of the department in the new town is a handsome and elegant edifice, by far the finest civic structure in Marseille.

The diocese of Marseille comprehends the town and its arrondissement. The bishop is a suffragan of the Archbishop of Aix. The see was founded in the third century. The town is the head-quarters of the 9th Military Division, which includes the departments of Basses-Alpes, Vaucluse, Var, and Bouches-du-Rhône. [See SUPPLEMENT.]



Coin of Marseille.

British Museum. Actual size. Silver.

MARSHFIELD. [GLOUCESTERSHIRE.]

MARSICO NUOVO. [BASILICATA.]

MARSTON MORETAINE. [BEDFORDSHIRE.]

MARSTRAND. [SWEDEN.]

MARTABAN. [TENASSERIM.]

MARTEL. [LOT.]

MARTIGUES, LES. [BOUCHES-DU-RHÔNE.]

MARTIN, ST., one of the Leaser Antilles, lies to the south of Anguilla, from which island it is separated by a deep channel, about 4 miles wide in the narrowest part. St. Martin is about 12 miles long and of a very irregular shape; its area is about 90 square miles. It contains a great number of rocky hills. The soil of the valleys and plains is sandy, and not very productive; there are no rivers or running streams on the island. The little rain which falls is collected into cisterns. The produce consists of sugar, rum, cotton, tobacco, and cattle. The island also contains some valuable salt-ponds.

St. Martin was originally settled by Spaniards, but they abandoned the island in the middle of the 17th century. After this it was held jointly by the French and the Dutch, the former taking the northern and the latter the southern half, which contains the salt-ponds. Marigot, the French town, stands in 18° 4' N. lat., 63° 10' W. long. Philipsburg, on the south-west side, in 18° 1' N. lat., 63° 7' W. long., has a commodious harbour with from 8 to 10 fathoms water. The population of the French part of the island is about 4000, of the Dutch 950.

MARTIN-DE-LONDRES, ST. [HÉRAULT.]

MARTIN-EN-RÉ, ST. [CHARENTE-INFÉRIEURE.]

MARTINIQUE, one of the French West India Islands, the most northern of the Windward Isles, is 10 leagues S.S.E. from Dominica. Its greatest length is 50 miles from north-west to south-east, and the mean breadth is about 16 miles; in form it is very irregular, and its surface is very uneven, being generally occupied by conical-shaped hills. Three mountains of considerable height are visible on approaching the island in any direction; one of these, Mont Pelée, on the north-west side, is an extinct volcano; the summits of the three are mostly covered with clouds. The island contains a great number of streams, and the coast, being indented by numerous bays and inlets, affords many good harbours. There are two towns, St. Pierre and

Port-Royal, both on the west side of the island; the former is in 14° 44' N. lat., 61° 14' W. long., and the latter (which is the capital) in 14° 35' N. lat., 61° 7' W. long. Port-Royal, the residence of the governor, stands on the north side of a deep and well-sheltered bay, protected by a fort which covers the whole surface of a peninsula and commands the town and harbour. During the war and while Martinique was in possession of the English, Port-Royal was the general rendezvous and head-quarters of the fleet stationed in the West Indies. The Diamond Rock, which is about 3 leagues south-south-east from Port-Royal Bay, was taken possession of by the English between the breaking out of the war in 1802 and the capture of the island in 1810, and was commissioned and rated as a sloop of war in the British navy. St. Pierre is an open roadstead, affording very indifferent shelter to shipping, but it is the principal place of trade in the island, and is said to be the handsomest town in the West Indies. It consists of three spacious streets parallel to the beach, and several transverse streets. Streams of water are conveyed through the principal streets, and impart a degree of freshness to the air most desirable in so warm a climate.

The population of the island, including liberated slaves, on Jan. 2, 1848, numbered 120,179, thus distributed:—The town and commune of St. Pierre, 20,360; Port-Royal, or as it is otherwise called, Fort-de-France, 12,611; and the remainder among the other 21 communes of the island.

The chief products of the island are sugar, molasses, and rum. Other products are coffee, cotton, cacao, and cloves. The quantity of sugar exported from Martinique to France in 1848 was 19,731,392 kilogrammes; in 1849, 18,391,600 kilos.; in 1850, 14,242,200 kilos.; in 1851, 19,715,530 kilos.; and in the first six months of 1852, 15,829,633 kilos. The island is subject to earthquakes and yellow fever, and often makes great ravages among the population.

Martinique, the native name of which is said to have been Madiana, was discovered by the Spaniards in 1493; colonised by the French in 1635; taken by the English in 1762, and again in 1794 and 1810; and restored finally to France in 1814. Its original inhabitants were Caribs, of which race there is none left on the island. [See SUPPLEMENT.]

MARTLEY, Worcestershire, a village and the seat of a Poor-Law Union in the parish of Martley, is situated near the left bank of the river Teme, in 52° 14' N. lat., 2° 21' W. long., distant 8 miles N.W. by W. from Worcester, and 118 miles N.W. by W. from London. The population of the parish in 1851 was 1309. The living is a rectory in the archdeaconry and diocese of Worcester. The church, which is of the 13th century, has a good painted east window. There are National schools, in which are incorporated an old foundation for a boys school, and one founded about a century ago for girls. Martley Poor-Law Union contains 28 parishes and townships, with an area of 50,731 acres, and a population in 1851 of 13,791.

MARTOCK. [SOMERSETSHIRE.]

MARTOS. [JÆRN.]

MARVEJOLS. [LOZÈRE.]

MARWAR. [HINDUSTAN.]

MARYBOROUGH, Ireland, the chief town of Queen's County, is situated on the Triogue, a tributary of the Barrow, in 53° 2' N. lat., 7° 18' W. long., 51½ miles S.W. by W. from Dublin by road, and 50½ miles by the Great Southern and Western railway. The population of the town in 1851 was 2079, besides 55 in the hospital, 223 in the lunatic asylum, and 278 in the jail. The town consists of a long irregular street on the Dublin and Limerick road, with several branches on both sides. It contains a neat church erected in 1803, a Roman Catholic chapel, three chapels for Dissenters, and two National schools. In the town are the county court house, the jail, the infirmary, a large infantry barrack, a bridewell, and a fever hospital. The Lunatic Asylum for Longford, Westmeath, King's County, and Queen's County, is a spacious and handsome building, standing in a well-planted inclosure of 22 acres. The assizes are held in the town, as are also quarter and petty sessions. Fairs are held eight times a year. The market-day is Thursday. In the centre of the town are the remains of an ancient castle. The town was named after Queen Mary, in whose reign the county was formed.

MARYLAND, one of the United States of North America, being the most southern of what are known as the Middle States, lies between 38° and 39° 43' N. lat., 75° 3' and 79° 32' W. long. It is bounded E. by the Atlantic Ocean and the state of Delaware, N. by Pennsylvania, W. by a straight line along 79° 32' W. long. from the Pennsylvania boundary to the Potomac, which divides it from Virginia down to 39° 10' N. lat., from which point to Chesapeake Bay it is bounded W. by the Potomac River, which separates it for 320 miles from Virginia, and S. it is bounded by Chesapeake Bay and the state of Virginia. The area is about 11,000 square miles. The total population in 1850 was 583,034, or 53 to the square mile. The federal representative population according to the Census of 1850 was 546,886, in which number three-fifths of the slaves are included. This, according to the present ratio of representation, entitles the state to send six representatives to Congress. To the Senate, like each of the other United States, Maryland sends two members.

Coast-line, Surface, &c.—The surface of Maryland consists of three great natural divisions, known as the Eastern Shore, the Western Shore, and the Mountainous Country. The Eastern and Western

Shores are divided by Chesapeake Bay and the Susquehanna River. The Eastern Shore, or the country east of Chesapeake Bay, has a level surface as far north as Chester Bay, where it begins to be undulating, and towards the boundary of Pennsylvania isolated hills make their appearance. The soil is generally thin and slender, but tolerably well cultivated. Along the shores both of the Atlantic and Chesapeake Bay marshy tracts of some extent occur. The largest is the Cypress Swamp, which partly belongs to Delaware, and is wooded. It is situated near the northern extremity of Sinepuxent Bay, a shallow arm of the sea, from one to five miles wide and nearly 30 miles long, which is formed by a long narrow stretch of sandy beach, which is a prolongation of the coast of Delaware. The water of this bay is comparatively fresh. Along the eastern side of Chesapeake Bay several indentations occur, forming harbours for vessels of moderate size, as Pocomoke Bay, Fishing Bay, Choptank Bay, and Chester Bay. There are several islands belonging to Maryland in Chesapeake Bay, of which the largest is Kent Island.

The Western Shore, or the country on the western side of Chesapeake Bay, is of the same description as the Eastern Shore, but rather less fertile, its surface being mostly composed of a quartzose sand, without a sufficient quantity of clay to render it productive. But there are some productive tracts of considerable extent, as in the neighbourhood of Annapolis. North of the river Patapsco the country along the Chesapeake Bay is undulating, and possessed of a greater degree of natural fertility. The bays and inlets along the western are not so numerous as those along the eastern shore, but they are more important. The principal are those formed by the Potomac, the Patapsco, on which Baltimore the chief commercial city stands, the Severn, on which Annapolis the capital of Maryland is built, the Bush River, Herring Bay, &c.

About 20 miles from the Western shore the country rises into hills which extend westward to the foot of the Blue Ridge, a part of the Appalachian range, a distance of about 40 miles. In this hilly tract the fertility of the soil varies greatly; the extremes of fertility and sterility are frequently found in a very limited space. The country west of 77° 30' W. long. is mountainous, being traversed from south to north by six or seven of the ranges which compose the Appalachian system. These ranges form long, narrow, steep, and almost parallel ridges of nearly equal height, running in nearly straight lines in a generally north-east and south-west direction. These ridges, as we proceed westward, are the South-East Mountain Ridge, sometimes called Parr's Ridge, which terminates with Sugar-Loaf Mountain on the Potomac; Cotoctin Mountains, crossing the Potomac at the Point of Rocks; South Mountain Ridge, better known as Blue Ridge, which crosses the Potomac at Harper's Ferry; the Kittatiny Ridge, which crosses the Potomac at Hancock; Rugged Mountain Ridge, Wills Mountain Ridge, and in the extreme west the great Alleghany Ridge. The valleys which are inclosed by these ridges are generally wide and fertile; they are from 500 to 800 feet above the level of the sea; and the ranges rise to an elevation of from 2000 to 2500 feet. The mountain district is so extremely irregular in outline, that though it occupies the whole breadth of the state, and is above 100 miles wide at the eastern, and 35 miles wide at the western extremity, it is compressed in the middle to less than three miles; the boundaries of Virginia and Pennsylvania there approaching to within that distance of each other.

Hydrography, Communications, &c.—Chesapeake Bay, which divides Maryland into two parts, belongs, above the mouth of the Potomac, wholly to this state. It is the deepest indentation of the eastern shore of North America between Florida Reef and the Bay of Fundy, and it is one of the finest æstuaries for commercial purposes in the world. From the entrance of the bay to the river Susquehanna is about 180 miles: of this, the lower portion, from the entrance to the mouth of the Potomac, nearly 80 miles, belongs to Virginia; the bay above the Potomac, a length of more than 100 miles, belongs to Maryland. The width of the bay averages 25 miles in its lower, and 10 miles in its upper part. Its area is estimated at 3500 square miles. It receives several important rivers, the chief on the west side being the Potomac and James, with the Susquehanna, Patapsco, Patuxent, Rappahannock, and York, which bring down all the waters from the eastern declivities of the Appalachian Mountain ranges between 37° and 43° N. lat.; it receives on its east side the Elk, Chester, Choptank, Nanticoke, and Pocomoke. It contains numerous good harbours, is generally 9 fathoms deep, and is navigable throughout.

Maryland is well supplied with navigable rivers. The most important is the Potomac, which belongs throughout equally to Maryland and Virginia. It rises within the Appalachian Mountains, with two branches: the northern branch rises in 39° 10' N. lat., on the eastern declivity of the Backbone Range, and runs in a generally north-eastern direction for about 70 miles, forming the boundary between the two states. Twenty miles below Cumberland it is joined by the South Branch, which rises in the centre of Virginia, about 38° 25' N. lat., and runs north-east for above 100 miles in a valley inclosed between the Alleghany and Kittatiny chains, before it unites with the northern branch. After this junction the Potomac flows in an eastern direction through mountain ranges with great rapidity, until it turns south-east, and before it breaks through the Blue Ridge, the most eastern chain of the Appalachian system, is joined from the

south by the Shenandoah, the largest of its affluents, which rises in Virginia, near 38° N. lat., and flows over limestone rocks, in a wide and fertile valley between the Kittatinny and Blue ridges, for about 180 miles. The united stream passes through the Blue Ridge at Harper's Ferry, by a gap which has all the appearance of being the effect of a violent disruption in the continuity of the mountain chain. The river now enters the plain country, through which it flows in a south-east direction, with rather a rapid course: the last falls occur a few miles above Georgetown, 8 miles above Washington, to which place the tide ascends. Below the head of tide-water the Potomac becomes a deep and wide river, and passing Washington and Alexandria, it has a general east-south-east course to Chesapeake Bay, which it enters in 30° N. lat. At its mouth the Potomac is 7 miles across. At the falls above Georgetown it is 10 feet deep, and at Alexandria 18 feet; ships of the line ascend to the Washington navy-yard. Around all the falls canals have been constructed. The whole course of the river exceeds 500 miles: large boats ascend it 50 or 60 miles above Harper's Ferry, and smaller ones much higher. The chief tributaries of the Potomac belonging to Maryland, are the Monocacy River, the Antietam, and Conococheague Creeks.

The *Patapsco*, the second largest river, rises on the eastern border of the hilly country, in 39° 20' N. lat. Its general course varies between south-east and south, and it flows about 100 miles; towards its mouth it becomes a bay, from 2 to 3 miles wide. It is navigable for vessels of 250 tons to Nottingham, 50 miles from its outlet, and boats ascend 14 miles higher, to Queen Anne's Town. The *Patapsco* forms the harbour of Baltimore. This river likewise rises in the eastern portion of the hilly region, north-west of the source of the Patuxent; after a course of about 30 miles in an east-south-east direction, it falls over a ledge of rocks, and before it enters Chesapeake Bay it widens into an estuary 10 or 12 miles in length. Vessels of 600 tons can sail to Fell's Point, the lower harbour of Baltimore, and boats may ascend to Elkridge Landing, 8 miles above Baltimore. On its banks are several extensive mills. The *Susquehanna* river traverses the northern part of Maryland for 15 miles, before it falls into Chesapeake Bay. The tide ascends to Fort Deposit 5 miles from its mouth; above this are falls. The Elk, Chester, Choptank, Nanticoke, and Pocomoke belonging to the Eastern Shore, mostly rise in Delaware, and are navigable for 30 or 40 miles. The *Youghiogheny* is the only Maryland river which does not flow into Chesapeake Bay. It rises in the extreme west of the state, shortly after passes into Pennsylvania, and there unites with the Monongahela, a tributary of the Ohio, which falls into the Mississippi, and empties itself into the Gulf of Mexico.

There are several short canals in the state. Some of the earliest constructed were those out for avoiding the falls and rapids in the upper course of the Potomac, but they have been to a great extent superseded by the Chesapeake and Ohio Canal, extending from Alexandria to Cumberland 191 miles, on the Virginia side of the river, and the Baltimore and Ohio railway. The Chesapeake and Delaware Canal, which is carried across the neck of the Delaware peninsula, and of which about half is in Maryland, is noticed under DELAWARE. Besides these there is the *Susquehanna* and Tide-Water Canal, constructed to assist the navigation of the *Susquehanna*.

The turnpike roads are generally good. Perhaps the most important lines are that from Baltimore to Hagerstown and thence to Cumberland, and the great national road from Cumberland westward. The total length of railway completed in Maryland in 1854 is said to exceed 500 miles: but all the longer lines belong in part to other states. The Baltimore and Ohio railway, running from Baltimore to Wheeling on the Ohio in Virginia 387 miles, belongs in part to Virginia and Ohio as well as to Maryland: it has two branches which belong to Maryland; the Washington 31 miles long, from Relay House, 7 miles S.W. from Baltimore to Washington, and the Frederick branch 3 miles long. This line opens a ready communication between the middle and western states, and is of great commercial importance to both. The Philadelphia, Wilmington, and Baltimore railway, 100 miles long, connects the cities so named; about half its length belongs to this state. The Baltimore and *Susquehanna* line, from Baltimore to York in Pennsylvania, has two-thirds of its extent in Maryland; the Westminster branch, from Relay House to Owings Mills, 7 miles, is wholly in the state. The Newcastle and French Town line, 16 miles long, connects Newcastle in Delaware with French Town in Maryland. The Annapolis and Elk Ridge railway, 21 miles long, belongs throughout to Maryland; it connects the capital with the Baltimore and Ohio railways.

Geology, Mineralogy, &c.—The geological features of Maryland are varied and interesting. Through the western side of the western shore and the eastern part of the mountain district runs a belt of eruptive and metamorphic rocks, from 50 to 100 miles wide, but covered in the centre by a band of uncomformable red-sandstone. The hills included in this series are generally round topped, and seldom rise more than 900 feet above the level of the sea. West of the red-sandstone they rise much higher. The rocks in the eastern part are granite, gneiss, mica, and talcose-schists, serpentine, primary limestone, &c. On the west these rocks are bounded by a narrower belt of the Lower Silurian formation, extending like the hypogene series in a north-east and south-west direction across the state. West of the

Lower Silurian, and following its general outline, is a still narrower belt of Upper Silurian strata; both the series being bent, folded, and fractured in a very remarkable manner. The country west of the Upper Silurian series consists almost entirely of Devonian strata, covered in places by small basins of the Carboniferous formation. The Upper Carboniferous strata, or coal-measures, occur in numerous small detached basins, outlying portions of the great Alleghany coal-field of Ohio, Pennsylvania, &c. These upper carboniferous strata consist of shale, grit, sandstone, limestones, argillaceous iron-ore, and coal, and dip on every side towards the centre of the basin. The north-eastern angle of the state, from the head of Chesapeake Bay, is for the most part occupied by Cretaceous strata, chiefly greensand and marl; but the Cretaceous rocks are to a great extent covered by more recent deposits. The whole of the state east of Chesapeake Bay (except the small portion occupied by the Cretaceous rocks), belongs to the tertiary formation, as does also the level tract along the western shore of the bay.

Maryland is rich in minerals, though they have as yet been only partially rendered available. The first place is claimed by the coal. The area of the coal-fields is estimated at 135 square miles; and the whole thickness of available coal at 45 feet. The coal is of excellent quality, but much of it lying in the midst of a wild forest region the larger part has been left undisturbed, and is likely for a long period to remain so. Iron is also extensively found. Brown hematitic ore, producing iron of excellent quality, occurs on the borders of the primary limestone district. Iron-ore also occurs extensively in the upper carboniferous strata. Titanated iron, which has been worked successfully, occurs in the gneiss rocks of Hartford county. Copper is obtained largely in the new red-sandstone strata. The serpentine rocks yield a large amount of peroxide of chrome, extensively used in the making of dyes and pigments. The primary limestones yield a beautiful saccharoidal marble, in much request for building purposes in Washington and Baltimore; and the conglomerates of the new red-sandstone series are much admired as an ornamental stone.

Climate, Soil, Productions.—The climate is rather mild in the level part of the country; but the winter is severe enough to block up the harbour of Baltimore with ice for some weeks. The range of the thermometer in Baltimore is from 9° to 92°; the mean annual temperature exceeds 53°. In the level and hilly districts the summer heat is modified by sea-breezes; but in the valleys between the mountains it is frequently almost insupportable, and these valleys experience very severe winters. The prevailing winds blow from north-west and south-east. Rain is rather abundant, the mean annual fall amounting to about 40 inches, and it occurs nearly in equal proportions throughout the year. Drought is rare. On the low shores of Chesapeake Bay agues and intermittent fevers are prevalent during summer and autumn. The mountain districts are very healthy.

As has been already mentioned, the soil of the level tracts known as the Eastern and Western Shores is everywhere more or less sandy; but marls, shell-lime, marsh-mud, peat, and other substances used as fertilisers abound, and with careful cultivation render the soil very productive. The valleys between the mountain ridges have an excellent soil; the slopes afford good grazing-ground. Wheat, maize, and tobacco are the staple productions; rye, oats, and barley are grown, and cotton is said to flourish in the southern counties. South of Baltimore a very choice kind of tobacco known as Kitesfoot is grown. The whole country was originally covered with a dense forest, of which a considerable part still remains, composed of a great variety of trees, especially oak, hickory, chestnut, ash, walnut, pine, the cedar, locust, and the tulip-tree, with a great variety of herbaceous plants. Along the coasts of the Atlantic and the adjacent swamps a wild grape grows, the fruit of which yields a pleasant wine. In the upper valleys hemp and flax are produced in considerable quantities. Vegetables of various kinds are abundant. The common fruits of England, as apples, pears, plums, and peaches, succeed in most places, and are of good quality.

The common domestic animals succeed well in Maryland. The forests abound with nuts suitable for fattening hogs, which are suffered to run at liberty in the woods, and when fattened are killed and exported in great quantities. The wild animals have nearly disappeared from the plains, but in the forests on the mountains wolves, bears, and deer are still found. The wild turkey is still seen in the western districts; the land-tortoise is also common. Fish is abundant, especially in the Potomac.

Manufactures, Commerce, &c.—Manufacturing establishments are rather numerous, but chiefly concentrated in the neighbourhood of Baltimore. The principal articles made are iron utensils, woollen and cotton goods, hats, paper, ropes, leather, sugar, and tobacco. Vessels are built at Baltimore and Annapolis.

In commercial importance Maryland ranks fifth or sixth of the states of the Union. The maritime commerce is almost entirely in the hands of the inhabitants of Baltimore; Annapolis and Easton having only a small portion of it. The exports consist of flour, wheat, rye, and Indian corn, flax-seed and flax-seed oil, salt beef and pork, butter, hogs' lard, whisky, lumber, and a considerable quantity of tobacco, which is greatly esteemed in the European market. The imports are colonial merchandise from the West Indies, wines and spirituous liquors, tea and spices, hardware and other manufactured

goods. The value of the imports in the year ending June 1st 1852 was 6,719,986 dollars.

Divisions, Towns, &c.—Maryland is divided into 20 counties. Annapolis is the political capital, but Baltimore is the commercial metropolis, and much the largest and most populous city in the state—ranking indeed in these respects as the third city in the United States. ANNAPOLIS and BALTIMORE are described under their respective titles. There are few other towns with any considerable population; the more important are noticed below: the population is that of 1850:—

Cumberland, the capital of Alleghany county, is situated on the left bank of the Potomac, at the confluence of Wills' Creek, 146 miles W.N.W. from Annapolis: population, 6073. Cumberland is the centre of the Alleghany mining district, and the most populous place in the state except Baltimore. It contains the usual county buildings, a market-house, several churches and schools, two banks, &c. Several of the public buildings are handsome structures. The coal of the district is semi-bituminous, and in considerable demand for ocean steamers. The Baltimore and Ohio railway passes through Cumberland; the great national road leading to the Mississippi commences, and the Chesapeake and Ohio Canal terminates here. Short lines of railway connect the mines with the town. Three newspapers are published here weekly.

Fredericktown, a city, and the capital of Frederick county, is situated on Carroll's Creek, a feeder of the Monocacy, 63 miles W.N.W. from Annapolis: population, 6028. In number of inhabitants Fredericktown ranks third among the cities of Maryland; but in wealth it is inferior only to Baltimore. The city is regularly laid out and well built, and the streets are wide. It contains a court-house, jail, and other county buildings, 17 churches, a college or high school and other institutions belonging to the Roman Catholics, library and scientific institutions, &c. Some of the churches are spacious and handsome, and the court-house is a substantial structure. Fredericktown is the centre of a rich agricultural and mineral district, contains several factories, and has an extensive trade. A branch railway connects it with the Baltimore and Ohio railway. Five newspapers are published here weekly.

Easton, the capital of Talbot county, stands on the Treadhaven Creek, 12 miles above its confluence with the estuary of the Choptank River, and 27 miles S.E. from Annapolis: population, 1413. Easton is a busy place, and contains a neat court-house, 4 churches, and some other public buildings, but is chiefly noticeable as the largest town on the eastern shore. Two newspapers are published here weekly.

Hagerstown, the capital of Washington county, on the right bank of Antietam Creek, 22 miles above its confluence with the Potomac, and 87 miles N.W. from Annapolis: population 3879, of whom 485 were free coloured persons and 183 slaves. The town stands in the midst of a rich agricultural district; is regularly laid out, has broad streets, is well built, and contains a court-house, jail, town-hall, several churches, two banks, &c. Seven weekly newspapers are published here. The town is situated near the border of Pennsylvania, and a short railway, called the Franklin, connects it with the railways of that state. Chester, on the river of the same name; Denton, on the Choptank; Elkton, on the Elk River, near the north-eastern angle of the state; Havre-de-Grace, on the Susquehanna; Port Tobacco, at the head of Tobacco River; Princess Anne, on the Manokin; Rockville, on Rock Creek, a tributary of the Potomac; Snow Hill, on the Pocomoke; Vienna, on the Nanticoke; and Upper Marlborough, on the Patuxent—are places of local consequence, and carry on a considerable trade, but neither of them has a population much exceeding 1000.

Government, &c.—The original constitution of Maryland was adopted in 1776, and subsequently amended more than twenty times. It was superseded by the present constitution, which was framed and adopted in 1851. By the new constitution the suffrage is vested in every free white male citizen of the United States, 21 years of age, who shall have resided in the state one year, and in the place for which he proposes to vote six months preceding the election. The legislature consists of a Senate of 32 members, elected for four years, and a House of Delegates of not less than 65, nor more than 80 (at present 74), members, elected for two years. The governor is elected for four years.

As regards provision for education Maryland is behind many of the states of the Union.

Maryland was first settled as a place of refuge for the persecuted Roman Catholics of England by Lord Baltimore in 1634, when 200 Roman Catholics established themselves at St. Mary's, and the country received the name of Maryland from Henrietta Maria, the wife of Charles I. The number of settlers soon increased, not only by emigration from England, but also by the addition of Nonconformists from New England and Virginia. During the Commonwealth the oppression of the Catholics retarded the growth of Maryland, though it enjoyed a more liberal constitution than the other colonies. In 1699 the seat of government was fixed at Annapolis, where it has ever since remained. Maryland took an active part in the war of independence; and formed one of the 13 original states of the Union. Except during the war with England in 1812, when the British naval forces did considerable mischief to the towns along

Chesapeake Bay, the subsequent history of the state is confined to its internal affairs.

(Kennedy, *History and Statistics of the State of Maryland* (Official Report), 1852; *Seventh Census of the United States* (General Report), 1853; *Statistical Gazetteer of the United States*, 1853; Haakill and Smith, Lippincott, *Gazetteers of the United States*; Ducatel, *Geology of Maryland*; Marcou, *Geological Map of the United States*; *American Almanac*, 1854.)

MARYPORT, Cumberland, a market-town and sea-port, in the parish of Canonby Cross, is situated on the sea coast, at the mouth of the river Ellen, in 54° 42' N. lat., 3° 28' W. long., distant 29 miles S.W. from Carlisle, 311 miles N.W. by N. from London by road, and 328 miles by railway, via Carlisle. The population of the town of Maryport in 1851 was 5698. The living is a perpetual curacy in the archdeaconry and diocese of Carlisle. The town is governed by 13 Trustees, appointed under an Act of Parliament, 4 by the lord of the manor, and 9 by the rate payers.

In the year 1750 there was only one house on the present site of the town of Maryport. The chapel of ease was built in 1760, and enlarged in 1837-38. A very handsome market-house and a new bridewell have been recently erected, and a new harbour formed. There are chapels for English and United Presbyterians, Wesleyan and Primitive Methodists, Independents, Baptists, Quakers, and Roman Catholics; National and British schools; a mechanics institution; a temperance and general reading-room and library; a hall for the Odd Fellows society; and a savings bank. Checks and linens are made. The manufacture of black-lead pencils is carried on. Ship-building and other occupations connected with shipping employ many of the inhabitants. Large quantities of coal and coke are brought to the port and shipped for Ireland. Lime and stone are also exported, and cattle, timber, flax, and iron imported. The number of vessels belonging to the port on December 31st 1853, was 107 of 16,650 tons burden, with 3 steamers of 233 tons. The number of sailing vessels entered at the port during 1853, was—inwards 383, of 32,860 tons; outwards 2703, of 213,888 tons. There is communication by steam-vessel with Liverpool twice a week in summer. The market-day is Friday. Fairs are held on May 28th and November 12th. Numerous visitors resort to Maryport during the summer season.

MARY'S, ST., ISLAND. [AZORES; SCILLY.]

MARY'S, ST., RIVER. [CANADA.]

MARYSVILLE. [CALIFORNIA.]

MAS-D'AGENOIS. [LOT-ET-GARONNE.]

MASCARA. [ALGERIE.]

MASHAM. [YORKSHIRE.]

MASOVIA. [POLAND.]

MASSA, a small duchy on the west coast of Italy, which, with the annexed territory of Carrara, constituted for a long time a sovereign principality under the family of Cibo. It now belongs to the Duke of Modena. [CARRARA.] The territory of Massa extends about 8 miles from the sea-coast to the Alpe Apuana, or mountain group which divides it from the province of Garfagnana. To the south-east Massa borders upon the territory of Pietra Santa, belonging to Tuscany; and on the north-west it adjoins Carrara: its breadth between these two limits hardly exceeds 6 miles. The small river Frigido flows through the territory of Massa from the mountains of Carrara to the sea. The town of Massa is in the lower part of the country, not far from the sea, on the high road from Genoa to Lucca and Pisa. It is surrounded by fine gardens and plantations of fruit-trees. Massa is a neat town: it is the seat of a bishop, whose see comprises the duchies of Massa and Carrara. There are a palace, a cathedral with some good paintings, a town-house, a fine public garden with orange-trees and a handsome marble bridge over the Frigido. It is the residence of the governor, and has a court of appeal for Massa [CARRARA] and Carrara. The town of Massa contains about 7000 inhabitants, who manufacture silk, and trade in marble.

MASSACHUSETTS, one of the United States of North America, lies between 41° 15' and 42° 52' N. lat., 69° 54' and 73° 34' W. long. It is bounded N. by the states of New Hampshire and Vermont; W. by New York; S. by Connecticut and Rhode Island; and S.E. and E. by the Atlantic Ocean. The length from east to west is about 160 miles; the general breadth from north to south is about 50 miles; but at the eastern extremity it expands to 90 miles, while a long narrow tongue of land, known as the Peninsula of Cape Cod, extends nearly 60 miles beyond the mainland, and south of this peninsula lie two islands, Martha's Vineyard and Nantucket, which form a part of Massachusetts. The area of the state is about 7250 square miles; the population in 1850 was 994,514, or 137.17 to the square mile. The inhabitants being all free, the ratio of representation entitles the state to send eleven representatives to Congress. To the Senate, like each of the states of the Union, Massachusetts sends two members.

Coast-line, Surface, &c.—Narraganset Bay, which lies chiefly within the state of RHODE ISLAND, enters by its most north-eastern inlet into Massachusetts, where it receives the Taunton River, the most considerable of all the streams which fall into that bay; the tide ascends this river to Dighton, 8 miles above its mouth. Farther east is Buzzards Bay, a deep indentation stretching in a north-eastern direction into the mainland. From its entrance between Seaconet

Point and the south-western of the Elizabeth Islands, a chain of 16 small islands which stretch in a north-western direction from an elbow of Cape Cod Peninsula to its innermost corner, Buzzard's Bay, is 35 miles long, but it lessens in width from 10 miles to 1 mile. The innermost corner is divided from Cape Cod Bay by an isthmus 5 miles in width. This bay is very much indented by small but serviceable bays on both shores; it is shallow, especially towards its inner part, yet vessels of considerable draught ascend to New Bedford, 16 or 17 miles from its entrance. The shores are low and sandy. On the east of Buzzards Bay begins Cape Cod Peninsula, which first stretches from the mainland, a little north of east, 35 miles, varying in width from 3 to 20 miles: it then changes its direction to north and north-west, for about 30 miles, with a mean width of 2½ miles, and terminates in Cape Cod. The difference in the rise of the tide, south and north of the peninsula, is remarkable. In Buzzards Bay and in Nantucket Bay it rises from 3¼ to 4 feet, and in Cape Cod Bay to 16 feet. Cape Cod Peninsula incloses the southern portion of a large bay, which is generally called Massachusetts Bay, though that name is now limited to the northern portion of it, and the southern, which is inclosed by the peninsula, is called Barnstable Bay, or Cape Cod Bay. This large bay extends northward to Cape Anne in the form of a parallelogram, 55 miles long from south-south-east to north-north-west, and 25 miles in width. From Cape Cod to Cape Anne it is open 44 miles to the Atlantic. It contains the important harbours of Plymouth, Boston, and Salem. North of Cape Anne the shores are somewhat high and rocky.

South of Cape Cod Peninsula are the islands of Nantucket and Martha's Vineyard. Nantucket is about 15 miles long, and 4 miles wide, rises to a very moderate height, and is level. Its sandy soil is almost entirely sterile, and the inhabitants live by fishing. It constitutes, with some smaller islands adjoining it, a separate county, having a population of 8452 in 1850. Martha's Vineyard is about 16 miles long and 8 miles in its greatest breadth: the surface is level and the soil sandy, but productive in some places. Together with some smaller islands lying near it, Martha's Vineyard constitutes Duke's County, which in 1850 contained 4540 inhabitants. The wide bay which is inclosed by these islands on the south, and by Cape Cod Peninsula on the north, is called Nantucket Bay.

The surface of Cape Cod Peninsula consists of two inclined plains, which attain some elevation where they meet. Between Hyannas Harbour and Barnstable, the highest level is about 80 feet above low-water in Nantucket Bay; but on the isthmus which unites the peninsula to the continent, it is only 40 feet. The soil of this tract is sandy and light, and of an inferior quality, but cultivated with great industry. Much of this peninsula however is quite destitute of vegetation. The country along the western side of Buzzards Bay and the shores of Massachusetts Bay is similar in soil. At the back of this level tract is a hilly region, which in the north-eastern districts extends nearly to the shores of the sea, and westward to the valley of the Connecticut River. Its surface is agreeably diversified by hills and depressions. The soil of the valleys is deep and strong, and cultivated with much care. In this part some hills rise to a considerable elevation, the highest, Mount Wachusett, attaining 2021 feet. Hills of smaller elevation extend towards the Connecticut River, but they approach the banks of the river only near Northampton and Hadley. North and south of these places the Connecticut runs through a valley from 2 to 3 miles wide, which is covered by an alluvium of great fertility. West of it the country immediately rises into high hills, which gradually attain the elevation of mountains; Berkshire, the most western district of the state, being traversed from north to south by two continuous ridges of the Green Mountains, called the Hoosic and Taghkanuc ridges, whose more elevated parts are above 3000 feet high: the highest point is the Saddle Mountain 3800 feet. The valleys of this district have a very fertile soil.

Hydrography, Communications.—Massachusetts is in every part well watered; but the streams are valuable rather for agricultural purposes, and as affording abundant mill-power than for navigation. The western and mountainous region is traversed by the *Housatonic*, which rises near the north-western corner of the state, and traverses it by a southern course of nearly 50 miles, when it enters Connecticut; it is a very rapid river and not navigable in Massachusetts. The *Connecticut* enters Massachusetts from New Hampshire, and traverses it by a course of about 70 miles, including its numerous bends. By means of short canals carried round its falls it has been rendered navigable for the whole of its course in Massachusetts. [CONNECTICUT.] No considerable river falls into Massachusetts Bay. *Charles River*, which falls into Boston Harbour, though its whole course does not exceed 30 miles, is navigable for about 8 miles for large boats, the tide flowing up to Dedham. The *Merrimac* rises in New Hampshire on the western declivities of the White Mountains, north of 44° N. lat., and runs nearly due south, 50 miles, when it receives a branch from Winnepiseogee Lake, and then runs for 52 miles south-south-east, till it is met by the Nashua River from the south-south-west. Below the junction with the Nashua, the Merrimac turns east and then north-east for about 40 miles, when it falls into the Atlantic after a course of more than 150 miles. In its natural state the Merrimac opposed great impediments to navigation, but by means of short canals carried round the several falls and rapids, an uninterrupted navigation has

been effected as far up the river as Concord in New Hampshire. The tide ascends to Haverhill, 18 miles from its mouth.

The state possesses several canals, but since the introduction of railways they are comparatively little employed for commercial purposes. The waters of some of them have been rendered available for mill-power. The following are the chief canals: there are numerous short ones for improving the navigation of rivers, &c. The Middlesex Canal begins at Charlestown opposite Boston, and terminates at Chelmsford on the Merrimac; the length is 27 miles. By it the countries on both sides of the Merrimac are united with the town of Boston. The Blackstone Canal extends from Worcester (which is about half way between Boston and the Connecticut River) to Providence in Rhode Island, 47 miles, of which 16 miles are in Rhode Island. The Hampshire and Hampden Canal, 22 miles long, branches off from the Connecticut River at Northampton, and unites with the Farmington Canal at the southern boundary-line of Massachusetts.

Massachusetts was the first state in the Union to adopt the railway; and the railway system is still more complete than in any other state, nearly every place of any importance being now brought into communication with the trading centres of this and the neighbouring states. The whole length of railways in the state at the commencement of 1854 was about 1300 miles. Main lines extend through the state from Boston through Worcester to Albany, and to Troy on the Hudson, placing Massachusetts in connection with the great districts of the lakes and the far west. Others of equal importance extend from Boston and Worcester through the manufacturing and commercial districts into the states of New Hampshire and Maine.

Geology, Mineralogy, &c.—The Green Mountain districts of the western part and the Alleghany districts of the eastern side of the state, comprise rocks of Igneous and Metamorphic formations, including granite, porphyry, gneiss, slates, primitive marble, serpentine, &c. Extending northward from the head of Narraganset Bay is a bed of Upper Carboniferous strata, or coal measures, including a small basin of anthracite coal, which extends into the eastern part of the state of Rhode Island, and is regarded by geologists as "especially remarkable for its geographical position, and the metamorphic phenomena to which it has been subjected at the epoch of the granitic and porphyritic eruptions that gave birth to the chain of the Alleghany." The valley of the Connecticut River where it crosses this state is occupied by strata of new red-sandstone, with intruded copper trap. The peninsula of Cape Cod and the connected islands are of tertiary formation. Both miocene and pliocene strata have been identified in the islands of Martha's Vineyard and Nantucket.

Massachusetts is not rich in minerals, but abounds in valuable building stones, the working of which forms an important branch of the industry of the state. Iron is the mineral most worked. It is found in various parts of the state in the form of bog-iron, and iron pyrites, or sulphuret of iron. Anthracite coal is somewhat extensively obtained west of the Taunton River. Lead mines are worked in the valley of the Connecticut. Plumbago, found at Worcester and Stockbridge, is employed in the manufacture of pencils and crucibles. Some copper is found in the Connecticut valley district. Veins of fibrous gypsum, gypsum in masses, and salt-springs occur in the new red-sandstone district. Kaolin, or porcelain clay, is abundant. Alum is obtained from the white clay of Martha's Vineyard. The granite of Massachusetts is of fine quality; it is largely quarried in many parts of the state, but that obtained in Quincy and its vicinity, being in great request for public buildings, is exported to every Atlantic port. The gneiss also yields an excellent building stone. The primary limestone of Berkshire affords a white marble, which admits of a fine polish, and has been employed in the construction of some of the best known buildings in the Union. Serpentine, suitable for ornamental building purposes, is quarried in Middlefield, Westfield, Newbury, and elsewhere. Slate for roofing is obtained in several places. Peat, available for fuel, occurs in many parts where wood is scarce.

Climate; Productions.—The climate of Massachusetts is less extreme than that of the states lying immediately north of it; yet it is much colder in winter and warmer in summer than the southern districts of Great Britain, though the difference of latitude amounts to about 9 degrees. The extremes of temperature are from 20° below to 100° above zero. The annual mean temperature, as taken at the observatory of Harvard College, deduced from 12 years observations, is 47.24° Fahr. The winter commences about the middle of December and terminates about the middle of March. During winter snow covers the ground and the rivers are frozen hard enough to bear loaded waggons. The spring terminates in the middle of May. The summer is hot, and at the solstice the thermometer frequently rises to 77° every day for a month and more; sometimes it attains in the night 100°; it sometimes descends to 60°, whilst at noon it is 90°. The summer lasts to the beginning of October, when the weather grows rapidly colder. The prevalent winds are from the north-west and north. The north-west wind prevails, except during the summer, when the wind blows mostly from the south or south-west. The annual quantity of rain amounts to more than 40 inches.

As Massachusetts was early settled a greater portion of its surface is cultivated than in most of the other states, and agriculture has been more improved. The farms generally average from 100 to 200 acres. The principal agricultural productions are maize, wheat, oats

rye, potatoes, hops, beans and other vegetables, and pumpkins, which last are used as food for swine and cattle. Forests still cover a considerable portion of the surface. In the plains the white pine grows on a soil consisting of light loam, and the yellow-pine on sand and gravel. The hilly and mountainous country produces oak, walnut, birch, maple, ash, cedar, cherry, and chestnut. In the valleys and on the banks of the rivers there are elm, cherry, maple, and aspen. Some marshy places are covered mostly with white cedar. All the fruit-trees of England are cultivated.

Cattle are of a good size in the mountainous and hilly country west of Connecticut River. Fish abound in the rivers and in the sea. The whale fishery in the sea between Massachusetts and the Great Bank of Newfoundland is still important, though the larger kinds of whales have disappeared. The fishery of cod in Massachusetts Bay and on the banks near Nantucket is very important, as is also that of mackerel.

Manufactures, Commerce, &c.—The manufactures of this state are more considerable than those of any other state of the Union, if its extent and population are considered. The most important branches are the construction of vessels, the manufactures of cotton and woollen goods, of iron, paper, leather, and glass; sperm-oil, candles, and soap; sugar; boots and shoes; rope and cordage; lumber and wooden ware; carriages and railway cars; cutlery; machinery, engines, and agricultural implements and tools; cabinet ware; tobacco and snuff; spirits; straw-bonnets, hats, and all the ordinary articles of domestic use.

The commercial relations of this state with foreign countries and the other states of the Union are extensive and important. The most important articles of export are dried and salt fish, train and spermaceti oils, salted beef, flour, soap, candles, leather, and cotton-goods. The imports consist mostly of colonial goods, brought from the West Indies, as coffee, sugar, molasses, indigo, iron, and hemp, together with the manufactured goods of England, especially silk, linen, and woollen; and iron from Russia and Sweden; a considerable trade is also carried on with China, Brazil, and the West Indies. Massachusetts has a larger import trade than any state of the Union, except New York: in the export trade it is exceeded by New York, Louisiana, and Alabama. The imports for the year ending June 30, 1852, were valued at 33,504,789 dollars. The exports for the same period were valued at 16,546,499 dollars, of which domestic produce amounted to 14,144,001 dollars, and foreign produce to 2,402,498 dollars. The whale, cod, and mackerel fisheries are important branches of the industry of the state.

Divisions, Towns, &c.—Massachusetts is divided into 14 counties. Boston, noticed in a separate article, is the political capital, the commercial metropolis of Massachusetts, and the most important city in the New England states. The following are the other more important towns; the population is that of 1850, but the Census Report does not very clearly distinguish between the population of the towns here called villages, and that of the townships, which in this as in some of the other states, are called 'towns':—

Andover, on the right bank of the Merrimac, 21 miles N. by W. from Boston: population, 6945. The town contains several churches and schools, and is the seat of Andover Theological Seminary, one of the chief theological colleges in the Union. There are considerable manufactories and mills, for which there is abundant water-power. *Barnstable*, on Barnstable Bay, 62 miles S.E. from Boston: population, 4902. It is a busy sea-port town, and the capital of Barnstable county, and contains the usual county buildings, churches, and schools. Most of the inhabitants are connected with the fishing trade. *Cambridge*, population 15,215, and *Charlestown*, population 17,216, two of the largest suburbs of Boston: the places are connected by bridges. They contain many excellent public buildings, manufacturing and commercial establishments, and literary institutions. Cambridge is the seat of Harvard University and observatory; Charlestown of the state prison, and a United States navy yard. At the back of Charlestown is Breed's Hill, better known as Bunker's Hill, the scene of a noted skirmish between the English and American forces in 1775; the site is marked by a granite obelisk. *Edgartown*, on the east side of Martha's Vineyard, the capital of Duke's county, population 1990, has a safe and convenient harbour, and carries on a considerable business connected with the whale fishing and coasting trade. *Fall River*, a manufacturing town, and port of entry, is built on the Fall River, the outlet of Watuppa Pond, at the confluence of Taunton River, 46 miles S. from Boston: population, 11,524. Fall River village which had only 1594 inhabitants in 1820, has now come to be one of the chief manufacturing centres of the state. It has several large cotton and woollen factories, print and bleaching works, iron foundries, boot and shoe manufactories, &c.; carries on some foreign and an extensive coasting trade; and is largely engaged in the whale, cod, and mackerel fisheries. *Fitchburg*, on the Nashua River, 42 miles W.N.W. from Boston: population, 5120. The town has of late years grown into considerable importance from having become a great railway centre, several of the principal lines forming a junction here. The Nashua River affords a great amount of water-power, and there are extensive cotton and woollen factories, paper-mills, &c., in the town and its vicinity. Granite of fine quality is quarried in the neighbourhood. *Gloucester*, situated on Cape Anne, 27 miles N.N.E. from Boston, population 7786, has a good harbour open

at all seasons. The inhabitants are employed in commerce, ship-building, and the fisheries. *Lowell*, on the right bank of the Merrimac, at the confluence of the Concord River, 26 miles N. from Boston: population, 33,383. Lowell is the principal seat of the cotton manufacture in New England, and is commonly designated in American works 'the Manchester of America.' The spot on which Lowell is built was in 1821 selected as the site on which to erect some extensive cotton-mills. The village, then known as East Chelmsford, contained 200 inhabitants in 1820. The great amount of water-power rendered available by the enlargement of the Pawtucket Canal, and the construction of the Merrimac Canal, led to the rapid extension of manufacturing operations; and in 1826 a charter of incorporation was granted, erecting the village into a town by the name of Lowell. At its incorporation Lowell contained 17,633 inhabitants; in 1850 as we have seen it had 33,383; and in 1853 it is said to have had over 40,000 inhabitants. In March 1836 Lowell was incorporated as a city. The factories are chiefly the property of companies, or corporations. In 1850 it had 10 companies making cotton or woollen goods. These companies possessed 40 mills, with a capital of 12,500,000 dollars; and employed 2802 males, and 8254 females; working 9906 looms, and 325,520 spindles. There were besides a bleaching company, which employed 220 hands; and a machine making company, which employed 700 hands. The females employed in the mills are lodged and boarded in buildings erected for the purpose, and careful provision is made for their personal comfort, and moral superintendence; and these arrangements and the superior educational facilities afforded to the work-people generally have attracted much attention in this country as well as in America. The 'female operatives' of Lowell for some years published a monthly periodical entitled "The Lowell Offering, a Repository of Original Articles, written exclusively by Females actively employed in the Mills," which displayed a very respectable amount of knowledge, tact, and skill in writing. Besides the companies' mills there are factories belonging to individuals, which employ about 1500 hands: they consist of paper, powder, planing, and batting-mills, foundries, &c. The city is regularly laid out, and has several good buildings. The principal public edifices are, the court-house, the market-house, the mechanics hall, hospital, &c. There are 23 churches, a city high school, 10 grammar schools, and 46 primary schools, two savings banks, and other educational and benevolent institutions. Four railways diverge from the city. *Lynn*, a city and port, on the north side of Massachusetts Bay, 10 miles N. by E. from Boston, population 14,257, contains 15 churches, 10 school-houses, an academy, several literary, scientific, and benevolent institutions, two savings banks, insurance offices, banks, &c. The principal occupation of the inhabitants is the manufacture of shoes, for which Lynn has long been famous. In 1850 there were in the city 89 shoe manufacturers, and the number of persons employed in the manufacture was 10,058. *Marblehead*, also on Massachusetts Bay, occupies the peninsula between Salem and Nahant harbours, about 4 miles N.E. from Lynn, and 14 miles from Boston: population, 6167. It is a busy fishing town, with a good harbour for vessels of the largest size. Coasting steamers call here several times daily. *Nantucket*, on the north side of Nantucket Island, 90 miles S.S.E. from Boston: population, 8452. The village is situated at the bottom of the bay, which is 6 miles long, and almost entirely land-locked. The harbour is a good one, and on the projecting points of land at its entrance, which are three-quarters of a mile apart, are two lighthouses. Nantucket was the first place in America which engaged in the whale fishery, and is still more largely engaged in it than any other town in the Union except New Bedford. *New Bedford*, a city, port of entry, and one of the capitals of Bristol county, on the right bank of the Acushnet, 4 miles above its entrance into Buzzards Bay, 51 miles S. by E. from Boston: population, 16,443. It is built on ground which rises rapidly from the river, is regularly laid out, and contains a town-hall, the custom-house, court-house, several churches, the Friends' Academy for Ladies, &c. The harbour is spacious, and affords secure anchorage for vessels of large size. New Bedford is the principal entrepôt of the United States whale fishery; two-thirds of the tonnage employed in the whale fishery belong to this port. The business of the city is chiefly connected with the whale fishery; the manufactories are of oil and candles, cordage, iron-hoops, copper and iron rivets, and Prussian blue; there are extensive cooperages. Ship-building is carried on to some extent. The New Bedford and Taunton railway connects the city with the railway system of the state. *Newburyport*, a city, port of entry, and one of the capitals of Essex county, is built on rising ground, on the right bank of the Merrimac, 4 miles from its mouth, 34 miles N.N.E. from Boston: population, 9572. It is regularly laid out and well built. The chief public buildings are—a custom-house, a court-house, jail, 10 churches (in one of which, the first Presbyterian church, is the tomb of the celebrated George Whitfield, who died at Newburyport); a lyceum, an academy, a high school, an endowed classical school, and several primary schools. Five large cotton-factories are in the town. The harbour is capacious and safe, being protected by a breakwater, but the entrance is obstructed by a sand-bar. Some foreign and coasting trade is carried on, but the cod and mackerel fisheries are of more importance. *Northampton*, the capital of Hampshire county, on the right bank of the Connecticut, 81 miles W. by S. from Boston: population, 5278. The town is regularly laid out, contains many

handsome buildings, and stands in the midst of a district celebrated alike for the fertility of its soil and the beauty of its scenery. It contains the usual county buildings, 8 churches, schools, &c. There are manufactories of cotton and woollen goods, silks, ribands, &c. A fine bridge above 1000 feet long crosses the Connecticut, and connects Northampton with Hadley, celebrated for its manufacture of brooms, and for the tobacco and broom-corn grown in its vicinity. *Pittsfield*, the most populous place in the extreme west of the state, is built on the right bank of the Housatonic, in the upper part of its course, 120 miles W. from Boston: population, 5872. The town, which is regularly laid out, has a square of four acres in the centre, on the sides of which the principal buildings are placed. It contains several churches and schools, the Berkshire Medical Institution, &c. The supply of water-power is large, and there are a cotton-factory, several tanneries, grist- and saw-mills, a brewery, &c. The Western railway passes through Pittsfield; the Housatonic line terminates and the Pittsfield and North Adams line commences here. *Plymouth*, a port of entry, and the capital of Plymouth county, is situated on the south side of Plymouth Harbour, 35 miles S.E. from Boston: population, 6024. Plymouth is celebrated in American history as the landing-place of the Nonconformist settlers, or 'Pilgrim Fathers,' as they are now commonly designated, who arrived here on December 22nd, 1620, and formed the first settlement in New England. The town is compactly built; the dwelling-houses are chiefly of wood, but some of the public buildings are substantial and handsome structures. Besides the usual county buildings there are 6 churches and several schools, and a fine granite edifice called Pilgrim Hall. Plymouth has some manufactories, and is engaged in the foreign and coasting trades, and in ship-building; but the principal dependence is on the cod and mackerel fisheries. *Quincy*, on the south side of Boston Harbour, 8 miles S.E. from Boston, population 5017, is celebrated for its extensive granite quarries, which employ above 1000 men, and furnish granite for the buildings of most of the principal cities of the Union. There are also considerable manufactories. *Roxbury*, 2 miles S. by W. from Boston, with which it is connected by a narrow neck of land: population, 18,364. Roxbury, though incorporated as a distinct city, is so closely united with Boston in all respects as to be in effect a suburb of it. Extensive manufactures are carried on here of cordage, carpets, worsted and silk goods, patent leather, India-rubber goods, iron-castings, railway-iron, steam-engines and boilers, lead, white-lead, chemical preparations, turpentine, shoes, hats, &c. *Salem*, a city, port of entry, and one of the capitals of Essex county, is built on a narrow point of land on Salem Harbour, Massachusetts Bay, 14 miles N.E. by N. from Boston: population, 20,264. The city is regularly laid out, and many of the public buildings are substantial and handsome structures. The principal are—the city-hall; the custom-house; market-house; almshouse; jail; mechanics-hall; museum of the East India Marine Society, which contains an excellent collection of works of nature and art; athensium; hall of the Essex Institute; 20 churches; and numerous schools. An aqueduct supplies the city with excellent water. The manufactories are on an extensive scale: they consist of cotton factories, cordage and twine factories, iron and brass foundries, machine shops, chemical works, manufactories of patent leather, boots and shoes, &c. The harbour admits vessels drawing 14 feet of water to unload at the wharfs. There is some foreign trade, though less than formerly; the coasting trade is important, and some vessels are engaged in the cod and mackerel fisheries. Five lines of railway diverge from Salem. *Springfield*, a city, and the capital of Hampden county, on the left bank of the Connecticut, 81 miles W.S.W. (98 miles by railway) from Boston: population, 11,766. Main-street, in which are the principal business establishments, the public buildings, the leading hotels, and the railway station, is very wide, and runs parallel to the river for above two miles; it is intersected by other streets at right angles. Four of the great lines of railway meet at Springfield, and the city has in consequence become an important centre of travel and traffic; and numerous hotels, several of them on a large scale, have been erected for the accommodation of travellers. The public buildings are—the court-house and other county buildings; 12 churches, some of which are of elegant design; several schools; and the United States armoury and arsenal. The manufactures of Springfield consist of locomotives, railway cars, and railway machinery; steam-engines and boilers; fire-arms; sheetings, sattinets, &c. *Taunton*, on the Taunton River, 28 miles S. by E. from Boston, population 10,441, contains a court-house, 10 churches, several schools, &c. The place is much resorted to in summer, and there are several good hotels for the accommodation of visitors. Railway cars, steam-engines, machinery, and castings are largely made; and there are extensive manufactories of printing-cloths, Britannia-metal ware, nails, &c. The Taunton is navigable for sloops of 50 tons up to the village. Branch railways connect Taunton with the railway system of the state. *Worcester*, a city and the capital of Worcester county, is pleasantly situated in the valley of the Blackstone River, and is surrounded by hills of moderate elevation, 45 miles W.S.W. from Boston by railway: population 20,271 in 1853. The city is regularly laid out, the houses are generally well built, and some of the public buildings are of a superior order. The principal thoroughfare, Main-street, is about two miles long, broad, straight, and lined with trees; it contains the chief public buildings, churches, hotels, and private residences. Outside the city are the state lunatic asylum

on the east, and the Roman Catholic College of the Holy Cross on the south-west. Manufactures of various kinds are very extensively carried on in the city and its suburbs. Five important lines of railway meet at Worcester.

Government, &c.—The first state constitution was framed in 1780, and amended in 1821 after the separation of Maine, which had previously formed a part of Massachusetts. Since that time it has undergone several modifications. By the constitution as it now stands, the right of voting is vested in every male citizen 21 years of age (paupers and persons under guardianship excepted), who has resided the past year in the state, and the past six months in the place of voting; and who shall have paid any state or county tax within the last two years. The legislative body, styled the General Court, consists of a Senate of 40 members: and a House of Representatives, consisting of members varying in number according to a certain ratio of representation, but at present (1854) consisting of 356 members. The members of both houses, as also the governor, are elected annually.

The public debt of the state, absolute and contingent, on the 1st of January 1853 was 6,685,705 dollars; but of this 5,049,555 dollars represented the "liability of the state for scrip loaned to the various railways," leaving as the debt of Massachusetts on its own account the sum of 1,636,149 dollars. The total revenue of the state for the year ending January 1st, 1853 (including a balance of 76,322 dollars on hand from 1852, and a temporary loan of 550,000 dollars borrowed in anticipation of revenue) was 1,781,703 dollars; the total expenditure for the same period (including 475,000 dollars, loans repaid) was 1,515,559 dollars. The "ordinary revenue" for the year was 598,170 dollars, the ordinary expenditure 674,222 dollars. The state militia in 1852 was composed of 122,343 men, of whom 550 were commissioned officers.

History.—This part of the American continent was probably discovered by John Cabot at the end of the 15th century, but though visited several times during the following century, no settlement was made. The first specific account of the country was contained in the accounts of the voyage of Bartholomew Gosnold, who sailed from England in 1602 and discovered the promontory which he called Cape Cod. The descriptions of the country, written by John Brereton, Gabriel Archer, and Gosnold himself, excited much interest, and a company was chartered by James I. in 1606, to which this country was granted under the name of North Virginia. The first settlement however was only formed in 1620 at Plymouth, by about 120 families of Nonconformists, who had fled to Holland, and thence proceeded to Cape Cod. They framed a constitution, and took an oath to keep it. It afterwards became the groundwork of the constitution of the state. The first regular house of representatives was organised in 1639. The progress of the colony was very slow in the beginning, especially on account of the oppression to which the inhabitants were subjected during the reign of the Stuarts, before the time of the Commonwealth and after the Restoration. Though they were relieved by the revolution of 1688, and the increase of the colony was thus promoted, its population in 1730 did not exceed 120,000 individuals. In the revolutionary war Massachusetts took a leading part, by resisting the demands of the English government, and creating a military force. Hostilities were commenced by the battle of Lexington in Massachusetts. Massachusetts formed one of the 13 original states of the Union: it ratified the constitution of the United States, February the 6th, 1788.

MASSIAC. [CANTAL.]

MASSILIA. [MARSILLE.]

MASSILLARGUES. [HÉRAULT.]

MASSOWAH. [ABYSSINIA.]

MASULIPATAM. [HINDUSTAN.]

MATAMOROS. [MEXICO.]

MATAPAN, CAPE. [LACONICA.]

MATARO. [CATALUÑA.]

MATELICA. [MACERATA-E-CAMERINO.]

MATERA. [BASILICATA.]

MATLOCK, Derbyshire, a watering-place in the parish of Matlock, is situated on the left bank of the river Derwent, in 53° 7' N. lat., 1° 32' W. long., distant 17 miles N. by W. from Derby, 144 miles N.W. from London by road, and 148½ miles by the North-Western and Midland railways. The population of the parish in 1851 was 4010. The living is a rectory in the archdeaconry of Derby, and diocese of Lichfield.

Matlock Bath, as the town is still frequently called, is situated in a deep and narrow valley. The town has grown up within the last century and a half. The church, erected in 1842, stands in a conspicuous situation; it has a spire 129 feet high. The Independents have a chapel. Visitors are attracted by the beauty of the scenery, the salubrity of the air, and the beneficial qualities of the hot and mineral springs. The hot springs have a temperature of 68°, and contain much free carbonic acid. The only manufacture is of vases, tazze, and other elegances which are made from the fluor-spar and Derbyshire marbles. There are several caves and 'petrifying springs.' Baths, hotels, and lodging-houses for the accommodation of visitors are numerous and handsome. Matlock High Tor is a precipitous limestone rock, rising from the river to a height of 306 feet. Matlock

village is much older than Matlock Bath, from which it is two miles distant. The inhabitants are chiefly employed in lead-mines and quarries.

MATTO GROSSO. [BRAZIL.]
 MAUBEUGE. [NORD.]
 MAUCLINE. [AYRSHIRE.]
 MAUGNIO. [HÉRAULT.]
 MAULEON. [PYRÉNÉES, BASSES.]
 MAURA, SANTA. [IONIAN ISLANDS.]
 MAURE. [ILLE-ET-VILAINE.]
 MAURE, SAINTE. [INDRE-ET-LOIRE.]
 MAURIAC. [CANTAL.]

MAURITANIA, or MAURETANIA, which derived its name from its inhabitants Mauri or Maurusii, was bounded W. by the Atlantic, N. by the Mediterranean, S. by the Gætuli, and E. by Numidia, thus corresponding to the northern part of Morocco and the western part of Algiers. The country of the Mauri was originally separated from that of the Massæyli by the Molocath (Strabo), or Mulucha (Plin., v. 1), the modern *Mulwia*; but the Roman province of Mauritania included the country inhabited by both these people.

Before the war with Jugurtha, the Romans had little or no knowledge of Mauritania; of which Bocchus was at that time the ruler. (Sallust, 'Bell. Jugurth.', c. 19.) Mauritania was afterwards given by Augustus to Juba II., his paternal kingdom of Numidia having been erected into a Roman province. Juba died about A.D. 17, and was succeeded by his son Ptolemæus, who was put to death by Caligula. Mauritania was shortly afterwards divided into two provinces by Claudius (A.D. 43); which were called respectively Mauritania Tingitana and Mauritania Cæsariensis. (Dion Cassius, lx.) Tingitana, the western province, which derived its name from Tingis (*Tangier*), was divided from the other province Cæsariensis by the Molocath; and Cæsariensis was separated from Numidia by the Ampsagas (*Wad-el-Kebir*). Mauritania Cæsariensis was subsequently subdivided into two provinces: the western part retained the name of Cæsariensis, but the eastern was called Sitifiensis, from Sitifi (*Setif*), a town on the borders of Numidia.

Mauritania contained many towns of considerable importance under the Roman empire. Of these, the principal in Mauritania Tingitana were, Rusadir (*Mellilah*), a sea-port and a Roman colony, west of the Molocath; Tingis (*Tangier*), at the entrance of the Strait of Gibraltar, which received especial marks of favour from Augustus Cæsar (Dion. xlviii.), and became a Roman colony under Claudius (Pliny, v. 1); Zilis or Zelis (*Arzila*), made a Roman colony by Augustus under the name of Julia Constantia Zilis, and placed under the same jurisdiction as the province of Bætica in Spain (Pliny, v. 1): it was situated a little to the south of Cape Spartel, which is called Cotes by Strabo, and Ampelusis by Mela (i. 5); Linx, Lixus, or Linga (*Al-Avriah*), a Roman colony, 32 Roman miles S. from Zilis, situated on a river of the same name now Wad-al-Khos. Banasa, a Roman colony, 50 Roman miles S. from Lixus, situated on the Subur (*Sebo*); and, 50 miles S. from the Subur, Sala (*Sales*, or *Sla*), of which there are extensive ruins.

The chief towns in Mauritania Cæsariensis were:—Saldæ, Sarda, or Saldæ, a sea-port and a Roman colony, which divided the kingdom of Juba from the province of Numidia (Strabo); Julia Cæsarea (*Zerzhal*), situated on the coast west of Saldæ, a Roman colony, which was originally called Iol (Strabo; Pliny, v. 1); Siga (*Takumbrit*), which Pliny (v. 1) erroneously places opposite Malaga in Spain; and in the interior, south-west of Cirta, the important town of Sitifi (*Setif*), a Roman colony.

The physical features, &c. of Mauritania are described under ALGÈRE and MAROCCO.

MAURITIUS, formerly *Isle de France*, an island and a British settlement, is situated in the Indian Ocean, between 20° and 20° 34' S. lat., 57° 20' and 57° 46' E. long. The greatest length, north to south, is 38 miles; the greatest breadth, east to west, is 27 miles; the circumference is about 120 miles. The area is about 700 square miles. The population in 1851 was 180,823; the emancipated slaves and their families numbered 48,330. The general population, as distinguished from the Indians and emancipated slaves, was 54,497. The white population consists for the most part of the descendants of French families, and they speak the French language.

The island is surrounded by a coral reef, generally running parallel to the shores at a distance varying from a furlong to a quarter of a mile, and mostly dry at low water. In this reef occur ten or twelve breaks, by most of which vessels of considerable burden can reach the island. The interior of the island contains numerous hills and mountains, mostly isolated. The most elevated are near Cape Brabant on the south-east coast, where they rise to about 3000 feet, and near Port Louis on the north-east coast. The mountain called Peter Botte, which belongs to the latter group, has an elevation of 2600 feet. The origin of the island is obviously volcanic. The soil is fertile, but generally shallow.

The hilly districts in the interior of the island are covered with trees, but there is no timber fit for ship-building. The ebony wood is of inferior quality, but the iron-wood and red-wood are valuable. There are cocoa-nut palms, tamarind-trees, mangroves, and bamboo.

The rainy season lasts from November to March or April. The

climate is damp through a considerable portion of the year. In the dry season the wind generally blows from the south-east. The highest temperature is about 87° Fahr., the lowest 60°, the mean annual temperature 78°. The island is periodically exposed to tempestuous weather, and is occasionally visited by terrific hurricanes.

Yams, cassava, and maize, are cultivated for food. Esculent roots and vegetables, European as well as tropical, thrive well and abundantly; wheat and rice are raised. The best fruits are mangoes, shaddock, and pine-apples.

Sugar is almost the only object of cultivation for export. Improvements have of late been introduced into the manufacture. The sugar crop for the year 1852 amounted to 75,000 tons. Silk-worms are reared, but the quantity of silk produced is small.

Horses are few, and seldom bred in the island. Mules and asses are principally used for the saddle. Cattle are scarce, on account of the want of good pasture. Cattle are imported from Madagascar; goats and sheep are numerous on the island; hogs abound, and form a material part of the food of the people.

Port Louis, the capital of the island, is situated near the north-western extremity, on a small bay or inlet, in 20° 9' S. lat., 57° 29' E. long. A reef runs out from the mouth of the inlet, passing close to Tonnelier Island, a coral rock, near which vessels usually anchor when the wind blows out of the harbour. The harbour is capacious, and during the fine season is perfectly safe. The town is built at its extreme south-western corner. In 1850 it was constituted a municipal corporation. The town contains about 35,000 inhabitants. It has a citadel, completed in 1843, good barracks, a new court-house, bazaar, a royal college, a theatre, and at a short distance an hospital. There are a library containing more than 60,000 volumes, mostly French, a good botanical garden, and some docks for the repair of vessels. The harbour and town are well fortified.

On the eastern coast is *Grand Port*, which is large, but its entrance is difficult, being narrowed by several shoals. It can only be entered and left with a fair wind, as it is impossible to tack. It is not much frequented. *Makeboury* is a small town on the south-east coast, with a good harbour, which was opened to foreign shipping in 1836.

Mauritius is under the care of a governor and a legislative and executive council, whose authority extends to the group of coral islands called the SEYCHELLES. The revenue for 1852 was 311,854*l.*; the expenditure was 283,053*l.*

The value of the imports into Mauritius in 1852 was 1,052,351*l.* 6*s.* 9*d.*, that of the exports was 1,100,546*l.* 14*s.* 6*d.*

The commercial relations of Mauritius extend to Batavia, Bombay, Surat, Muscat, the Persian and Arabian Gulfs, the western coast of Africa, the Cape of Good Hope, and Madagascar, but a considerable portion of its produce comes to England. Besides sugar, small quantities of indigo, cloves, and some woods are exported. The island receives from England and India silk and cotton goods; and from England cloth, wine, oil, hats, iron and steel utensils, with some smaller articles. Madagascar supplies the Mauritius with cattle and rice, and receives in return manufactured goods. Arabia and Persia are supplied with sugar from the Mauritius, and send in return dry fruits and some smaller articles.

Mauritius, with the neighbouring island of Bourbon, was discovered by the Portuguese in 1505; they took possession of Mauritius in 1545, but apparently formed no settlement on it. The Dutch surveyed it in 1598, and called it Mauritius, in honour of Maurice, stadtholder of the republic of the Netherlands. They did not however settle here till 1640, about which time they fixed themselves on the shores of Grand Port. They abandoned the island in 1708. In 1715 the French took possession of the island, formed a settlement at Port Louis, and called the island *Isle de France*. They remained in the undisturbed possession of it till the year 1810, when it was taken from them by the British, to whom it was secured at the peace of 1814, and who have retained it in their possession ever since. A bishop of Mauritius has just (December 1854) been appointed by the British government. There are 18 government schools, attended by 1853 pupils in 1852; and a royal college, with 276 pupils in 1852, an income of 3054*l.*, and an expenditure of 3610*l.* during the same year. In 1852 there returned to India 2398 adult male and 361 female immigrants, with 72 children. In the rural districts court-houses and jails have been recently erected, and a little attention has been given to the construction of new roads, and the repair of the highways now in use. [See SUPPLEMENT.]

MAURS. [CANTAL.] MAUVESIN. [GERS.]

MAWES, ST. [CORNWALL.]

MAYAGUANA. [BAHAMAS.]

MAYBOLE, Ayrshire, Scotland, a burgh of barony and market-town in the parish of Maybole and district of Carrick, is pleasantly situated on a small eminence surrounded by hills, about 5 miles from the sea-coast, and 9 miles S. from Ayr, in 55° 20' N. lat., 4° 42' W. long. The population of the town in 1851 was 3862. The burgh is governed by 17 councillors. Many of the inhabitants are employed in hand-loom weaving for Glasgow manufacturers. The church is a large but inelegant structure. There are several schools, a savings bank, and some benevolent institutions. Maybole is the capital of Carrick was once the winter residence of many noble families; and in it was held the court of Bailyery for the district. At the east end of

the town stands the ancient seat of the Casallia family. A portion of a collegiate church, founded in the 15th century, still remains, as well as the house, now the Red Lion Inn, wherein John Knox and Quintin Kennedy, abbot of Crossraguel, held their disputation.

MAYENNE. [MAINZ.]

MAYENNE, a department in the west of France, is bounded N. by the departments of Manche and Orne, E. by the department of Sarthe, S. by Maine-et-Loire, and W. by Ille-et-Vilaine. Its form approximates to that of a parallelogram, 54 miles long from north to south, and 40 miles broad from east to west. Its area is 1998 square miles. It lies between 47° 45' and 48° 35' N. lat., 0° and 1° 15' W. long. The population in 1841 was 361,392; in 1851 it amounted to 374,566, giving 187.94 inhabitants to a square mile, or 13.36 above the average per square mile for the whole of France. The department is formed out of the western part of the old province of Maine and the northern part of Anjou; and is named from its principal river the Mayenne.

The surface of the department is uneven, strewed with hills, and in some places cut up by valleys and ravines. The Armoric Hills run across the department in the north, and send out a branch southward, which forms the watershed between the Vilaine and the Mayenne. From a distance the country has the appearance of a vast forest, such is the number of trees planted in the hedge-rows that inclose each field. The population of Lower Maine does not, as is the case in most parts of France, live in hamlets or villages, but is scattered among isolated farmhouses, each of which stands among thick hedges, and contains a family that is supplied with every necessary of life, both of food and clothing, from the land and their own industry. This isolated and independent existence has left its impress on the people in a certain rudeness of address, an honest but obstinate adherence to old usages, and a consequent aversion to things called improvements. The soil in the arrondissement of Château-Gontier, and in part of that of Laval, is productive in bread-stuffs of all kinds; in the rest of the department the land is poor, and does not yield enough for the consumption of the inhabitants. Meadow land is scanty, nevertheless a great number of beasts are fed, which form a source of considerable profit to the farmer. Flax, hemp, and fruit-trees are extensively cultivated. Other products are chestnuts, nuts, some bad wine, and cider fruits yielding 6,833,288 gallons of cider. Well-woolled sheep, pigs, and fowls are numerous. Bees are kept in great numbers.

The department belongs almost entirely to the basin of the Loire, and is drained chiefly by the *Mayenne* (the ancient *Meduana*), which rises in the south of the department of Orne, and running nearly south past the towns of Mayenne, Laval, and Château-Gontier, divides the department of Mayenne into two pretty equal parts. A few miles below Château-Gontier, it enters Maine-et-Loire, where it receives the Oudon on the right bank, and the Sarthe, swelled by the Loire, on the left; from its junction with the Sarthe to its entrance into the Loire at Ponts-de-Cé, about 5 miles south of Angers, this river takes the name of Maine. Small steamers ply up to Angers, and barges up to Laval. The principal feeders of the Mayenne in this department are the Varenne, the Calmont, and the Ernée, on the right bank, and the Jouanne, and the Onette, on the left bank. A small portion of the west of the department is included in the basin of the Vilaine. [ILLE-ET-VILAINE.] A narrow band along the east of the department is drained by feeders of the Sarthe. The south-western districts are drained by the Oudon.

The department is crossed by 5 state, 11 departmental, and a great number of bad cross roads. It is also traversed by the railway from Paris to Brest, which passes through Laval.

In geological structure the department belongs nearly altogether to the primitive formations. Iron-mines are worked for the supply of eight smelting furnaces and ten forges. Coal-mines are worked near Laval. Marble, granite, flint, building- and lime-stone, and slate are quarried. White sand, used in the manufacture of glass, is raised. Sailcloth and linen are the chief manufactures; cotton-stuffs, hair-cloth, linen thread, and paper are made. About 215 fairs and markets are held in the year.

The climate is healthy, and resembles that of the south of England.

The department was comprehended in ancient times in the territory of the Diablintes, the Arvii, and the Andes, or Andecavi, three Celtic tribes included in Lugdunensis Tertia. *Næodunum* and *Vagoritum*, the respective chief towns of the Diablintes and the Arvii were within the limits of the department. Of the first there are important remains about 6 miles south-east from Mayenne, at the village of Jublains, which in sound preserves the name of the Diablintes almost without alteration. There are the walls of a Roman station forming nearly a square of 600 or 700 feet each way, with towers on the sides and at the corners. The walls are scarcely more than 7 or 8 feet high, and about 9 feet thick, composed of layers of square stone, alternating with three tiers of brick, and the whole united by a very hard cement. It is one of the most firmly-built and best preserved Roman forts in France. Within the inclosure are the traces of buildings probably occupied by the garrison of the fort. A subterranean apartment, which probably formed part of a Roman villa, was discovered near the fort, with a mosaic floor and painted walls. An ancient well has also been discovered, and medals and rings have been dug up. There is near

Jublains a granitic rock presenting a resemblance to a chair, supposed to be a Druidic monument. There are some remains of *Vagoritum* at a place called Arve, or Erve, on the river Erve, a feeder of the Sarthe, which drains the east of the department. From these names (*Jublains* and *Erve*) it is inferred with great probability that the towns took at a later period the names of the people to whom they belonged. In the country between Jublains and the Erve there are some Druidical stone circles and other Celtic monuments.

The department contains 1,275,607 acres. Of this surface 875,521 acres are arable; 171,344 acres are grass land; 65,186 acres are covered with woods and forests; 27,351 acres are laid out in nurseries, plantations, gardens, &c.; 50,367 acres consist of heaths and moors; and 9951 acres are covered with rivers, ponds, brooks, &c.

The department is divided into 3 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Laval	9	92	130,523
2. Mayenne	12	110	165,181
3. Château-Gontier	6	72	78,862
Total	27	274	374,566

1. In the first arrondissement the chief town is *Laval*, which is also the capital of the department. It is situated in 48° 4' 7" N. lat., 0° 46' 16" W. long., 247 feet above the level of the sea, 152 miles W. by S. from Paris, and has 17,538 inhabitants in the commune. The principal part of the town stands on the slope of a hill, on the right bank of the Mayenne, and consists of irregularly-built, narrow, steep, and crooked streets of timber-framed houses, each story of which overhangs the one below it, so that a considerable part of the buildings overhang and darken the dreary streets. From the midst of these dismal buildings, and close to the river, rises the extensive old castle of the lords of La-Tremouille, surmounted by a lofty round tower, which formed the keep; this castle is now used as a prison. Near the castle an old bridge thrown across the river leads to a new suburb, regularly built with wide straight streets, on the left bank of the river. Another suburb called *Avenières* is interesting on account of its elegant church, which dates from 1040. The principal buildings in the old town are—the churches of La-Trinité, Des Cordeliers, and St.-Vénérand; two hospitals, founded about the year 800; the public library; and a large and handsome linen-market. The town has a tribunal of first instance, a tribunal and chamber of commerce, and a college. It is the centre of a large manufacture of table and household linen and linen-yarn, for the sale of which there are weekly markets; calico, flannel, cotton-handkerchiefs, serge, soap, leather, &c. are also made; and there is a good business done in flax, wine, brandy, clover-seed, timber, iron, marble, &c. The town grew up round a castle built by the counts of Maine to check the inroads of the Bretons. The castle was burnt by the Northmen, but rebuilt in 840, and surrounded, together with the houses grouped about it, with a turreted wall. In the 12th century Laval gave a title to a barony whose possessors were all surnamed Guy in honour of Guy IV., who had distinguished himself in the Crusades under Godfrey de Bouillon. The barony was raised to a county by Charles VII., and into a duchy by Louis XI. in 1481. Laval was taken by the English under the great Talbot in 1466, but the French recovered it the following year: the town still retains its walls. It was taken in 1793 by the Vendéans, who in October of that year, under the command of Larochejacquelin, defeated with terrible slaughter a large army of republicans, commanded by General Léchelle, near the town. The railway from Paris to Brest passes through Laval. *Argenté*, 6 miles E. from Laval, stands on the slope of a hill near the Jouanne, and has marble quarries, tanyards, and about 2000 inhabitants. *Chailland*, 12 miles from Laval, near the Ernée, has coal-mines, iron-forges, smelting-furnaces, and a population of 2600. *Evron*, situated in a remote but fertile district, 16 miles N.E. from Laval, has a population of 4130. The town originated in a Benedictine abbey founded here in the 7th century by Hadouin, count of Maine. The abbey-buildings, which are extensive and still entire, are now occupied by nuns, who devote their labours to the instruction of female teachers for the education of the female poor. The abbey-church is one of the finest in all the department. The ancient chapel of St.-Crespil, near the abbey-church, and the market-house, are notable buildings. This town has a good weekly corn-market, linen-manufactures, and some trade in wine, wool, and brandy. The country about Evron is extremely retentive of wet and boggy in winter, so that the roads are almost impassable. This kind of soil covers the watershed between the Sarthe and Mayenne, to which rivers and small streams run from it in various directions.

2. In the second arrondissement the chief town, *Mayenne*, stands on the steep slopes of two hills united by a bridge across the river Mayenne, 18 miles N. by E. from Laval, in 48° 18' 17" N. lat., 0° 38' 55" W. long., 333 feet above the level of the sea; and has tribunals of first instance and of commerce, a college, a council of prud'hommes, and 9588 inhabitants in the commune. Mayenne was formerly defended by strong fortifications which withstood the English under the Earl of Salisbury for three months in 1424, when it capitulated. It gave

title to a barony in the house of Guise, which François I. erected to a marquisate in 1544, and Charles IX. into a duchy in favour of Charles de Lorraine, who became head of the French political party called the League. The streets are ill laid out, irregularly built, with old odd-looking houses, and so steep that it is not unusual to see eight horses and four bullocks yoked together drawing a single carriage. On the top of the hill on the right bank there are two large squares, in one of which is the town-house. The old castle of the lords of Mayenne stands on the right bank of the river, and commands the bridge; a large building near it serves for the linen-market. Linen, calicoes, and cotton-yarn are the chief industrial products of the town, which has also bleach-mills and dye-houses. *Ambrières*, 6 miles N. from Mayenne, is a well-built town of 2453 inhabitants. A castle now in ruins, built here by the Conqueror, is the most interesting object in the town. The corn-market is held on a part of its site. *Bais*, a town of 2342 inhabitants, S.E. of Mayenne, was burned by the Vendéans in 1799. *Ernée*, prettily situated on the river Ernée, 14 miles W. from Mayenne, is a well-built town, with wide straight streets, and 5489 inhabitants, who manufacture linen-yarn and cloth. There are iron-mines and iron-forges near Ernée. *Gorron*, 12 miles N.W. from Mayenne, has a population of 2351. The ancient castle of Gorron, one of the frontier fortresses of Maine, has been entirely destroyed, and a corn-market erected on its site. *Lassey*, 12 miles N.E. from Mayenne, has 2565 inhabitants, and an ancient castle, the erection of which dates from the year 825, and which is the best preserved of the old fortresses of Maine. *Prez-en-Pail*, 20 miles N.E. from Mayenne, on the road to Alençon, has a population of 3495. *Villaines-la-Juhel*, E. of Mayenne, has 2500 inhabitants, who manufacture woollen-cloth.

3. In the third arrondissement the chief town, *Château-Gontier*, is situated in a beautiful plain, 16 miles S. from Laval, in 47° 49' 50" N. lat., 0° 42' 11" W. long., 192 feet above the level of the sea, on the left bank of the Mayenne, over which a stone bridge leads to a large suburb. Of the castle built here by Foulques Nerra, count of Anjou, who intrusted its safe keeping to a knight named Gontier (whence the name), there is scarcely a vestige. The town, which is ill laid out, but has well-built houses, possesses a tribunal of first instance, a college, and 6443 inhabitants, who manufacture linen, serge, hair-cloth, and leather; and trade in clover-seed, thread, iron, timber, and wine. The most notable objects in the town are—the square on the site of the old castle, and the promenade which commands a fine view of the picturesque banks of the Mayenne. *Coaze-le-Vivien*, N.W. of *Château-Gontier*, has 3408 inhabitants. *Craon*, formerly a fortified town, and famous for its siege by the Prince of Conti in 1592, is situated on the left bank of the Oudon, 12 miles W. from *Château-Gontier*, and has 3906 inhabitants, who manufacture coarse woollens, and trade in corn, linen, thread, &c.

The department forms with that of Sarthe the see of the Bishop of Le-Mans; is included in the jurisdiction of the High Court of Angers, and within the limits of the University-Academy of Rennes; and belongs to the 16th Military Division, of which Rennes is headquarters. It returns 3 members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Statistique de la France; Official Papers.*)

MAYNOOTH, county Kildare, Ireland, a post- and market-town, in the barony of North Salt, is situated on the Royal Canal, 15 miles W. by N. from Dublin by the Midland Great Western railway, of which it is a station. The population in 1851 was 2201.

Maynooth consists of a single well-built street, at the east end of which is the entrance to Carston, the extensive demesne of the Duke of Leinster, and at the west end the royal college of St. Patrick. There are in the town a parish church, a Roman Catholic chapel and nunnery, a National school, and a dispensary. Maynooth College is a plain quadrangular structure, with a front 400 feet in length. The grounds attached to it occupy a space of 80 acres. The institution was founded in 1795 by an Act of the Irish Parliament for the education of candidates for orders in the Roman Catholic Church. In 1845 it was permanently endowed, out of the Consolidated Fund, for the support and instruction of 500 students, and of 20 senior scholars on the Dunboynes foundation—a revenue of 460*l.* derived from the estates of the late Lord Dunboynes. The buildings have been completed by a sum of 30,000*l.*, vested by the Act of 1845 in the Commissioners of Public Works for Ireland. They contain seven lecture-halls, a chapel, library, refectory, and professors' and students' apartments. The course of study occupies eight years, during which the students can leave the college only by special permission of the bishop of the diocese to which they respectively belong. Near the college are the ruins of Maynooth Castle, a seat of the Fitzgeralds, the ancestors of the Duke of Leinster; it was built in 1426. Fairs are held in the town on May 4th and September 19th.

MAYO, a maritime county in the province of Connaught, Ireland, is bounded E. by the counties of Sligo and Roscommon, S. by the county of Galway, and W. and N. by the Atlantic Ocean. It lies between 53° 27' and 54° 19' N. lat., 8° 31' and 9° 20' W. long. Its greatest length from east to west is 72 miles; from north to south 53 miles. The area is 2131 square miles, or 1,363,882 acres, of which 497,587 acres are arable, 800,111 acres uncultivated, 8360 acres in plantations, 848 acres in towns, and 56,976 acres under water. Next

to Cork and Galway, Mayo is the largest county in Ireland. In 1831 the population was 366,828; in 1841 it was 388,887; in 1851 it was 274,612.

Coast-line and Islands.—The length of the coast-line from the mouth of the river Moy on the north-east to the head of Killery Harbour on the south-west, exclusive of minor indentations, is about 250 miles. The only harbour generally frequented on the northern coast is that of Killala, in the Bay of Killala, which is formed by the estuary of the Moy. The bay is a square of about 5 miles, with a range of sand-hills extending across the bottom. In this range are two openings, one forming the bar of the Moy, and the other that of Killala Harbour. Formerly vessels for Ballina entered by the Killala bar; but since certain improvements were made in the Moy the navigation has been direct, and vessels of 200 tons now sail up to within a mile of Ballina. From Killala Bay westward to Benwee Head, a distance of 20 miles, the coast rises in lofty cliffs, affording little shelter for craft of any kind. Between Benwee Head and the Mullet is Broadhaven, a bay consisting of an outer and an inner harbour, the entrance to the latter being less than half a mile in width in 4 fathoms of water. The basin within runs up 7 miles to the town of Belmullet, and affords good anchorage throughout. The Mullet, extending 15 miles in length, is connected with the mainland by a narrow isthmus 5 miles long, which separates Broadhaven from the Bay of Blacksod. The southern part of the peninsula is low and sandy; but on the north are some inconsiderable eminences, of which Slieve More, rising over the entrance to Broadhaven, is the chief. Blacksod Bay affords excellent roadsteads and several sheltered spots well adapted for landing cargoes. The southern boundary of Blacksod Bay is ACHILL ISLAND. The upper end of the bay abounds with a multitude of safe and excellent anchorages among the numerous islands between the creeks of Newport and Westport. The mouth of the bay being covered for one-third of its breadth by Clars Island, the whole basin enjoys a considerable shelter from the swell of the ocean. The remainder of the coast of Murrisk between Clew Bay and the Killery possesses no harbours, but there is anchorage in westerly winds under the lee of Innisturk Island in the offing. Small islands, singly or in groups, lie in great numbers along the northern and western coasts.

Surface, Hydrography, and Communications.—The surface of the county embraces a part of the central plain of Ireland, with a large extent of wild and mountainous country between it and the sea. The mountain region consists of two principal districts separated by Clew Bay, which running inland 15 miles, by from 7 to 8 miles in width, meets the extremity of the plain at Westport. The mountain groups south of Clew Bay cover an area of about 15 by 20 miles, and stretch into the highlands of Joyce country and Connemara. [GALWAY.] The Furmnamore and Partry Mountains extend in a north-east direction from the head of Killery Harbour, and form a continuous range 15 miles long, rising abruptly over the western shores of Lough Mask and Lough Carra. Furmnamore, in the centre of the range, is 2210 feet high.

On both sides of the chain are bold ravines, traversed by streams descending on the one hand into Lough Mask, and on the other into the valley of the Owen Errive River, which runs southward into the head of Killery Harbour, and into the valley of the river Ayle, which runs northward. The Ayle dips underground on emerging from the mountain district, and passing eastward for two miles under the limestone rock of the plain, rises again and flows southward into the head of Lough Mask. The group of Muilrea skirts the northern shore of Killery Harbour, and extends inland. Muilrea Mountain, which rises over the entrance to the harbour, is the highest ground in the county, being 2682 feet in altitude. Northward from the group of Muilrea the surface rises into undulating hills of from 900 to 1200 feet in height, the general slope of the country being towards the north-west. The northern verge of Murrisk is occupied through a length of 10 miles by the range of Croagh Patrick, running parallel to the shore, which rises in its highest summit to an altitude of 2610 feet.

North of Clew Bay the Croagh Moyle Mountains run in a south-westerly direction from the valley of the Moy to the head of the bay at Newport. The group of Nephin extends from Lough Fyough, near the northern shore of Clew Bay, to the western shore of Lough Conn, over which Mount Nephin, the highest point in the district, rises abruptly to an elevation of 2646 feet. In the valley bounded by these ranges lie Lough Beltra and Lough Lavalla. A tract of extremely desolate moorlands is bounded towards the east by the valley of the Moy, and towards the west by the Tyrawley and Nephin Beg Mountains. A ridge of low elevation divides this tract into two portions, the waters of one of which flow eastward by the Deel River to Lough Conn, and those of the other passing through a gap in the centre of the Nephin Beg range run westward by the Owenmore River to the head of Blacksod Bay. The chief height of the Nephin Beg chain is Slieve Cor, 2368 feet; Nephin Beg is 2012 feet. West of the Tyrawley and Nephin Beg Mountains are numerous lakes, of which the greatest is Carrowmore, which discharges its waters by the Owenmore River into Tullaghan Bay.

The valley of the Moy from the sea to Foxford, which is situated 15 miles above the mouth of the river, is open, and contains much improved and improvable land, especially in the neighbourhood of KILLALA and Ballina. Between Ballina and the range of Nephin is

Lough Conn, a fine sheet of water 8 miles in length by from 1 to 4 miles in breadth, communicating on the south by a very narrow strait in the neck of land called the Puntoon, with Lough Cullin, a smaller lake, through which it discharges its waters into the river Moy close to Foxford.

The valley at Foxford is contracted by the approaching ranges of the Croagh Moyle and Slieve Gamph Mountains, but southward from this point it opens into an extensive plain in which Slieve Carnon, 855 feet high, is the most considerable eminence. The main stream of the Moy, rising in the county of Sligo, runs westward through an open upland valley bounded on the north by the line of the Ox Mountains, and on the south by low undulating hills of from 600 to 700 feet in height, skirting the northern verge of the great plain. This vale is thinly inhabited, and much incumbered with mountain bogs, except towards the western extremity, where there is a good deal of cultivation round the small town of Swineford. Southward from the valley of the upper Moy, the district on the eastern verge of the county is bleak and swampy. A good pastoral tract extends from the Roscommon border on the east to the vicinity of Castlebar on the west, and from the Slieve Carnon on the north to the borders of Galway on the south. This tract is named generally the Plains of Mayo, though the name strictly applies to the rich grazing lands immediately south of Slieve Carnon. Farther south, the tracts of bog are more numerous than in the northern and central portion of the plain, occupying most of the valleys, and in several instances insulating the demesnes of the gentry. An open fertile district extends along the eastern shore of Lough Mask.

From Westport to Newport the head of Clew Bay is studded with 170 green pasturable islands, varying in size from a few acres to half a mile in length. The shore along the head of the bay is also good arable and pasture land, and is worn into numerous peninsulas and low promontories, many of them wooded, which greatly increases the picturesque effect. From within three miles of Westport to Castlebar lie a number of small lakes, the waters of which are discharged by a river passing through the town into the head of Lough Cullin.

The county has been of late years much improved by the construction of important lines of road. One leading from Castlebar to Belmullet, and another from Ballina to Belmullet, have opened the wild districts of Tyrrawley and Erris. The district of Murrisk has been opened by an excellent road from Westport to the head of Killery harbour, where it joins the government road, leading through Connemara. The champaign part of the county is in general well supplied with roads.

Geology, Mineralogy, &c.—The geological structure of Mayo, like that of Galway, exhibits an arrangement of primary and secondary rocks skirting a limestone basin. As usual, the champaign district and the field of limestone are co-extensive. In Clew Bay, as in many of the western bays of Ireland, while the promontories on each side are of primary rock, the bottom of the bay consists of stratified limestone, as appears from the multitude of limestone islands round its upper extremity. The verges of the plain are traversed by numerous subterranean channels. The southern half of Murrisk belongs to the grauwacke series; in the valley of the Ayle, a tract of yellow sandstone lies between the clay-slate of this formation and the stratified limestone. The northern division of Murrisk consists mainly of mica-slate with protrusions of granite and quartz, the chief quartz protrusion being the peak of Croagh Patrick. Along the north-western coast of Murrisk a tract of old red-sandstone appears, which rises again on the southern and eastern side of the island of Clare, overlying the granite of which the nucleus of that island consists. It re-appears in the northern mountain district. The limestone tract occupies the greater part of north-eastern Tyrrawley, but no where reaches the sea, from which it is separated by a field of yellow sandstone and conglomerate. The mica-slate field comprises all Erris, the Mullet, the island of Achill, and southern Tyrrawley as far eastward as great Nephin. Granite and quartz protrusions are of frequent occurrence, in this district generally constituting the loftiest and most striking elevations. Granite again rises on the opposite side of the valley of the Moy in the Slieve Gamph Mountains over Foxford, supporting flanks of mica-slate as in the range of Nephin. Throughout the primary district iron-ore is abundant, but remains unwrought for want of fuel. Marble susceptible of a good polish has been raised in several parts of the barony of Murrisk. Slates are quarried.

Climate, Soil, and Produce.—The climate of the western districts is damp and ungenial. That of the level part of the county, which is protected by the mountains from the prevalent winds, and lies open towards the east and south, is as mild as the climate of most of the midland counties.

The soils of the champaign tract are in general similar to those of other limestone districts: the best lie about Balla, Claremorris, and Hollymount on the south, and round Ballina on the north.

The tillage lands in the neighbourhood of Westport have been for the most part reclaimed from a comparatively moory state; but towards Newport the soil is naturally good, and produces large crops of the best oats. The chief occupations are agriculture and fishing. Pasturage is more general than tillage. In 1853 the number of acres under crop was 179,268, of which 3263 acres grew wheat; 81,451 acres oats; 7262 acres barley, bere, rye, peas, and beans; 53,412

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acres potatoes; 12,308 acres turnips; 2470 acres other green crops; 1198 acres flax, and 17,904 acres meadow and clover. Of plantations, in 1841, there were 9356 acres, yielding oak, ash, elm, beech, fir, mixed timber, and fruit. In 1852 on 31,915 holdings there were 14,942 horses, 16,736 mules and asses, 133,870 head of cattle, 172,117 sheep, 30,570 pigs, 8072 goats, and 324,716 head of poultry. The fishery districts are Westport, Keele, Dulough, Dunkeehan, and Ballycastle, comprising 226 miles of maritime boundary, and in 1853 employing 486 registered vessels, and 2910 men and boys. There are considerable salmon fisheries on the Moy and other rivers of the county. The principal fishing-bank on the north lies between Downpatrick Head and Broadhaven, at about 3 miles from the shore, in 30 to 45 fathoms water, where turbot, sole, cod, ling, haddock, and hake are taken. Between the Stags of Broadhaven (insular rocks in the offing of that bay) and the island of South Inniskea is another bank, in 18 to 30 fathoms water, on which the same fish abound. Blacksod Bay and Clew Bay also contain extensive fishing-banks for turbot, sole, plaice, &c.; and vast quantities of oysters and lobsters may be taken on the shores of both. The herring-fishery is chiefly prosecuted near the mouth of Killery harbour.

Divisions and Towns.—The county is in the dioceses of Tuam, Killala, and Achonry. It is divided into nine baronies—Burrishoole, Carra, Claremorris, Costello, Erris, Gallen, Kilmaine, Murrisk, and Tyrrawley. The principal towns are Castlebar, Westport, Ballina, and Ballinrobe, which are noticed under their respective titles.

The following are some of the smaller towns and more important villages, with the population of each in 1851:—

Binghamstown-erris, a fishing village, built since 1821 on Saleen Creek, on the west side of Blacksod Bay, 52 miles W. from Castlebar by road, consists of mean dwellings laid down on a regular plan, and contains a parish church, a Roman Catholic chapel, and a dispensary. The harbour, consisting of a basin, with a pier 165 feet long, was completed by the Fishery Board. Fairs are held on the 1st of every month. CLARE, or CLAREMORRIS. *Cong*, population 519, a poor village near the head of Lough Corrib, 30 miles S. from Castlebar, contains a parish church, a Roman Catholic chapel, a dispensary, and the ruins of an abbey, in which Roderick O'Connor, the last native king of Ireland, after being dispossessed of his sovereignty, passed the last years of his life. Petty sessions are held in the town on the second Friday of every month. *Crossmolina*, population 1225, a market and post-town, on the river Deel, near the head of Lough Conn, 16 miles N. by W. from Castlebar by road, contains a parish church, a Roman Catholic chapel, a Methodist chapel, and remains of an old castle and of an abbey. Petty sessions are held monthly. Fairs are held ten times a year. There is a weekly market. *Foxford*, population 681, a market and post-town, on the right bank of the river Moy, near Lough Cullin, 13½ miles N.E. by N. from Castlebar, contains a handsome parish church, with a square tower, a Roman Catholic chapel, a market and court-house, and a dispensary. Petty sessions are held monthly. Thursday is the market-day. Fairs are held four times a year. NEWPORT.

Mayo returns two members to the Imperial Parliament. The county is in the Connaught circuit. The county prison is at Castlebar, where the assizes are held. Quarter sessions are held there and at Ballina, Ballinrobe, Belmullet, Castlebar, Claremorris, Swineford, and Westport. Petty sessions are held in 24 places. A savings bank is established at Castlebar, the deposits in which amounted on November 20th 1853 to 13,903*l.* 13*s.* 11*d.* In September 1852 there were 173 National schools in operation, attended by 9928 male and 8770 female scholars.

History and Antiquities.—This county formed part of the grant made by king Henry II. to William Fitz-Adelm de Burgho about the year 1180. Little is known of the proceedings of the settlers until the great rebellion succeeding the assassination of William de Burgho, earl of Ulster, in 1333. Immediately after the murder of the earl some of the younger branches of the Burke family, seeing that the entire province would be inherited by his infant daughter, seized on the counties of Galway and Mayo, and cast off allegiance to the English law, renouncing their English names, and identifying themselves and their followers with the native Irish. The name chosen by Edmund de Burgho, who seized on Mayo, was MacWilliam Oughter. From this time till the reign of Elizabeth the MacWilliam of the day exercised the authority of an independent potentate. In 1575 the MacWilliam, accompanied by the O'Malley and a number of the clan Donnell, came to Galway and made his submission, consenting to pay 250 marks per annum for his country, and to allow his followers to hold by English tenure. The county was shortly after again declared shire-ground. The Burkes however subsequently broke into rebellion, in which they were joined by other families. To appease these tumults Sir Richard Bingham marched to Ballinrobe on the 12th July 1586, and having razed several castles of the Burkes and Macdonnells, and defeated the rebels, succeeded in restoring the county to tranquillity. In 1793 a French force of 1100 men, under General Humbert, made a descent on Mayo, carried the towns of Killala and Ballina, and being joined by a large body of the peasantry defeated General Lake before Castlebar, but had to surrender at Ballinamuck.

The antiquities of the county are chiefly ecclesiastical. There are round towers at Killala, Turlogh, Meelick, and Balla. At Cong are the remains of a splendid abbey, founded in the 7th century, and

rebuilt by O'Connor in the 12th century. An archiepiscopal crozier of surprisingly beautiful workmanship, made by command of Turlough O'Connor, the father of Roderick, the last native king of Ireland, and preserved at Cong until recently, is now in the possession of the Royal Irish Academy. At Ballyhaunis are the ruins of a largely endowed abbey founded by the family of Nangle. At Moyne there are the fine remains of a Franciscan friary. Rossark abbey, in the same neighbourhood, built by the Joyces in the 15th century, is another very striking ruin. The remains of Ballintubber abbey, 7 miles from Ballinrobe, are among the most elegant specimens of early architecture in Ireland. It was founded by Cathal O'Connor about the close of the 12th century. Throughout the county there are many other remains of religious houses.

The chief military antiquities are Carrig-a-Nile, near Newport, said to have been a stronghold of Grace O'Malley, or Granu Aile, celebrated for her exploits against the English in the 16th century; Doona Castle, on the shore of Tullaghan Bay, another seat of the O'Malleys; and Inver Castle, on the shore of Broadhaven, which probably belonged to the same family.

MAYOTTA. [COMORO ISLANDS.]

MAYPU, RIO. [CHILL]

MAZANDERAN. [PERSIA.]

MEACO. [JAPAN.]

MEASHAM. [DERBYSHIRE.]

MEATH, a maritime county in the province of Leinster, Ireland, is bounded N. by Cavan, Monaghan, and Louth, E. by the Irish Sea and the county of Dublin, S. by Kildare and King's County, and W. by Westmeath. It is situated between 53° 22' and 53° 55' N. lat., 6° 13' and 7° 17' W. long. Its greatest length from east to west is 47 miles; from north to south 40 miles. The area is 906 square miles, or 579,899 acres, of which 547,391 acres are arable, 16,033 acres uncultivated, 12,767 acres in plantations, 467 acres in towns, and 3244 acres under water. The population in 1841 was 183,828: in 1851 it was 140,750.

Coast-line and Surface.—The coast, 10 miles in length, has a tolerably straight outline running south by east from the mouth of the Boyne to the boundary of the county of Dublin, near Gormanstown. The shore is low, skirted by sand-banks or hills, and broken by one or two small streams which flow into the sea. There is no harbour of importance.

The highest part of the county is near the western border, to the south of the Crosswater stream, which separates Meath from Cavan. The principal hill in that district is Sliebhnallagh, which rises to the height of 904 feet, between Oldcastle and Crossakeel. There are small patches of bog in many parts of the county. The general surface of the county is a continuation of the central plain of the island. Belonging almost entirely to the basin of the Boyne, it is broken only by gentle undulations or by detached hills of inconsiderable height. In the southern portion of the county the chief elevation is 558 feet, the height of one of several hills in the neighbourhood of Dunshaughlin.

Hydrography and Communications.—The Boyne touches the border of the county at its south-western extremity, and after dividing it for a few miles from the county of Kildare, flows in a winding channel north-east by Trim to Navan, where it receives the Blackwater, its chief tributary. The Menagh, which skirts the south-western border and unites with the Boyne where the latter first touches the county; the Blind, the Blackwater, which on the south divides Meath from Kildare, and the Deel, all small streams, join the Boyne before it reaches Navan. From Navan the Boyne flows east-north-east by Slane to the border of Louth, and thence along the boundary-line to the sea at Mornington below Drogheda. The Boyne is navigable in the natural bed of the stream to above Drogheda, and afterwards partly in the natural bed, and occasionally by a lateral cut or canal to Navan, about 23 miles from its mouth. The Blackwater touches the border of the county on the north-west side at the junction of the Crosswater, and after running a short way between Louth and Meath flows east-south-east 18 miles into the Boyne at Navan. The Nobber rises from some bogs and small lakes on the northern side of the county near Kilmainham, and flowing in a winding course first south-east then north-east enters Louth, and there unites with the Dee. The southern and south-eastern borders are watered by the affluents of the Liffey, or by some smaller streams which flow into the sea between the Liffey and the Boyne. Lough Sheelin, a lake of an oval form, 5 miles long, separates Meath and Westmeath from Cavan. Lough Bawn and other small lakes lie on the western border of the county. In the north the lake of Kilmainham, about a mile long, is formed by an expansion of the Nobber.

The Royal Canal enters the county near Killook, and runs for some miles within the border, occasionally quitting it for the county of Kildare. It is carried by aqueducts over the Blackwater and the Boyne, and soon after enters Westmeath. About 14 or 15 miles of this canal are within the county, which it connects with Dublin at one end, and the Shannon, near the town of Longford, at the other. The Midland Great Western railway, from Dublin to Galway, crosses the county close to the line of the Royal Canal. The Dublin and Belfast Junction railway passes along the coast, and a branch from Drogheda continues the communication inland to Navan.

The county is well provided with roads. The principal lines are the coast and inland roads to Drogheda, joining the Great Northern road to Armagh and Belfast; the Dublin and Londonderry road through Slane; the Dublin and Enniskillen road through Navan and Kells; the Dublin and Granard road by Trim and Athboy; and the Dublin and Sligo road by Clonard.

Geology.—Meath belongs chiefly to the great limestone district of Ireland, the southern part of the county, and considerable portions of the north and west, being occupied by this formation. A part of the limestone beds belongs to the calp or black shale series, composed of alternations of impure black argillaceous limestone with black shale containing balls of gray ironstone. From beneath the beds of the calp series those of the lower limestone crop out. The hilly parts of the county belong to the transition district, which extends from the coast of the county of Down into the counties of Longford and Roscommon. The rocks are grauwacke slate, fissile clay-slate, flint-slate, and chlorite slate. In this district limestone and marl are abundant.

Climate, Soil, and Produce.—The climate of Meath is colder than that of the western division of the island, but is less humid even than the climate of most of the eastern counties. Cold winds prevail during spring.

The soil is for the most part a deep loam of the richest character. Meath is the first county in Leinster for the quality of its grazing land. The mode of farming, though slovenly and defective, bears some resemblance to that of England. The employments are chiefly agricultural. Grazing is more attended to than tillage. Some coarse linens are manufactured. In 1853 the number of acres under crop was 203,528, of which 9563 acres grew wheat; 94,862 acres oats; 7434 acres barley, bere, rye, peas, and beans; 13,441 acres potatoes; 12,128 acres turnips; 5563 acres other green crops; 589 acres flax; and 59,953 acres meadow and clover. In 1852 on 10,897 holdings, there were 21,623 horses, 3579 mules and asses, 105,068 head of cattle, 151,422 sheep, 20,096 pigs, 7298 goats, and 242,203 head of poultry. The total value of the live stock here enumerated was estimated at 1,064,809*l.* The best breeds of cattle have been introduced. The horses are generally inferior. A large, long, blood horse, which sells for a high price, is much reared in the county.

Divisions and Towns.—The county of Meath is divided into 19 baronies,—Deece Lower and Upper, Drogheda, Duleek Lower and Upper, Dunboyne, Fors, Kells Lower and Upper, Lune, Morgallion, Moyfenrath Lower and Upper, Navan Lower and Upper, Ratoath, Skreen, and Slane Lower and Upper. The principal towns are NAVAN, KELLS, and TRIM, which are noticed under their respective titles. The following are the smaller towns and most important villages, with the population of each in 1851:—

Bohermeen, population 831 in 1841, had in 1851 fewer than 20 houses, and was therefore not returned as a separate village. Besides the parish church there is a large Roman Catholic chapel. Near Bohermeen are the extensive demesne of Allanstoun, the mansions of Oatlands, Durhamstown, and Robertstown, and Ardbraccan House, the palace of the Bishop of Meath. The episcopal residence, which is one of the finest in Ireland, was erected in 1766 on the site of a castle which had from an early period been the seat of the Bishops of Meath.

Athboy, population 1204, a market- and post-town, formerly a parliamentary borough, is situated on the Athboy River, 7 miles N.W. from Trim, and 36 miles N.W. by W. from Dublin. It contains a small church, a Roman Catholic chapel, a sessions-house, two free schools, a national school, and a dispensary. An almshouse for 12 poor widows is supported by Earl Darnley the proprietor of the town. Petty sessions are held monthly. Fairs are held 7 times a year.

Clonard, population of the townland of Anneville, or Old Clonard, 325 in 1861, is situated on the Boyne, 33 miles W. by N. from Dublin. Clonard in ancient times had an abbey which became the seat of a bishop whose diocese was augmented, previous to 1152, by the addition of the bishoprics of Trim, Ardbraccan, Dunshaughlin, and Slane; and was afterwards designated the diocese of Meath, but the cathedral continued to be at Clonard till 1206. About 1175 Hugh de Lacy erected here an Augustinian monastery. Clonard was the scene of conflict in 1641 and in the insurrection of 1798.

Duleek, population 1158 in 1841, but only 374 in 1851, is situated on the Nanny Water, 24 miles N. by W. from Dublin, and contains a parish church, erected in 1819, a Roman Catholic chapel, a National school, and a dispensary. There is an extensive flour-mill. Petty sessions are held monthly. Fairs are held 4 times a year. In the town are two stone crosses and the remains of an abbey or priory, and a monastic hospital. Duleek returned two members to the Irish Parliament.

Dunshaughlin has been already described. [DUNSHAUGHLIN.]

Nobber, population 266, situated on the road from Dublin to Clones, 40½ miles N.W. by N. from Dublin, contains a neat parish church, a Roman Catholic chapel, and a dispensary. Near the village is a large Danish camp, and in the churchyard are the remains of a structure supposed to have belonged to the Knights of St. John of Jerusalem. Fairs are held 6 times a year.

Oldcastle, the seat of a Poor-Law Union, will be separately noticed. [OLDCASTLE.]

Ratoath, population 396, formerly a parliamentary borough, is situated on the road from Ashbourne to Dunshaughlin, 15 miles N.W. by

N. from Dublin. It contains a neat parish church, a large Roman Catholic chapel, and a dispensary. There is here a remarkable Danish mound called the Moat of Ratoath. Fairs are held in the village on April 18th, June 1st, and November 20th.

Slane, population 526, a market- and post-town, is pleasantly situated on the left bank of the Boyne, 16 miles N.N.E. from Trim, and 28 miles N.N.W. from Dublin. The town consists generally of neat modern houses, and contains a parish church with a handsome spire, a Roman Catholic chapel, and a dispensary. In early ages Slane was the seat of a bishopric. Slane Castle, the seat of the Marquis of Conyngham, is on the bank of the river just above the town. In the grounds are a large chapel and lofty tower forming the remains of an abbey, founded in 1512 on the site of an earlier structure. There is a group of tumuli at New Grange a short way down the river; the largest is a mound 70 feet high, having at the top an irregular area, 300 feet in circumference. This mound, when opened, was found to conceal the entrance to a gallery leading to a remarkable excavation or cavern. Petty sessions are held monthly. Fairs are held on the 2nd of April, June, and September, and on November 8th.

Summerhill, population 208, about 6 miles S.S.E. from Trim, and 22½ miles N.N.W. from Dublin, is formed on a regular plan, and contains some well-built houses, a Roman Catholic chapel, and a dispensary. Adjoining the town is the demesne of Summerhill, the property of Lord Langford. Petty sessions are held in the town monthly, and fairs four times a year.

Tara, Tarah, or Taragh, population 122, is situated on the east side of the hill of Tara, 23 miles N.W. from Dublin. The parish church, built in 1823, forms a conspicuous object on the summit of the hill. Up to the close of the 6th century, it is said the kings, clergy, and bards of Ireland assembled every third year at the hill of Tara to settle the affairs of the kingdom, and elect a supreme ruler. In this neighbourhood the Danes were defeated in 980. Roderick, the last native king of Ireland collected his forces here before attacking the English at Dublin. In 1589, O'Neill assembled his troops at Tara Hill after laying waste the surrounding country, and in 1798 it was the scene of a skirmish between the insurgents and a detachment of fenibles. On the summit of the hill is a pillar stone, regarded by some as the coronation stone of the ancient kings of Ireland.

Meath returns two members to the Imperial Parliament. The county is in the diocese of Meath, with portions in Armagh and Kilmore. It is in the home circuit. The assizes are held at Trim, where the county prison is. There are bridewells at Trim, Navan, and Kells. Quarter-sessions are held at each of these towns and at Duleek and Dunshaughlin. Petty-sessions are held in 17 places. There are savings banks at Kells and Navan; the deposits on November 20th 1853 amounted to 22,341*l.* 17*s.* 1*d.* The county is in the military district of Dublin. There are barrack stations at Navan and Trim. The constabulary force, consisting of 466 men and officers, has its head-quarters at Navan. In September 1852, there were 144 national schools in operation, attended by 7092 male and 7088 female children.

History and Antiquities.—Meath appears to have been included by Ptolemæus in the territory of the Blainii, or Eblani, a nation whose sway extended over the counties of Dublin and Wicklow. At an early period Meath constituted one of the kingdoms into which Ireland was divided, and comprehended, it is likely, not only the present counties of Meath and Westmeath, but also the whole or part of those of Longford, Cavan, and King's County. Teamor, now Tarah Hill, near the Boyne, between Dunshaughlin and Navan, was the residence of the sovereign of Ireland, and the place where St. Patrick made his first efforts for the conversion of the Irish to Christianity. After the sovereignty of Ireland became a merely nominal supremacy, the kings of Meath constituted one of the two lines of the great family of the Hy-Nialla, by which the general government was alternately possessed.

In the invasions of the Northmen or Danes, the kingdom of Meath suffered severely. For several centuries it was exposed to their ravages, or to those of the Irish princes, with whom the kings of Meath were at war.

At the English invasion, Richard, earl of Strigul or Chepstow, commonly called Strongbow, took possession of Meath in 1171, which was conferred by Henry II. as a county palatine on Hugh de Lacy. In the general rebellion excited in the reign of Henry II., Meath was preserved to the English by the valour of William Petit, who defeated the Irish invaders in 1186. The power of one of the De Lacys, who had been created Earl of Ulster, having excited the jealousy of John, that king visited Ireland in 1210, and spent some months in reducing the fortresses in Meath and Ulster. The county was very much disturbed for upwards of 100 years afterwards. The native Irish repeatedly renewed their incursions, and in 1329 the English, under Lord Thomas Butler, sustained a severe defeat from them near Mullingar in Westmeath. Richard, duke of York, Lord-Deputy in the reign of Henry VI., erected castles along the border of Meath and other counties in order to repress them.

At the close of the reign of Henry VIII. the ancient county of Meath was divided; and West Meath, including the present counties of Westmeath and Longford, and part of King's County, was erected

into a separate county. Cavan, which was partly formed out of Meath, was erected into a separate county by Sir John Perrot, Lord-Deputy in the reign of Elizabeth. In the great rebellion of 1641 Trim was entered by the English troops, who designed to make it a military post; and an attempt of the Irish in 1642 to surprise the garrison was defeated by a bold and successful sally. Sir Charles Coote, one of the best officers of the English, and commander of the garrison, fell in the action. In 1647 Trim was unsuccessfully besieged by the insurgents under General Preston. It served as a place of retreat to some of the Royalists on their defeat at Rathmines, near Dublin, in 1649; but after the storming of Drogheda, and the massacre of the garrison by Cromwell, Trim was surrendered by the Royalists without resistance.

The battle of the Boyne was fought close upon the border of this county, between Drogheda and Slane. The two armies subsequently crossed the county from north to south. In the rebellion of 1798 some outrages were committed in the county by a party of insurgents, and a body of about 4000 men took post on Tara Hill, where they were defeated with considerable slaughter by the troops and yeomanry.

There are several remains of antiquity in the county. At Tarah, or Taragh, once the seat of the Irish monarchs, are considerable earthworks. Two splendid torques, or collars of pure gold, were dug up here in 1813. There are considerable ruins of the castles of Scorlogestown, Dunmoe, Athlumney, and Asigh. Slane Castle and one or two others have been fitted up as residences. There are round towers at Kells and at Donoughmore near Navan. There are numerous interesting ruins of ancient monastic edifices, particularly those of the monastery at Duleek, which present some remarkable traces of rude architecture. The ruins of Bective Abbey are extensive and picturesque.

The diocese of Meath is in the province of Armagh: it comprehends nearly the whole of the counties of Meath and Westmeath, a large part of King's County, and small portions of Cavan, Longford, and Kildare. The bishop of Meath takes precedence of all the bishops. The only dignitaries are the archdeacon of Meath and the dean of Clonmacnoise. The income of the diocese of Meath and Clonmacnoise is 4068*l.* Previous to 1152 the ancient sees of Clonard, Fore, Trim, Dunshaughlin, Slane, and Ardbraccan, with some smaller sees, were consolidated into the diocese of Meath, the seat of which was fixed at Clonard. Duleek, Kells, and Clonmacnoise were afterwards added to the diocese, the seat of which was transferred about 1206 to Newtown Abbey near Trim.

MEAUX. [SEINE-ET-MARNE.]

MECCA, a city in Arabia, capital of the Hedjaz, and the birth-place of Mohammed, is situated in about 21° 30' N. lat., 40° 20' E. long., and 70 miles from the Red Sea, in a sandy valley running north and south, and from 100 to 700 paces broad. The chief part of the city is placed where the valley is widest. In the narrower part are single rows of houses only or detached shops. The town itself covers a space of about 1500 paces in length, but the whole extent of ground comprehended under the denomination of Mecca amounts to 3500 paces in length. The heights that screen the valley are from 200 to 500 feet in height, barren and destitute of trees. Most of the town is situated in the valley itself, but there are some parts built on the sides of the hills.

The streets are in general broader than those of eastern cities, for the purpose of accommodating the vast number of pilgrims who resort to it. The houses are lofty and of stone; and the numerous windows that face the streets give to these quite a European aspect. Many of the houses are three stories high. In Mecca it was necessary to leave the passages wide for the visitors who crowd here.

The only public place in the body of the town is the large square of the great mosque, which is enlivened during the Hadj (Pilgrimage) by a great number of well-stored shops. The streets are all unpaved, and in summer the sand and dust are as great a nuisance as the mud is in the rainy season, during which they are scarcely passable after a shower.

Mecca is badly provided with water; there are few cisterns for receiving rain, and the well-water is brackish. The famous well of Zemzem in the great mosque is indeed copious enough to supply the whole town, but the water is not well tasted. The best water is brought by an aqueduct from the vicinity of Ararat, six or seven hours distant. There are two places in the interior of the city where the aqueduct runs above ground, and in these parts it is let off into small channels or fountains, at which some slaves of the Sherif are stationed to exact a toll from persons who fill their water-skins.

All the houses in Mecca except those of the principal and richest inhabitants are constructed for the accommodation of lodgers, and divided into numerous separate apartments, each consisting of a sitting-room and a small kitchen. Except four or five houses belonging to the Sherif, two 'medressa,' or colleges, and the mosque, Mecca has no public edifices of any importance.

The mosque, called Beitullah (God's House), or El Haram, is only remarkable for the Kaaba, or Holy House, which it incloses. The Kaaba stands in an oblong square, surrounded by colonnades; on the east there are four rows of pillars, and on the other sides only three. The pillars are united by pointed arches, every four of which support a small dome, plastered and whitened on the outside. The number of

these domes is 152, and that of the pillars is variously stated at 450 and 500. These columns are from one foot and a half to one foot and three quarters in diameter, and above twenty feet in height, but otherwise there is little regularity in them. No two capitals or bases are exactly alike. The capitals are of coarse Saracenic workmanship, and some, which had served for other buildings, have, by the ignorance of the workmen, been placed upside down upon the shafts.

Seven paved causeways lead from the colonnades towards the Kaaba, in the centre. The whole area of the mosque is upon a lower level than any of the streets surrounding it. There is a descent of eight or ten steps from the gates on the north side into the platform of the colonnade, and of three or four steps from the gates on the south side.

Towards the middle of this area stands the Kaaba, which, according to the belief of the Mohammedans, was constructed in heaven 2000 years before the creation of the world, and Adam, the first believer, erected the Kaaba upon earth on its present site, which is exactly below the spot which it occupied in heaven. It is an oblong massive structure, eighteen paces in length, fourteen in breadth, and from thirty-five to forty feet in height. It is constructed of the gray Mecca stone, in large blocks of different sizes, joined together in a very rough manner and with bad cement. It stands upon a base two feet in height, which presents a sharp inclined plane. As the roof is flat, it has at a distance the appearance of a perfect cube. The only door which leads into it is opened only two or three times in the year: this door is on the north side, and about seven feet above the ground: it is entered by wooden steps. At the north-eastern corner of the Kaaba, near the door, is the famous Black Stone, which every pilgrim kisses; it forms a part of the sharp angle of the building, and is four or five feet above the ground. It is an irregular oval, about seven inches in diameter, with an undulating surface, and seems to be a piece of basaltic lava. The four sides of the Kaaba are covered with a black silk stuff, hanging down and leaving the roof bare. This covering is renewed annually at the time of the hadj, and is brought from Cairo, where it is made at the expense of the Turkish sultan. An opening is left for the black stone. The Kaaba remains without a cover for fifteen days before the new one is put on. The black colour of the covering spread over a large cube in the midst of a vast square, gives to the Kaaba, at first sight, a very singular and imposing appearance. As it is fastened slightly, the least breeze causes it to move with a slow undulation, which is hailed by the assembled congregation as a sign of the presence of the guardian angels, whose wings by their motion are supposed to produce the waving of the covering. Seventy thousand angels have the Kaaba in their holy care, and are ordered to transport it to Paradise when the trumpet of the last judgment shall be sounded.

There are several other buildings within the area of the mosque, mostly appropriated to reading prayers, preaching, or the performance of devotions. The Zemzem, or Holy Well, is supposed to be the spring found in the wilderness by Hagar at the moment when Ishmael was dying of thirst. It seems probable that the town of Mecca owes its origin to this well; for many miles round no sweet water is found, nor is there in any part of the adjacent country so copious a supply. It is inclosed by a square building of massive construction, with an entrance to the north opening into the room which contains the well. This room is beautifully ornamented with marbles of different colours; and adjoining to it, but having a separate door, is a small room with a stone reservoir, which is always full of Zemzem water; this the hadjis get to drink by passing their hand with a cup through an iron-grated opening, which serves as a window, into the reservoir without entering the room. From before dawn till near midnight the well-room is constantly filled with visitors. It is considered a miracle that the water of this well never diminishes notwithstanding the continual draught from it. The water is supplied by a subterraneous rivulet.

The inhabitants of Mecca, with few exceptions, are Arabians. They have two kinds of employment, trade and the service of the Beitullah. During the hadj Mecca becomes one of the largest fairs in the East, and certainly the most interesting, from the variety of nations which frequent it. The merchants of the place make large profits during this time by their merchandises. They have also a considerable trade with the Beduins, and with other parts of Arabia. India goods, drugs, articles of dress, and corn, are the chief articles of trade. The greatest profit however is derived from supplying food for 60,000 hadjis, or pilgrims, and 20,000 camels. The only articles of manufacture are some pottery and beads; there are a few dyeing-houses in the city.

Mecca is governed by a Sherif, who is chosen from one of the tribes of Sherifs, or descendants of the Prophet, settled in the Hedjaz; they were once numerous, but are now reduced to a few families of Mecca. Although he obtains his station by the choice of the Sherif families, or by force, he holds his authority from the Turkish sultan. [ARABIA, vol. i., cols. 413, 414.] Only Mussulmans are allowed to enter Mecca.

Near Mecca is a hill called *Arafat*, on which, according to the belief of the Mohammedans, Adam, conducted by the angel Gabriel, met Eve, after they had been separated for 200 years, in consequence of their disobedience, and banishment from Paradise. It is the scene of an annual procession of the Mohammedans, at which certain prescribed ceremonies are performed; and no pilgrim, although he may have

visited all the holy places of Mecca, is entitled to the name of 'hadji' unless he has been present on this occasion.

(Burkhardt, *Travels*; Ali Bey, *Travels*.)

MECHELEN, MECHLIN, or MALINES, a large well-built town in the province of Antwerp, is situated on the Dyle, in 51° 2' N. lat., 4° 29' E. long., in a fertile plain, at the intersection of four railroads leading to Antwerp, Ghent, Brussels, and Liège, respectively distant 27, 35, 12, and 59 miles. The streets are wide, well paved, and kept remarkably clean. The large square, called La Place d'Armes, and the market-place, are in particular deserving of mention. The cathedral, dedicated to St. Rombaud, is the most remarkable building in the town. Its tower is 348 feet high, and contains a fine peal of bells: the nave was finished in 1437, the choir in 1451. The pulpit, representing the Conversion of St. Paul, and the Crucifixion by Vandyke, are the great ornaments of the interior. The side-chapels are adorned with numerous pictures. The organ is remarkable for its rich and full body of tone. Among the other churches of Malines are those of St. Jean, which contains the Adoration of the Magi by Rubens; and the elegant gothic church of Notre-Dame, in which is the 'Miraculous Draught of Fishes,' also by Rubens. The other principal buildings are—the arsenal, which contains a cannon-foundry; the town-house; the archiepiscopal palace; and the church of the Jesuits. Mechelen contains a college, an academy of painting, a society of fine arts, and a large building which serves as an asylum for 800 widows and aged women.

It appears that as early as the 5th century Mechelen was the capital of a lordship, which was afterwards given in 754 by Pepin to one of his relatives. It was subsequently destroyed by the Normans, and rebuilt in the year 890. In 910 it was ceded by France to the Bishop of Liège. At this time it occupied only the left bank of the Dyle, but was extended on the other side of the river in 970. Mechelen was sacked by the Spaniards in 1572, and by the army of the Prince of Orange in 1578. It was taken in 1706 by the Duke of Marlborough, and by the French in 1746, but was restored at the peace of Aix-la-Chapelle. In 1792 it was again taken by the French, who in 1804 destroyed its fortifications.

Malines is the seat of an archbishop, who is primate of Belgium, and has for his suffragans the bishops of Namur, Tournay, Aix-la-Chapelle, Trèves, Ghent, Bruges, Liège, and Mayence.

Mechelen carries on some trade by means of vessels of considerable burden which ascend the Schelde and the Dyle at high-water, the influence of the tide being felt a few miles above this town. The principal articles of commerce are—corn, oil, hemp, flax, and hops. The lace-manufacture of Mechelen, once of great importance, has greatly fallen off. The lace made here now is coarser and much less valuable than that made at Brussels. The railway terminus for the four lines above alluded to is about a quarter of a mile north of the town. It was originally intended to have the terminus in the middle of the town, but this project was successfully resisted by the authorities and the townfolk. The consequence is, that of the millions who pass through the terminus yearly a very small number enters the picturesque old city, and fewer still stop in it; and Mechelen has begun to have a deserted aspect. There are manufactories of hats, shawls, coarse woollens, and paper; cotton-mills, dye-houses, breweries, distilleries, and tanneries.

MECKLENBURG, a county in North Germany, lying between 53° 8' and 54° 2' N. lat., 10° 40' and 13° 45' E. long., consisting of the grand-duchies of Mecklenburg-Schwerin and Mecklenburg-Strelitz, and the principality of Ratzeburg, is bounded N. by the Baltic, E. by Prussia, S. by Prussia and Hanover, and W. by Lauenburg and Lübeck. The whole area is 5588 square miles, and the population in 1848 amounted to 642,391.

Surface, &c.—The surface of the country, being a part of the lowland of Northern Germany, may be described generally as a plain. There is a ridge or chain of hills, which, commencing in the Silesian Mountains, traverses the country, and extends in a north-west direction into Holstein. On both sides of this ridge there is some heath, moor, and sand, but a great portion of the land is fertile, and in parts covered with considerable forests. The soil is partly loamy and heavy, partly of a middling quality, and partly sand. In Mecklenburg-Schwerin there are 62 lakes at least one mile and a quarter long, besides many smaller ones. Lake Müritz, which is the largest, is 18 miles long and 8 miles broad. In Mecklenburg-Strelitz the county of Stargard alone contains 53 lakes at least one mile and a quarter long; the largest is the Tollen Lake, 7½ miles long. Some of the rivers fall into the Baltic, and others into the Elbe. Of the former the principal are the Trave, Stakenitz, Recknitz, Peene, Warnow, and Stuhr; the Warnow is one of the chief rivers: the length of its course is about 100 miles. At Rostock it suddenly expands to a breadth of 2400 feet, and falls into the sea at Warnemünde. The Elbe washes the frontier only at two places, near Dönitz and Boitzenburg, which lie on its banks. The rivers that fall into the Elbe are the Elde, which has a course of above 100 miles, and the Havel. The Peene and the Havel have their sources in Mecklenburg. The coast of the Baltic, which is but little indented, is generally steep, and high above the sea; and where it is lower, the country is protected from the incursions of the sea by sand-hills. Though Mecklenburg, on the whole, is not a picturesque country, there are some spots of very pleasing

appearance about many of the lakes, especially Lake Malchin, and near the sea-coast. The climate is healthy; but the weather is variable and frequently foggy, and the winter often very cold.

Natural Productions.—Agriculture is the chief employment of the inhabitants. Wheat, rye, barley, oil, seeds, oats, peas, and vetches are very abundant; the wheat is grown for exportation. The forests produce oak, beech, and fir-timber of excellent quality. The horses are light and active, show a good deal of blood, and are superior generally speaking to those met with in the rest of North Germany. Horned-cattle and sheep are numerous, and the quantity of butter made and the wool sold is very considerable. The wool fairs are held in Rostock, Gastrow, and Neu-Brandenburg in June. Swine are abundant. In parts wild boars, stags and deer, bustards, partridges, snipes, wild geese, and ducks are numerous. The geese of Mecklenburg are celebrated for their size and quality. Fish abound both in the sea and in all the lakes. The country is poor in minerals, and no mines of any kind are worked.

Trade and Manufactures.—The manufactures are inconsiderable, but great pains are taken to promote the woollen manufacture. Favourably situated as the country is between the Baltic and the Elbe, its commerce is far more important than its manufactures. The exports consist of the farm products before named, together with oil-cake, rags, bones, &c.; the imports of wine, spirits, sugar, molasses, coffee, iron, fish, manufactured goods, hemp, flax, oil, cheese, chalk for manure, pitch, &c. The revenue of Mecklenburg-Schwerin amounted to 3,251,174 thalers, the expenditure to 3,439,564 thalers in 1852-3.

The southern part of Mecklenburg is traversed by the Berlin and Hamburg railway, from the Hagenow station on which a line 71 miles in length runs north-eastward through Schwerin and Bützow to Rostock, with branches to Güstrow and Wismar.

Religion and Education.—The inhabitants in Mecklenburg-Schwerin, who are of Vandal and Slavonic origin, profess the Lutheran religion, with the exception of 687 Catholics, 181 Calvinists, and 3232 Jews; and in Mecklenburg-Strelitz about 800 Jews and 50 Catholics. The sovereigns are the heads of the Lutheran Church. There is a university at Rostock with faculties of Lutheran theology, law, medicine, and philosophy, 37 professors, and about 105 students. There are gymnasia for Lutheran pupils in Schwerin, Parchim, Güstrow, Rostock, Wismar, Neu-Strelitz, Neu-Brandenburg, and Friedland; and elementary education has been widely diffused since the reign of Frederick Francis.

The military force of Mecklenburg-Schwerin in time of peace is 2665 officers and men; in time of war 4572 officers and men. The peace establishment of Mecklenburg-Strelitz amounts to 742 men. Their contingents to the army of the Confederation exceed their ordinary establishment, that of Mecklenburg-Schwerin being 3580, and that of Mecklenburg-Strelitz 718 men. In the full council Schwerin has two votes and Strelitz one; in the select council they have together one vote, namely, the 14th.

Form of Government.—The grand-dukes, assisted by a ministry of state, have the whole executive power, but share with the estates the legislative power and the right of imposing taxes. The grand-dukes indeed govern their respective dominions independently of each other, but the estates of the two grand-duchies are inseparably united by a compact made in 1523, called the Landes-Union. The clergy, formerly the first estate, having been excluded after the Reformation, the assembly has since consisted of two estates. The first is called the equestrian order, which includes all the owners of noble estates (whether they are noblemen or not). They have great privileges and immunities, and are rich and powerful. There are about 572 land-owners who have seats and votes in the assembly. The second estate consists of the deputies of the 44 towns. They meet annually at Sternberg and Malchin alternately. In general above 200 members attend. The grand-duke alone has the right of introducing such measures ('propositions') as he deems necessary. The estates may accept or reject them; and they may likewise state grievances, and petition for remedies.

Mecklenburg was in ancient times inhabited by the Vandals. On their emigrating to the south they were succeeded by Slavonic tribes, of whom the most powerful were the Obotriti, to whose prince, Heinrich Burewin, son of Pridislaus, Henry the Lion gave his daughter Matilda. Pridislaus was declared in 1170 a prince of the empire, and was the ancestor of the succeeding sovereigns of Mecklenburg. These princes received the ducal title from the emperor Charles IV. in 1340, and assumed that of grand-duke on joining the German confederation in 1815. The house of Mecklenburg is the oldest reigning family in Europe—perhaps in the world.

I. Mecklenburg-Schwerin is divided into the circles of Mecklenburg, Wenden, the principality of Schwerin, Rostock, and the lordship of Wismar. It contains an area of 4824 square miles, and had a population of 542,768 in 1852.

Bützow, the capital of the principality of Schwerin, is situated on the Warnow, 19 miles by railway S.S.W. from Rostock, and has about 4000 inhabitants, who manufacture paper and playing-cards.

Güstrow, capital of Wenden district, and one of the finest towns in the grand-duchy, was formerly the residence of the princes. It is situated on the left bank of the Nebel, 27 miles by railway S.E. from

Rostock, and has about 9000 inhabitants. The most remarkable buildings are the cathedral, containing some costly monuments of the reigning family; and the old palace (now a house of correction), described as the finest princely residence of the middle ages in Mecklenburg. Güstrow is a walled town, and a place of some commercial importance. There are several breweries, distilleries, and factories in the town.

Rostock, capital of the circle of Rostock, a trading port, and the largest town in the grand-duchy, is situated in 54° 5' N. lat., 12° 20' E. long., on an eminence on the left bank of the river Warnow, 131 miles by railway from Hamburg, 187 miles by railway from Berlin, and has about 22,000 inhabitants. It is surrounded by old walls, and consists of the old, the middle, and the new towns. On the whole the old town is most irregular, the middle town the handsomest, and the new town the most regularly built. The principal buildings are the arch-ducal palace, the university, the court of justice, the town-hall, and the churches of St. Mary and St. Peter—the former contains the tomb of Grotius, and possesses one of the finest organs in northern Germany; the latter, built in the 12th century, is remarkable for its fine steeple, 420 feet in height. The university, founded in 1419, has 23 professors, and possesses a library of 120,000 volumes rich in Oriental and Spanish literature. Rostock is the principal trading port of Mecklenburg, and possesses about 150 ships. The chief exports are corn, wool, oil-cake, rags, bones, flax, horses, cattle, provisions, &c.: the imports, colonial produce, wine, manufactured goods, and bay-salt. The manufactures comprise woollen-cloth, chicory, soap, beer, spirits, refined sugar, vinegar, chemical products, &c. Between 200 and 300 vessels belong to the port, which admits only those of 8 or 9 feet draught; larger vessels load and discharge at Warnemünde, at the mouth of the Warnow, 9 miles N. from Rostock: 435 vessels cleared from Warnemünde in 1849.

Schwerin, capital of the grand-duchy and of Mecklenburg district, is situated in 53° 45' N. lat., 11° 30' E. long., on the western shore of the lake Schwerin, 55 miles by railway S.W. from Rostock, and has about 18,000 inhabitants. The town has a striking and important appearance when viewed from a distance. It is inclosed by walls pierced by seven gates. On a nearer view however it is a long, irregular, and plain town, containing a few fine buildings: among them are the grand-ducal palace, which is built on an island in the lake, and is an old fortified structure, containing a good picture-gallery and a museum; a modern building appropriated to state business; and an old gothic cathedral, 305 feet in length and 135 feet in breadth. There are also Lutheran and Catholic churches, a synagogue, and a mint. The manufactures, of vinegar, cloth, pottery, and tobacco, are not of much importance.

Wismar, a fortified sea-port on Wallfisch Bay, at the mouth of the Stuhr, in 53° 53' N. lat., 11° 35' E. long., 22 miles N. from Schwerin, has about 12,000 inhabitants. The harbour is not deep, but it is considered one of the safest in the Baltic. Wismar possesses from 60 to 70 vessels; the entries into the harbour in 1849 numbered, exclusive of steamers, 338 ships, carrying 16,473 tons; the departures were 343 vessels, carrying 17,631 tons. The harbour is admirably sheltered on all sides; the islands of Poel and Wallfisch lie across the entrance, and screen it from the northerly winds. The town is tolerably well built, the streets are broad and well paved. The principal buildings are three gothic churches, a handsome modern town-hall, and a fine lofty school-house. The exports consist chiefly of corn; the imports are mostly Swedish productions. Fishing, agriculture, and the manufacture of tobacco, sail-cloth, playing-cards, beer, spirits, and linen employ a large portion of the population. Wismar was bought by Schwerin in 1803 of the Swedish government for 1,200,000 dollars. Wismar was a member of the Hanseatic League.

Among the other towns of Schwerin are the following:—**Parchim**, situated on the Elbe, 20 miles S.E. from Schwerin, is a walled town with about 7000 inhabitants, who manufacture woollen-cloth, tobacco, leather, chicory, &c. **Ludwigslust**, a market-town, and station on the Berlin-Hamburg railway, 20 miles S. by E. from Schwerin, has a fine palace, in which the grand-duke resided till 1837, a tobacco factory, and about 6000 inhabitants. **Boitzenburg**, 18 miles by railway W. from Hagenow, stands on the right bank of the Elbe, the Mecklenburg tolls on which river are paid here. The town has ship-building docks, a considerable transit trade, and 3300 inhabitants. **Dobberan**, a bathing village near the Baltic coast, with a population of 3200.

II. Mecklenburg-Strelitz lies east of Mecklenburg-Schwerin, and has an area of 764 square miles, with a population in 1851 of 99,828.

Neu-Brandenburg, a pretty circular town, with broad straight streets, is built near the Tollen-see; manufactures of woollen-cloth, cards, paper, and tobacco are carried on. The grand-duke has a palace in the town and a country-house in the neighbourhood. There is an annual wool-fair; and horse-races are held in the vicinity; population, 6000.

Stargard (called *Old Stargard*), is a small town with about 1400 inhabitants, a few miles S. from Neu-Brandenburg.

Strelitz, capital of the grand-duchy, situated in 53° 21' N. lat., 13° 10' E. long., consists of the old and new towns, which though a mile apart form one city. Old Strelitz is the seat of leather, tobacco, and pipe manufactures; and four annual fairs are held there. New Strelitz, founded in 1733, is built in the form of a star, with eight

divergent rays. This town is the residence of the grand-ducal court. The most remarkable edifice is the ducal palace, which contains a library of 50,000 volumes and a curious collection of German antiquities. The inhabitants chiefly depend for their support on the expenditures of the court. The united population of the two towns is 9500.

Ratzeburg, a small principality belonging to Mecklenburg-Strelitz, and situated between Schwerin, Lübeck, and Lauenburg, has an area of 137 square miles, and a population in 1851 of 16,352. It is traversed by the river Trave, and is bounded W. by the Lake of Ratzeburg, by means of which timber, corn, pulse, flax, and cattle are sent to Lübeck for exportation. The inhabitants also carry on considerable fisheries. *Ratzeburg*, the chief town, mostly belongs to Lauenburg, with the exception of the cathedral and the hospital, which belong to Strelitz. [HOLSTEIN.] It is the seat of the government of the principality, and has a population of 3000. [See SUPP.]

MECKRAN. [BELOOCHISTAN.]

MEDELLIN. [ESTREMADURA, Spanish.]

MEDELPAD. [ANGERMANNLAND.]

MEDEMBLIK. [HOLLAND.]

MEDEYAH. [ALGÉRIE.]

MEDIA, a country of ancient Asia. In the time of Strabo it was divided into two divisions, Great Media and Media Atropatene. Great Media, which is a high table-land, is said by all ancient writers to have had a good climate and a fertile soil; an account which is fully confirmed by modern travellers. It was separated on the west and south-west from the low country watered by the Tigris and Euphrates, by a range of mountains known to the ancients under the name of Zagros and Parachoatras. It was bounded E. by a desert and the Caspian Mountains (the modern Elburz Mountains), N. and N.W. by the Cadusii, Atropatene, and the Matieni, thus answering for the most part to the modern Irak Ajemi. Atropatene, which corresponds to the modern Azerbaijan, extended as far north as the Araxes (Aras); it was much less fertile than Great Media, and does not appear to have been included in the Media of Herodotus. It derived its name from Atropates, who successfully opposed the Macedonians, and established an independent monarchy, which continued till the time of Strabo.

The principal town of Great Media was Agbatana, or Ecbatana, the summer residence of the Persian kings. [ECBATANA.] South-west of Ecbatana was Bactana, or Bagistana, now called *Baghistan*, or *Behistan*, and sometimes *Basitán*, where Semiramis on her march from Babylon to Ecbatana is said to have formed a Paradise or great park. On the perpendicular face of the rock that skirts the plain is a group of figures in low-relief, with long inscriptions in the cuneiform character, which relate to Darius, son of Hystaspes, and his victories. These inscriptions have been interpreted by Colonel Rawlinson, and copies with translations are given in the 'Journal of the Asiatic Society,' vol. x. It is situated on the great commercial road which, beginning at Ctesiphon, passed through the Median gates of the mountain range called Zagros, and terminated at Ecbatana. In the north-east of Great Media, near the Caspian Gates, was the town of Rhagæ, afterwards called Europus by the Macedonians, and Arsacia by the Parthians, which was founded, or rather colonised by the Macedonians under Seleucus Nicator. This town, of which the ruins are still visible at Rai, is frequently mentioned in the apocryphal book of Tobit, as the place where many of the Jews resided, who had been carried away captive by Shalmaneser. Near Rhagæ was the Nisæan plain, celebrated for its breed of horses, which were considered in ancient times the best in Asia. (Herod., iii. 106, vii. 40; Arrian, vii. 13; Strabo, p. 525; Ammian., xxiii. 6).

The mountainous country in the south-western part of Great Media was inhabited by the Mardi, bordering on the north-west of Persia; the Uxii, and Elymsii, east of Susiana; and the Cossei, south of Great Media. The King of Persia was obliged to pass through the country of the latter whenever he visited Ecbatana, and could only obtain a free passage by the payment of a considerable sum of money. The Cossei were defeated by Alexander, but they never appear to have been completely subdued by the Macedonians.

The chief town of Atropatene was Gaza, or Gazika, as it is called by Ptolemæus, at no great distance from the modern Tauris, or Taubrees. North-west of Gaza was a salt-lake, called Spauta, or Martianus (Urmiah, or Urumiyah). In the north-east of Atropatene, near the Caspian Sea, were the Kadusii, or Gelsæ, whence the modern name of Ghilan is probably derived.

According to Herodotus the Medes were originally divided into six tribes—the Bussæ, Parataceni, Struchates, Arizanti, Budii, and Magi (i. 101). They were originally called Arii (Herodot., vii. 62); which word appears to contain the same root as Ar-tai, the ancient name of the Persians (Herodot., vii. 61).

Media originally formed part of the Assyrian empire. Its history as an independent kingdom is given differently by Herodotus and Ctesias (whose account is preserved in Diodorus).

According to Herodotus there were four kings of Media: 1, Dejoceus, who reigned B.C. 710-657; 2, Phraortes, B.C. 657-635, greatly extended the Median empire, subdued the Persians and many other nations, but fell in an expedition against the Assyrians of Ninus (Nineveh); 3, Cyaxares, B.C. 635-595, completely organised the military forces of the empire, and extended its boundaries as far west as the Hælyæ. In an

expedition against Nineveh, he was defeated by the Scythians, who had made an irruption into southern Asia, and was deprived of his kingdom for 28 years. After the expulsion of the Scythians, he took Nineveh, and subdued the Assyrian empire, with the exception of the Babylonian district; 4, Astyages, B.C. 595-560, who was dethroned by his grandson Cyrus, and Media reduced to a Persian province. Ctesias makes the Median monarchy commence about B.C. 842, and to last 232 years. Xenophon makes a fifth Median king, Cyaxares II., succeed Astyages.

The Medes revolted during the reign of Darius II., the father of the younger Cyrus, about B.C. 408, but were again subdued. (Herodot., i. 130; Xenoph., 'Hellen.,' i. 2). They do not appear after this time to have made any further attempt at recovering their independence. On the downfall of the Persian empire they formed a part of the kingdom of the Seleucidæ, and were subsequently subject to the Parthians.

MEDINA, the second holy city of the Mohammedans, and the place where their Prophet was buried, is situated in that part of Arabia which is called El Hedjaz, or Hedj, about 25° 15' N. lat., 39° 30' E. long., and about 110 miles from the town of Yembo on the Red Sea, which is the harbour of Medina.

Medina is built on the elevated plain of Arabia, not far from the eastern base of the ridge of mountains which divide the table-land from the lower country between it and the Red Sea. The town stands on the lowest part of the plain, where the watercourses unite, which produce in the rainy season numerous pools of stagnant water, and render the climate unhealthy. Gardens and date-plantations, interspersed with fields, inclose the town on three sides; on the side towards Mecca the rocky nature of the soil renders cultivation impossible.

The city forms an oval about 2300 paces in circuit, ending in a point. The castle is built at the point on a small rocky elevation. The whole is inclosed by a thick wall of stone, between 35 and 40 feet high, flanked by about 30 towers, and surrounded by a ditch. Three well-built gates lead into the town. The houses are well built of stone, and generally two stories high. As the stone is of a dark colour, the streets have a gloomy aspect, and are for the most part very narrow, often only two or three paces across; a few of the principal streets are paved with stone. There are only two large streets which contain shops. The principal buildings within the city are—the great mosque containing the tomb of Mohammed; two fine medreses, or colleges; and the castle, standing at the western extremity of the city, which is surrounded by strong walls and several high and solid towers, and contains a deep well of good water.

The suburbs extend west and south of the city, and cover more ground than the city. They are separated from it by an open space. Towards this open space the suburbs have no walls, but on the outside they are inclosed by a wall of inferior size and strength to that of the city. Four gates lead through this wall from the suburbs into the open country. The greater part of the suburbs consist of large courtyards with low houses built round them, and separated from each other by gardens and plantations; they are inhabited by the lower classes of the town, and all those who are engaged in agriculture. The cattle are kept in the midst of the courtyard, where there is a large well, and the only entrance is shut at night. In the western portion of the suburbs are regular and well-built streets with houses resembling those of the city. There are two mosques in the suburbs, one of which is called Meudjed Ali, or the mosque of Ali, the Prophet's cousin.

The town is well supplied with sweet water by a subterranean canal which runs from the village of Koba, about three-quarters of a mile distant in a southern direction. In several parts of the town steps are made down to the canal, where the inhabitants supply themselves with water, which however contains nitre and produces indigestion in persons not accustomed to it. There are also many wells scattered over the town; every garden has one, by which it is irrigated; and when the ground is bored to the depth of twenty-five or thirty feet water is found in plenty. During the rainy season many torrents descend from the higher grounds to the lower depression in which Medina is built, and part of the city is inundated. This plentiful supply of water made this site a considerable settlement of Arabs long before it became sacred among the Mohammedans by the flight, residence, and death of the Prophet, to which it owes its name of Medina, or Medinet el Neby (the City of the Prophet).

The mosque containing the tomb of Mohammed bears, like that of Mecca, the name of Hûram, on account of its inviolability; but in other Mohammedan countries it goes by the name of Meudjed el Neby, the 'Mosque of the Prophet,' who was its founder. It is situated towards the eastern extremity of the city, and its dimensions are much smaller than those of the mosque at Mecca, being 160 paces in length, and 130 paces in breadth; but it is built much upon the same plan, forming an open square, with a small building in the centre, and surrounded on all sides by colonnades roofed with small domes, which are whitewashed on the outside.

Near the south-eastern corner of the Mosque stands the famous tomb, detached from the walls so as to leave between it and the southern wall a space of about 25 feet, and 15 feet between it and the eastern wall. The inclosure which protects the tomb from visitors, forms an irregular square of about 20 paces, in the midst of the

colonnade, several of its pillars being included within it; it is an iron railing painted green, about two-thirds of the height of the columns. The railing is of good workmanship in imitation of filigree, and is decorated with open-worked inscriptions in yellow bronze. It is of so close a texture that no view can be gained into the interior except by several small windows, about 6 inches square, which are placed in the four sides of the railing, about 5 feet above the ground. The inclosure is entered by four gates, three of which are constantly kept shut, and one only is opened every morning and evening to admit the eunuchs, whose office it is to clean the floor and light the lamps. The inclosure is called El Hedjra. Permission to enter it is granted gratis to people of rank, and may be purchased by other people, from the principal eunuchs, for about twelve or fifteen dollars; but on entering the inclosure nothing more is to be seen than what may be observed when peeping in at the windows of the railing. At the distance of a few paces from the railing a curtain of rich brocade is carried all round, equal in height to the railing. No persons whatever are permitted to enter within the curtain, except the chief eunuchs, who take care of it, and who put on during the night the new curtain sent from Constantinople, whenever the old one is decayed, or when a new sultan ascends the throne. The old curtains are sent to Constantinople, and serve to cover the tombs of the sultans and princes.

According to the historians of Medina the curtain covers a square building of black stone supported by two pillars, in the interior of which are the tombs of Mohammed and his two earliest friends and successors, Abu Bekr and Omar. These tombs are deep holes, in which the coffins are deposited; that of Mohammed is cased in silver. The floor between the curtain and the railings is inlaid with variously coloured marble in mosaic; glass lamps are suspended all round the curtains, which are lighted every evening and remain burning all night. The whole of the inclosure is covered with a fine lofty dome rising far above the domes which form the roof of the colonnades, and is visible at a great distance from the town. As soon as pilgrims to Medina catch sight of it they repeat some prayers.

Near the curtain, and within the railings, is the tomb of Setna Fatme, the daughter of Mohammed and wife of Ali; it consists of a catafalque forming a cube, covered with a richly embroidered black brocade, and without any other ornament.

Four gates lead to the interior of the mosque; a few steps are to be ascended from the neighbouring streets up to the gates, the area of the mosque being at a somewhat higher level, contrary to what is the case at Mecca. About three hours after sunset the gates are shut by means of folding doors coated with iron, and not opened till about an hour before dawn; but those who wish to pray all night in the mosque can easily obtain permission from the eunuch on guard, who sleeps near the Hedjra. During Ramadhan the mosque is kept open the whole night.

The inhabitants of Medina, like those of Mecca, are not Beduins, but strangers, who have come to the place as pilgrims and afterwards settled there, or they are descendants of such strangers. Medina is not so great a place of commerce as Mecca, and the merchants are not so rich, but it has the advantage of having a considerable tract around which is fit for cultivation, and there are many wealthy land-owners in the town, who let out their possessions to poorer people. Wheat and barley are cultivated, but the chief profit arises from the plantations of date-trees, the fruit of which is held in greater estimation than the dates of Egypt.

(Burckhardt, *Travels in Arabia*.)

MEDINA-DEL-CAMPO, and DE RIO SECO. [LEON.]

MEDITERRANEAN SEA, the name of the sea that washes the coasts of Europe, Asia, and Africa, between the Strait of Gibraltar on the west and Syria on the east. This sea was anciently called The Sea, or the Great Sea, by the Jews. The Greeks do not seem to have had any general name for the Mediterranean: Herodotus calls it 'this sea' (l. 185); and Strabo calls it 'the sea within the columns,' that is, within the Strait of Gibraltar (121, 491, Casaub.). Mela calls the whole sea by the name 'our sea' (nostrum mare), and observes that different parts have their several names. Pliny appears to have no general name for it. The term Mediterranean is not applied to this sea by any classical Latin writer. It was called 'bahr-roum,' or the Sea of Rome, by the Arabs.

The Mediterranean Sea is comprised between the parallels of 30° 15' and 47° N., and the meridians of 5° 30' W. and 40° E. The distance from Gibraltar to the farthest shore of Syria is about 2300 miles, and the narrowest part, between Sicily and Africa, is 79 miles across. The Mediterranean, including the islands, occupies an area of 734,000 square miles. The surface of country of which it receives the drainage is very difficult to estimate, but may be assumed to exceed this quantity.

On the coast of Africa the Mediterranean forms a few large bays but no inlets of any magnitude. Into the European continent, on the other hand, it sends large inlets, connected with each other or with the main portion of this sea by narrow straits. Such are the Adriatic, which separates Italy from Austria and Turkey, and is joined to the Ionian Sea by the Strait of Otranto; the Ægean Sea, or Archipelago, stretching northward from Crete, between Greece and Asia Minor, embracing the numerous Greek islands, cutting up the mainland on

each side, with numerous bays, gulfs, inlets, and harbours, and washing at its northern extremity the coast of European Turkey; the Sea of Marmora, extending nearly east and west, between European Turkey and Asia Minor, from the Strait of the Hellespont, or Dardanelles, which connects it with the Ægean on the south-west, to the Bosphorus, or Strait of Constantinople, on the north; the Black Sea, a vast gulf which washes Asia Minor on the south, Armenia and Circassia on the east, the Crimea and Russia on the north, and European Turkey on the west; the Sea of Azof, which separates the peninsula of the Crimea from Russian-Circassia, and is connected with the Black Sea by the Strait of Yenikaleh, or Kertsch, the ancient Cimmeric Bosphorus; and the Siwash More, or Putrid Sea, which indents with its innumerable shallow bays and inlets the north-eastern coast of the Crimea and the coast of a part of the Russian province of Taurida, being separated from the Sea of Azof on the west by an extremely long and remarkably narrow tongue of land called Kosa Arabatskaia. To the north of the Kosa Arabatskaia is a very narrow strait which forms the only communication between the Sea of Azof and the Putrid Sea. Westward the Putrid Sea extends to the isthmus of Perekop, which is only 6 miles wide. As all these seas have been noticed in separate articles, ADRIATIC, ARCHIPELAGO, AZOF, BLACK SEA, MARMORA, &c., it remains here to notice the great connected mass of the Mediterranean Sea.

The Mediterranean Sea extends in an eastern direction from the Strait of Gibraltar which connects it with the Atlantic (5° 30' W. long.), a distance of about 2300 miles; its most eastern part, the harbour of Iskenderun, on the coast of Syria, being in about 36° 10' E. long. It is divided into two parts by the projection of the Italian peninsula, the island of Sicily, and Cape Bon on the north coast of Africa, between which and the most western part of Sicily the width of the sea is only 79 miles. The coast of Africa eastward from Ceuta to Cape Bon is bold and high with few exceptions, and deviates but little from a straight line, the indentations being small. The principal bays and harbours in this interval are the Bay of Melillah (east of which is the low marshy flat at the mouth of the Mulwia), the bays Oran, Algier, Bonah (east of which is the bank celebrated for its coral fisheries), and Carthage.

This part of the basin of the Mediterranean extends no great distance southward, the most southern point being the source of the Mulwia, about 32° N. lat. The rivers which are of inconsiderable magnitude are the Mulwia (ancient Mulucha), near the boundary between Morocco and Algérie, the Wady-el-Kebir (ancient Ampaga), the Wady-Serbous, and the Wady-Magerdah (Bagradas), all of which flow from the Atlas Mountains and their eastern continuation through Algérie.

From Gibraltar the sea gradually trends towards the north-east along the south and east coast of Spain, where are the ports of Malaga, Carthage, Valencia, and Barcelona, and the Bay of Rosas. A little north of the Bay of Rosas the coast runs first north and then east, forming the Gulf of Lyon off the south of France, where the coast is for the most part low, and fringed with numerous shallow shore-lakes or lagoons. The chief harbours in the Gulf of Lyon are Cete and Marseille. Eastward from Marseille the coast is high, the lower offsets of the Maritime Alps reaching down to the shore. In one of the indentations of this part of the coast is the French naval harbour and station of Toulon. The most northern part of this western division of the Mediterranean is the Gulf of Genoa, which is bounded to landward by a bold coast formed by the declivities of the Ligurian Apennines. From the Gulf of Genoa the coast of Italy takes a direction of south-south-east to the Strait of Messina, which separates that peninsula from the island of Sicily. The coasts of Tuscany, the States of the Church, and a great part of the kingdom of Naples are low, marshy, and unhealthy. [MAREMME.] The chief ports are Leghorn [LIVOURNO], Civita Vecchia, and Naples; the principal gulfs are those of Gaëta, Naples, Salerno, Policastro, and Santa Eufemia, between which and Sicily are the Lipari Isles.

The largest rivers that flow into the western division of the Mediterranean are the Ebro and the Rhône. Its basin is bounded by the Apennines, the Alps, the Cevennes, the Pyrenees, the Sierra de Oca, Sierra de Deza, Sierra de Alcaraz, Sierra Segura, the Sierra Nevada, and Sierra de Ronda. The widest part of the sea is between Genoa and Bonah, about 500 miles. In this interval lie the islands of Corsica and Sardinia. Between Cete and Algiers the distance is about 450 miles. Off the coast of Spain lie the Balearic islands. The distance between Carthage in Spain and Oran in Algérie is hardly 130 miles. Farther west the sea narrows to about 100 miles. In the strait itself, which is about 10 miles wide at its narrowest part, are the harbour of Tangier on the African side, and the bay and harbour of Algeciras west of the rock of Gibraltar. The rocks of Ceuta and Gibraltar at the eastern extremity of the Strait are the ancient Abyla and Calpe; these are the Pillars of Hercules, whence the strait was named Fretum Herculeum, or Strait of Hercules. The western entrance of the Strait is formed by capes Trafalgar and Sparte. In the middle of the Strait there is a constant current from the Atlantic into the Mediterranean, and a counter current along each of the coasts. It is said that there is an undercurrent into the Atlantic through the Strait. The length of the western part of the Mediterranean from Cape Sparte to Cape Bon is about 1400 miles.

The length of the eastern division of the Mediterranean from Cape Bon to the harbour of Iskenderun on the coast of Syria is about 1300 miles. Its width between the Gulfs of Taranto and Sidra is about 550 miles; between Cape Matapan and the coast of Cyrenaica 230 miles; and between Egypt and Asia Minor on the meridian of Alexandria 350 miles. At Cape Bon (37° 4' 20" N. lat., 10° 53' 35" E. long.) the Mediterranean suddenly falls off to the southward, along the eastern shore of Tunisia, for more than 3 degrees of latitude, to the bottom of the Gulf of Khabs (the ancient Syrtis Minor). The coast of Tunisia is partly high, and in parts skirted by wide uncultivated plains; to the west of the Gulf of Khabs a little way inland is the great salt lake Al Sibkah, which lies on the northern edge of the Great Desert of Sahara. There are several islands along this coast—Pantellaria belonging to Sicily; the Karkenah group (Ramlah, Gerbah, and others), low islands covered with date-trees, and seated on a bank frequented by shoals of tunny fish; and in the south of the Gulf of Khabs Jerbah, the ancient Meninx, a flat fertile island, abounding in palm, olive, carob, and date trees. On the north side of the island is a pyramid constructed with the skulls of the Spaniards who fell here in 1588 in battle with the Turks.

To the east of the island of Jerbah, the coast of Tripoli trends southward gradually to between 15° and 16° E. long., where it again falls off rapidly, forming the Gulf of Sydra (the ancient Syrtis Major), which extends eastward as far as 20° E. long., and its most southern point is on the parallel of 30° 20' N. The part of the continent of Africa which forms the coast of this, the most southern part of the Mediterranean, consists of a narrow strip of habitable land, hemmed in between the sea and the Great Desert; and at one part traversed by 19° E. long., the sand of the desert actually forms for some short distance the shore of the sea. Eastward of this point lies the fine hilly and wooded region of CYRENAICA, which presents a high coast and trends rapidly to northward to the east of the Gulf of Sydra till it nearly reaches the parallel of 33° N. The coast then declines again gradually southward along the shore of Tripoli and Egypt, Arab's Gulf, west of Alexandria, reaching the parallel of 30° 50' N. lat. The Egyptian coast is low but diversified by the harbours of Alexandria, the Bay of Aboukir, and the mouths of the Nile, beyond which the Syrian Desert approaches the shore. In all this great interval, from Cape Bon to the borders of Palestine, there is not a single river of any magnitude except the Nile, and the basin of the sea comprises merely the narrow strip of hilly land that separates it from the Desert till it reaches the great river of Egypt, which links with the Mediterranean countries all Egypt, Nubia, a great part of Abyssinia, Sennaar, Kordofan, and other unexplored regions of central Africa. Tripoli and Alexandria are the most important towns on this part of the coast. The isthmus that connects Africa with Asia from the head of the Red Sea at Suez to the old Pelusian mouth of the Nile, is only 65 miles across. According to a survey, made in 1853, the surface of the Mediterranean, at the point just named, was one metre (3 feet 3½ inches) lower than the surface of the Red Sea in the Gulf of Suez.

The sea that washes the coasts of Syria and Asia Minor, is called the LEVANT. The Syrian coast runs nearly due north, being for the most part bold, rocky, and extremely ill provided with harbours or sheltered anchorages. The Bay of ACRA, north of Mount CARMEL, (the most remarkable headland on the coast), and BEYROUT, are the principal places of trade; between them, on their ancient sites, are Tyre (Sur) and Sidon (Saida), once famous for their commerce, colonies, and manufactures, now mere villages.

Yafa, or Joppa, is still the port of landing for pilgrims to Jerusalem. The rocky island of Ruad, the ancient Aradus, 2 miles off the coast of Phœnicia, was in ancient times covered with a city, founded by a colony from Sidon. It became a busy, industrious, and wealthy hive. There are some remains of its ancient structures still. The city was supplied with water from a submarine spring, which still supplies the fishing village that occupies the site.

The basin of the Mediterranean extends no great way from the Syrian coast. Jerusalem stands on the watershed between this sea and the Dead Sea. The high lands of Judæa, Samaria, and Galilee form the boundary, which in Upper Galilee, a little south of the latitude of Tyre, approaches within a few miles of the coast, but again takes a north-north-east direction, so as to inclose the region of Coele Syria, watered by the Nahr-el-Litany, the ancient Leontes, which enters the Mediterranean a little north of Tyre; and the Nahr-el-Asy (Orontes), which flowing northward, and passing Antioch, enters the sea a few miles south of Ras-el-Khanzir.

On the east and north of the Bay of Iskenderun there is only a narrow strip between the Jawur-Dagh and Durdun-Dagh, the ancient AMANUS Mountains, belonging to the basin of the Mediterranean. The Gulf of Iskenderun extends in a north-eastern direction for about 50 miles between the Cape of Khanzir in Syria and Cape Kara-Tash in the south-east of Asia Minor. The harbour of Iskenderun, on the east side of the Gulf, has some trade in the imports and exports of Aleppo and Antioch. The Jihun falls into the west side of the gulf, at the extremity of the Durdun-Dagh, and drains the south-western angle of Asia Minor. The Jihun in ancient times was called Pyramus, which entered the sea to the west of Cape Kara-Tash. The coast here, and for a long distance westward as far as the mouth of the

Tarsus River, is low and alluvial. About 70 miles S.W. from Ras-el-Khanzir lies the island of CYPRUS. Across this alluvial plain another considerable river—the Sihun, which has its source in the highlands on the left bank of the Kizil-Ismak, near 39° N. lat., flows into the sea between the Jihun and the Tersus-Chai, or river of Tarsus.

To the west of the Tersus-Chai the Taurus Mountains and their southern offshoots come close down to the coast, which is bold, rocky, and precipitous, but covered with luxuriant timber. Between the gulfs of Adalia and Makri there is a vast projection formed by another mountain mass from the Taurus. In all this coast of Asia Minor, from the Gulf of Iskenderun to the Yedi Burun, or Seven Capes, there are no harbours; but to the westward of the Seven Capes the coast of Asia Minor, both on the south and on the west along the Ægean, is cut up by innumerable bays, harbours, and inlets, forming countless islands, peninsulas, capes, and headlands. Off the south-west of Asia Minor lie the islands of Rhodes and Crete.

Crete, Scarpantos, and Rhodes form the natural boundary of the Ægean on the south. North-west of Crete lie the island of Cerigo (the ancient Cythera) and the Morea. The Morea on every side presents a bold high coast, indented however with many fine bays, studded with islands, and forming good harbours. On the east coast are the Gulf of Ægina (Saronic Gulf) containing the islands of Ægina and Salamis, and the Gulf of Nauplia (Argolic Gulf). On the south coast, between Cape Matapan and Cape Malea, is the Gulf of Kolokythi (Laconian Gulf); and west of the high Maniote region, which ends in Cape Matapan, is the Gulf of Koroni (Messenian Gulf), bounded on the west by Cape Gallo. On the west side of the Morea are the Bay of Navarino, sheltered by the Island of Sphagia, the ancient Sphacteria; farther north the Gulf of Arcadia (Cyparissian Gulf), off which lie the Strophades Islands; and the gulfs of Patras and Lepanto (Corinthian Gulf), which separate the Morea from the rest of Greece.

The part of the Mediterranean that lies between Greece, Italy, and Sicily was anciently called the Ionian Sea, which is joined to the Adriatic by the Strait of Otranto. In its eastern parts, along the coast of Greece, are the islands which form the Septinsular Republic of the Ionian Islands, under the protection of Great Britain. The principal bay on the east side of this sea is the Gulf of Arta, the ancient Ambracian Gulf, which formed part of the boundary between Greece and Epirus, as it now does between Greece and Turkey in Europe. On the Italian side, which presents numerous headlands, but has in parts a low coast, are the gulfs of Taranto and Squillace. The principal harbour on this coast is that of Taranto, the ancient Tarentum. Along the east of Sicily the offshoots of Ætna form a bold coast; but south of Ætna there are many small sheltered bays, the principal of which form the harbours of Catania and Syracuse. About sixty miles south of Sicily is the island of Malta, which belongs to Great Britain, and is considered the key of the Mediterranean. Nearly due east of Cape Bon, and traversed by 12° E. long., is the island of Pantellaria, the ancient Cosyria, which is wholly of volcanic origin.

The navigation of the Mediterranean must no doubt be of very early date. The story of Minos destroying pirates (Thucyd., i. 4) takes for granted the fact that there must have been merchant vessels carrying something worth stealing from the earliest recorded period. If with Strabo we take for granted the accuracy of Homer's descriptions, it by no means follows that the Greeks knew everything that could have been known to every other nation at that time; and the stories told of the jealousy with which the Phœnicians and Carthaginians guarded their discoveries prove at least that geographical knowledge was not common property; and with regard to these very nations, the knowledge which the Greeks could have had of them, among other barbarians, must have been inferior to that which we possess in the minute accuracy of the Scriptures alone. The foundation of Utica 130 years before Carthage proves a regular communication between this place and Syria at a distance of upwards of 1300 miles; and we may conclude that occasional voyages of these enterprising people had already extended the bounds of knowledge far beyond these limits.

The Mediterranean was divided by Strabo into three basins: the first comprised the sea between the Columns of Hercules and Sicily; the second, between Sicily and Rhodes; and the third, between Rhodes and the shores of Syria.

Strabo supposed that the parallel of latitude of 36½° passed through the Sacred Promontory (Cape St. Vincent), between the Pillars of Hercules (or Gibraltar and Ceuta), dividing this part of the Mediterranean in the middle of its breadth, which was believed by navigators to be 5000 stadia, or 429 nautical miles from the Gulf of Lyon to the shore of Africa, which is very near the truth. The sea here however lies altogether to the north of this parallel; and hence, as the configuration of the European shores seems to have been tolerably good, the coast of Africa must have been proportionally distorted. This parallel was carried through the straits of Sicily, Rhodes, and the Gulf of Issus, now the Gulf of Iskenderun.

In consequence of the above supposition, he placed Marseille to the southward instead of the northward of Byzantium. He supposed Sardinia and Corsica to lie north-west and south-east instead of north and south, and made the distance of Sardinia from the coast of Africa 2400 stadia, or 205 miles, instead of 100 miles, the true distance. From the Columns of Hercules to the Strait of Sicily he considers to be 12,000 stadia, or 1028 miles.

From Cape Passaro (Pachynum) to the west extremity of Crete he considered 4500 stadia, or 386 miles; it measures 400 miles; and he supposed the length of Crete 2000 stadia, or 171 miles, the true length being 140 miles. He supposed that a line drawn through Byzantium, the middle of the Propontis, the Hellespont, and along the capes of the coast of Asia Minor, would coincide with the meridian: this error placed Byzantium too far to the north, and not far enough to the east. From Alexandria to the east end of Crete he considered 3000 stadia, or 257 miles: it measures about 290 miles. From Alexandria to Rhodes he made 3600 stadia, or 308 miles: it measures 320 miles. He supposed the head of the Greater Syrtis to be 1000 stadia, or 86 miles, to the south of Alexandria: it is about 60 miles. From Cape Acamas (the west point of Cyprus) to Cape Khelidonia, he made 1900 stadia, or 163 miles: it measures 120 miles; and from Cape Pedalion (Cape Greco) to Berytus (Beirut), he made 1500 stadia, or 129 miles; it measures 90 miles. From Rhodes to Issus he considered 5000 stadia, or 429 miles: it measures 400 miles.

Many of the latitudes given by Strabo are very near, that is, within 10'; those of Marseille and Byzantium excepted, the former being 3° 43' too little, and the latter 2° 16' too much. The longitudes, which were all at that time referred to Cape Sacrum as the first meridian, and the extreme west point, as was believed, of the known world, are without exception too small; that of Carthage, the nearest to the truth, being 1° 9', and Alexandria, the most erroneous, 6° 40', too small.

On the shores of this sea have been transacted the most important events in the history of mankind, and its character seems to mark it as the theatre best adapted to the complete and rapid civilisation of the race. From the great diversity of soil and productions, under a varied and favourable climate, the colonists, from whatever points they first proceeded, would soon acquire those different habits under which their several energies and capabilities would be developed. The comparative shortness of the distances of the several places, by rendering navigation easy and pleasant in small and imperfect vessels, would, by facilitating intercourse from an early period, tend to diffuse and to promote civilisation; while commerce, by bringing together men of different habits, manners, and languages, and thus circulating practical information, would supply the materials for the perfection of the arts and sciences. On its shores in ancient times flourished the Phœnicians, Jews, Egyptians, Carthaginians, Greeks, and Romans.

This sea is navigated by vessels of no great size. There is a form of rig peculiar to the larger vessels, called 'polacca,' which has originated in the suddenness and frequency of squalls, which often require the sail to be instantly taken in: for this purpose the masts are made in one piece, and the topsails, on being lowered, can slide down without interruption. The Mediterranean, being studded with places of refuge, and in which gales, though frequent and violent, never last so long as to wear the ship or the spirits of the men, and in which, besides, vessels have from the earliest times to the present ceased to navigate in the winter months, may indeed be favourable to training men to a certain degree of expertness in managing boats, but could never originate that seamanship on the grand scale which the long and boisterous sea-voyages, the rugged and dangerous coasts, and long winter nights, force upon the hardier sailors of the northern regions. Steamers now ply regularly at all seasons between all the chief seaports of the Mediterranean.

The winds have been remarked as peculiarly variable in the Mediterranean, and three or four vessels have often been seen carrying different winds at the same time. The scirocco, or south-east wind (called solano on the coast of Spain), has always been noted throughout the Mediterranean for its depressing effects upon the animal system. It is usually accompanied with a gloomy sky and haze. In winter its effects are but slightly perceived. Water-spouts are very common. The Adriatic is infested by a northerly wind called Bora, which blows for a short time with great violence. The Black Sea has always been noted for its stormy character in winter; the west winds blow frequently with hurricane force.

The depth of the Mediterranean is without doubt very great, the sea being in most places unfathomable; and, unlike many other great expanses of water, soundings are comparatively of limited utility.

The Mediterranean, though poetically termed a 'tideless sea,' is not strictly so; since in its latitudinal extent between Venice and the Lesser Syrtis it experiences a rise and fall of from 5 to 7 feet. Tides are also felt, but somewhat irregularly, on the sides of the Gibraltar current, in the Gulf of Corinth, and in the Faro of Messina; and there is a curious reciprocal motion in the waters in the channel of the Eurippus, between Greece and Negropont. Strong currents occur, especially near Venice and the Faro of Messina. A westerly current sets along the coast of Karamania. It has been stated that an easterly current prevails constantly along the coasts of Africa and Egypt, but this, we believe, has not been substantiated.

An important source of commerce in the Mediterranean is the tunny fishery, especially on the coast of Italy, in the Strait of Messina, and along the coast of Sicily. The fish enter the Mediterranean in spring, keeping along the European shores, and leave it again at the close of the year by the coast of Africa. They are caught in nets so constructed that the fish are driven into compartments, where they are struck and killed. The tunny frequently weighs 4½ cwt., its flesh is

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very nutritious. The tunny swims in compact shoals of conical form on a very broad base. The sword-fish generally pursues the shoals, and is taken by harpooning; its weight sometimes exceeds 2 cwt., its flesh resembles veal, and it is more delicate than the tunny. The anchovy abounds in most parts of the Mediterranean, and the mullet is very plentiful on the Italian coast. Other fish are also very abundant. The sponge is a valuable product of the Archipelago. Fruits of all kinds, corn, timber, raw silk, cotton, wine, dyestuffs, bark, and a vast number of other products enter into the native commerce of the Mediterranean.

MEDMENHAM. [BUCKINGHAMSHIRE.]

MEDOC. [GIRONDE.]

MEDWAY. [KENT.]

MÉEN, ST. [ILLE-ET-VILAINE.]

MEERPOOR. [HINDUSTAN.]

MEERUT, the chief town of one of the Regulation Provinces into which the sub-presidency of the north-western provinces in Hindustan is divided. The town is situated in 28° 57' N. lat., 77° 45' E. long., 38 miles N.E. from the city of Delhi. It is an ancient walled town of considerable size, and is one of the military stations of the British army. The town contains a British Protestant church, which is 150 feet long, 84 feet wide, and has a lofty and handsome spire; it is of brick, covered with stucco, and whitewashed, and is altogether a very striking building. There is also a British free school.

MÉES, LES. [ALPES, HAUTES.]

ME'GARIS, one of the political divisions of ancient Greece, was separated from Boeotia on the north by the range of Mount Cithæron, and from Attica on the east and north-east by the high land which descends from the north-west boundary of Attica, and terminates on the west side of the Bay of Eleusis in two summits, formerly called Kerata, or the Horns, and now Kandili. Megaris was divided from the Corinthian territory on the west by the Oneian range of mountains, through which there were only two roads from Corinth into Megaris: one of these, called the Soironian Pass, which is the steep escarpment of the mountains that terminate on the coast of the Saronic Gulf, passed by Crommyon, and along the side of the escarpment was the direct road from Corinth to Athens. This road, on the whole, is still in good condition. The other road, following the coast of the Corinthian Gulf, crossed the Geranean Mountains, which belong to the Oneian range, and led to Pegæ, on the Corinthian Gulf, and thence into Boeotia.

The area of Megaris is about 720 square miles. ('Fasti Hell.' ii, p. 385.) Megaris is a rugged and mountainous country, and contains only one plain of small extent, in which the capital, Megara, was situated. The rocks are chiefly, if not entirely, calcareous. The country is very deficient in springs.

Megara, which was about 20 miles from Athens, was built on two hills, on the summit of each of which was a citadel, named respectively Caria and Alcaethous. It was connected with the port of Nisea by two walls, which were built by the Athenians when they had possession of Megara, B.C. 461-445. Pausanias has described at considerable length the public buildings which existed in Megara in his time; but scarcely any remains of them can now be traced. In front of the harbour of Nisea was a little island called Minoa, which was occupied by the Athenians during the Peloponnesian war. (Pausanias, Thucydides, Strabo, Procopius; 'London Geographical Journal,' vol. viii.)

The port of Pegæ, or Pegæ, on the Corinthian Gulf, was the only other place in Megaris of any importance. Tripodiscus, situated on the road from Pegæ to Megara, is mentioned by Thucydides (iv. 70) and Strabo (p. 394), and is said by Plutarch ('Qu. Gr.' xvii. p. 387) to have been one of the five hamlets (κῆμαι) into which Megaris was originally divided; the names of which were—Heræa, Piræa, Megara, Cynosuria, Tripodiscus.

According to the traditions preserved by Pausanias, Megara must have been a very ancient city. It early became annexed to Attica, and was subsequently held by the Dorians and by Corinth. It gained its independence of the latter at a period which is uncertain, and rapidly rose to wealth and power, attested by the numerous colonies it sent out. Among these were—Selymbria, Chalcedon, Byzantium, and Megara in Sicily. The Megarians were powerful at sea, where they contended with the Athenians, from whom they took Salamis; and it was only after a long struggle that Athens regained possession of the island. The government was originally in the hands of the great Dorian landholders, but they were deprived of their power by Theagenes, who put himself at the head of the popular party, and obtained the sovereignty, about B.C. 620. He adorned the city with several public buildings. (Paus., i. 40, 41.) Theagenes was at length expelled from Megara, and shortly afterwards a most violent struggle arose between the aristocratic and democratic parties, of which a vivid picture is drawn in the poems of Theognis, a native of Megara.

For some time after the Persian wars Megara appears to have been constantly engaged in war with Corinth, and her enmity to Corinth was the occasion of her forming an alliance with Athens, about B.C. 461. (Thuc., i. 103.) Athenian garrisons were placed in Megara and Pegæ; but six years afterwards the Megarians renounced their alliance with Athens, and put to death the Athenian garrison at Megara. (Thuc., i. 114.) In the seventh year of the Peloponnesian war the democratic party formed a plan for surrendering the city to Athens, which was

defeated by the arrival of Brasidas with a Lacedæmonian force. We read little more of Megara in Grecian history. In B.C. 357 democracy was again the established constitution. (Diod., xv. 40.) Megara was taken and almost destroyed by Demetrius; it was also taken by the Romans under Metellus (Paus., vii. 15, § 4); it suffered greatly in the invasion of Alaric (Procop., 'Bell. Vand.' i. 1); and its ruin was completed by the Venetians in 1687.



Coin of Megara. British Museum. Actual size.

MEILLERAIE. [LOIRE-INFÉRIEURE.]

MEININGEN. [SAXE-MEININGEN.]

MEISSEN, a town in the kingdom of Saxony, is situated in 51° 10' N. lat., 13° 25' E. long., on the little river Meise or Misi, on and between hills on the left bank of the Elbe, over which there is a covered bridge, supposed to have been originally built in the 11th century; this bridge was destroyed in 1547, 1757, and in 1813, but has since been rebuilt. Meissen is one of the oldest towns in the country, having been founded in 922 by king Henry I., as a bulwark of his German settlements against the Slavonians. His son, Otho I., founded the cathedral and established a bishopric, of which the town continued to be the seat till the Reformation. The town is surrounded by walls, outside of which are several suburbs. The cathedral, a masterpiece of ancient German architecture, has a tower surmounted with a spire 60 feet high, composed of beautiful open-work; it is rich in ancient monuments. Adjoining it is the Princes' chapel, founded in 1425 by Frederick I., elector of Saxony, of the house of Meissen, for the hereditary vault of his family, in which there is a bronze monument of the founder. The palace of Albrechtsburg, near the cathedral, was formerly the common residence of the margraves, burgraves, and bishops of Meissen; but the margraves transferred their residence to Dresden in the 13th century. The palace was almost entirely rebuilt in 1471. Ever since 1710 it has contained the celebrated porcelain manufactory, the productions of which rival or surpass those of China and Japan in hardness, durability, beauty of form, and painted ornamentation. The former convent of St. Afra, on a lofty rock, which is joined by a stone bridge to the eminence on which the palace stands, is now converted into a school. There are manufactures of leather, hosiery, colours, camels'-hair brushes, &c.; but the chief source of profit is the making of wine.

MEJERDAH, the ancient *Bagradas*, a river in northern Africa. Its upper course lies within the territories of Algiers; in its middle course it forms the boundary-line between that country and Tunis, and in its lower course it traverses the northern district of the last-mentioned state. A great number of rivers rise in the mountains which between 36° and 36° N. lat., 7° and 8° E. long., constitute the most eastern of the elevated ranges of Mount Atlas; these unite about 35° 30' N. lat., and form the Wady Serat, or Mellag, the principal branch of the Mejerdah River, which bore in ancient times the name of *Bagradas*. In its course, which is nearly due north, it separates Algiers from Tunis, until it reaches 36° 10' N. lat., where it is joined by the Wady-Hamiz from the west, and takes the name of Mejerdah. Up to this junction its course exceeds 100 miles, and from this point it runs about 60 miles eastward through a hilly country. It then turns north-north-east, and continues this course until it falls into an inlet of the Bay of Tunis near Cape Farina, after a course of more than 260 miles. Near its mouth it passes the ruins of Utica. In ancient times its lower course was somewhat different; the river fell into the sea between Utica and Carthage, but much nearer the latter than it now does. The alluvial deposits of the river have caused considerable changes on the coast. [CARTHAGE.] In any other country the Mejerdah would be held to be an inconsiderable river; it is however the second river in size of those that enter the Mediterranean between Cape Bon and the Strait of Gibraltar, being exceeded in size only by the Mulwia; and yet it is fordable in many places near its mouth. The Mejerdah is used to irrigate the fields in the lower part of its course, where it flows through a wide and level valley. It overflows and fertilises the adjacent country in spring; the inundations are caused by the spring rains and the melting of snow on the mountains which surround its upper branches.

MEKINEZ. [MAROCCO.]

MEKRAN, or MUKRAN. [BELOOCHISTAN.]

MELAZZO. [MESSINA.]

MELBOURNE. [CAMBRIDGESHIRE; DERBYSHIRE.]

MELBOURNE, the capital of the colony of Victoria, or Port Phillip, Australia, is situated on the Yarra-Yarra River, near the head of Port Phillip Bay, 600 miles distant from Sydney by the overland route, and above 600 miles from Adelaide, the capital of South Australia. Melbourne has sprung into existence within the last 20 years; it increased rapidly after the discovery of gold in the colony in 1851, and is now a large and important city, the seat of an exten-

sive commerce. The streets are spacious and laid out with great regularity. Melbourne contains several fine buildings, among which may be named the cathedral, and several places of worship, including chapels for Episcopalians, Independents, Presbyterians, and Wesleyan Methodists; a court-house, the governor's residence, a post-office, a custom-house, a jail, the government offices, several boarding-houses, hotels, baths, and large commercial establishments. Extensive improvements are projected, including an ample supply of water to be brought into the city from a distance of 20 miles. The city revenue amounted in 1852 to 16,161*l.* 19*s.* 5*d.*, being more than double that of the preceding year. Of this revenue the corporation expended the principal part in public improvements. Melbourne is the seat of a bishopric; a corporate town with a mayor; the residence of the lieutenant-governor; and the seat of government.

The gold finding in the colony, which appears to continue without much diminution, attracts numerous emigrants to Melbourne, especially from Great Britain. The population of the city is probably now about 40,000. Vessels of 200 tons can ascend the river to Melbourne, larger vessels lie in Hobson's Bay. *Williamstown*, the port of Melbourne, is a small town built on a low sand-flat at Point Gallibrand, on the west side of Hobson's Bay, about 8 miles S.W. from the city. It contains some good houses. A railway connects Williamstown with Melbourne city. It is proposed to construct a pier at Williamstown, having a communication with the railway terminus, so that passengers and goods may be landed and sent on to Melbourne without difficulty. Statistics in reference to the shipping and commerce of Melbourne will be given more at length in our account of the colony of VICTORIA.

MELCOMBE REGIS. [WEYMOUTH.]

MELDRUM, or OLD MELDRUM. [ABERDEENSHIRE.]

MELFL. [BASILICATA.]

MELFORD. [SUFFOLK.]

MELIANAH. [ALGÉRIE.]

MELILLA, a sea-port town of Morocco belonging to Spain, is situated 11 miles S. from Cape Ras-ud-Dir, or Tres-Forcas, in 35° 8' 15" N. lat., 2° 58' 2" W. long., and has about 3000 inhabitants. The town stands on a peninsula about 40 feet above the sea, and united to the mainland by a rocky isthmus. Melilla is one of the Spanish presidios on this coast. It is impregnable on the land side, and towards the sea it is defended by strong ramparts. The fortress has large magazines and cisterns, and small vessels can enter the harbour. The presidios of Peñon-de-Velez and Aluzemas, or Alhucemas, two strongly fortified rocky islands between Cape Tres-Forcas and Ceuta, are also under the governor of Melilla. The Spanish garrison of Melilla numbers about 1000. The rest of the inhabitants are for the most part convicts and exiles. Melilla is said to derive its name from the Spanish word for honey, which is gathered of superior quality on the mountain slopes along this coast.

MELINDA, a sea-port situated on the eastern shores of Africa, near 4° S. lat., 40 E. long. In his first voyage, Vasco de Gama sailed along the eastern coast of Africa as far north as this place, where he got a pilot from the king to conduct his vessel to India. Gama describes the town as situated on a plain near the sea-shore, surrounded with gardens, and consisting of houses neatly built of hewn stone, with handsome rooms and painted ceilings. It was at that time evidently a place of some importance. In 1605 the Portuguese took possession of Melinda; and about 23 years later of Mombas also, which lies a short distance to the south; and as the harbour of the latter is much superior Melinda began to decline. It was taken from the Portuguese about the beginning of the last century by the Arabs, who in their turn were supplanted by the Galla, a savage nation, which has carried its conquests from the southern declivity of the Abyssinian Alps as far south as Melinda. On the site of the town are the ruins of Portuguese churches and other buildings.

MELITENE. [MALATIA.]

MELKSHAM, Wiltshire, a market-town and the seat of a Poor-Law Union in the parish of Melksham, is situated in 51° 22' N. lat., 2° 8' W. long., distant 7 miles W. by N. from Devizes, 96 miles W. by S. from London by road, and 100 miles by the Great Western railway. The population of the town of Melksham in 1851 was 2931. Melksham Poor-Law Union contains six parishes and townships, with an area of 16,233 acres, and a population in 1851 of 18,614.

At the time of the Domesday Survey the town appears to have been a place of some consequence. It afterwards declined, but was revived by the introduction of the cloth manufacture. Some years since mineral waters were discovered in the neighbourhood of the town; and hot and cold baths were established, and houses built for visitors to 'the Spa.' The town consists principally of one long winding irregular street. The principal part of the town is divided by the river Avon, over which is a stone bridge of four arches, from a suburb called 'the city.' The houses, which are of stone, are of neat appearance, and the town is lighted with gas, well paved, and drained. A spacious cheese-market, market-house, and town-hall in the Grecian style were erected in 1847 by a joint-stock company. The church is chiefly of the perpendicular style, with some Norman portions. In 1845 the tower was removed from the centre to the west end. The Wesleyan Methodists, Independents, Baptists, and Quakers have places of worship; and there are National and British schools, a mutual

improvement society, and a savings bank. The principal manufacture is that of broadcloth and kerseymer; rope-making is also carried on, flat-rope being largely made. Extensive flour-mills are on the river Avon. The market-day is Tuesday; a fair is held on July 27th for horses, cattle, sheep, and pigs. Petty-sessions and a county court are held.

MELOS. [MELO.]

MELROSE. [ROXBURGHSHIRE.]

MELSUNGEN. [HESSE-CARSEL.]

MELTON MOWBRAY, Leicestershire, a market-town and the seat of a Poor-Law Union in the parish of Melton Mowbray, is situated in a valley on the river Eye, or Wreak, in 52° 46' N. lat., 0° 53' W. long., distant 16 miles N.E. from Leicester, 105 miles N.N.W. from London by road, and 117½ miles by the Great Northern and Syston and Peterborough railways. The population of the town of Melton Mowbray in 1861 was 4391. The living is a vicarage in the archdeaconry of Leicester and diocese of Peterborough. Melton Mowbray Poor-Law Union contains 54 parishes and townships, with an area of 93,016 acres, and a population in 1851 of 20,530.

Melton is the seat of the well-known Melton Hunt. Stables to accommodate 500 horses have been provided. Many hunting seats are in the immediate neighbourhood. The town is watched, lighted, and paved, and the three bridges in and near it are kept in repair from trust property called 'the Town Estate.' The river is navigable to the Soar navigation at Syston. A canal unites Melton Mowbray with Oakham in Rutlandshire. The church is large, and has a fine tower, partly in the early English style. Independents, Wesleyan and Primitive Methodists, and Roman Catholics have places of worship. Melton Grammar school was closed in 1848. There are a National school and a Roman Catholic Free school; a literary institute with a museum; a mechanics institute; and a savings bank. The chief manufacture is that of bobbin-net lace. Pork pies are extensively made chiefly for sale in London, Manchester, and Leeds. Petty-sessions and a county court are held. The market is on Tuesday; six fairs are held in the year.

MELUN, a town in France, capital of the department of Seine-et-Marne, is situated on the Seine, 28 miles by railway S.E. from Paris, in 48° 32' 32" N. lat., 2° 39' 33" E. long., 229 feet above the level of the sea, and had 7528 inhabitants in the commune in 1851.

Cæsar, who mentions the place by the name *Melodunum*, describes it as being "a town of the Senones, situated in an island of the Sequana (Seine), in the same manner as Lutetia (Paris)." ('De Bello Gallico,' vii. 58.) It was taken by Labienus in his campaign against the Parisii. In the earlier times of the French monarchy Melun was a place of note; it was repeatedly taken by the Northmen and the English. It was taken by the English under Henry V. after an obstinate resistance in 1420; but in 1435 the inhabitants drove them out and admitted the troops of Charles VII.

The town is built on an island (the site of Melodunum) and on both banks of the river, the largest quarter standing on a slope on the right bank, and the three parts being united by two bridges. It is on the whole a well-built town; the banks of the river are lined with quays, and several new promenades have been formed. The principal square, which is regularly built; the church of St. Aspais, on the right bank of the Seine; the church of Notre-Dame, on the island; the former monastery of St. Père, now the residence of the prefect; the Carmelite convent, now converted into a court-house, a prison, a guard-house, and a theatre; the old monastery of La-Maison-des-Frères, which now serves for a cavalry barrack; and the central prison for five departments, are the chief structures in the town. The manufactures are woollen stuffs, printed calicoes, cotton twist, and leather. Melun has a tribunal of first instance, a college, and a good trade in corn, flour, wool, and cattle. It is a station on the Paris-Dijon railroad.

MELVILLE ISLAND. [NORTH WEST PASSAGE.]

MEMEL. [KÖNIGSBERG.]

MEMPHIS. [EGYPT.]

MENAI STRAIT. [ANGLESEY.]

MENDE. [LOZÈRE.]

MENDEFI MOUNTAINS. [AFRICA.]

MENDEREH, RIVER. [ANATOLIA.]

MENDIP HILLS. [SOMERSETSHIRE.]

MENDHAM. [SUFFOLK.]

MENDOCINO, CAPE. [CALIFORNIA.]

MENDOZA, one of the provinces of the Argentine Confederation, South America, extends between 32° and 35° S. lat., along the eastern side of the Andes, for 150 miles from north to south, with a nearly equal breadth; and is bounded S. and S.E. by the province of Buenos Ayres, N.E. by that of San Luis, N. by that of San Juan, and W. by the republic of Chili. The population is variously estimated at from 35,000 to 45,000.

The surface of the country is described generally under ARGENTINE CONFEDERATION. The western side is mountainous, containing that portion of the chain of the Andes which includes the volcanoes of Aconcagua, Maypu, Rancagua, and Peteroa. The Andes are here crossed by the most frequented roads which lead over the mountain passes of Uspallata, Portillo, and Las Damas. Eastward the mountains decline into hills towards the Mendoza River, east of which are broad plains. Within this province are the southern part of the Vale of

Uspallata and the whole of that of Tunuyan. The valleys of Uspallata and Tunuyan are barren, and nearly uninhabited. The plain which stretches from the Andes eastward has a sandy soil and does not produce grain, or even grass, without irrigation, but when irrigated, it yields abundant crops of wheat, maize, barley, and lucerne; the lucerne may be cut 14 times in a year. The Desaguadero River forms the northern boundary-line of the province, and like the Mendoza affords remarkable facilities for irrigating the dry land along its banks. The confluence of the Desaguadero and the Mendoza forms a remarkable chain of lakes called the Guanacache; some distance south of which it forms with the San Juan and a portion of the Tunuyan rivers, another great lake called the Bevedoro. The main portion of Tunuyan now branches off some distance west of this lake, and forms a junction many miles south with the Diamante. The Tunuyan then receives another important tributary the Chadileuba, and soon after expands into another vast inland lake without any outlet, called, from the extreme saltiness of its waters, the Urrelauquen, or Bitter Lake. Rain and dew are very rare in Mendoza, except in the southern districts on the banks of the Rio Diamante, which forms the southern boundary-line of the province, where the rains are so abundant that corn may be raised without artificial irrigation. The chief productions of the province are wine and brandy, wheat, maize, fruit, tallow, and soap, which are chiefly sent to the provinces farther east, Buenos Ayres, San Luis, Cordova, and Santa Fé; with dried figs, raisins, peaches, apples, nuts, and olives, which go mostly to Chili, whither also from 300 to 400 mules and a large quantity of hides are annually sent. Silver-mines have been worked at Uspallata, and veins of copper are also known to exist, though they have not hitherto been opened. Limestone, slates, gypsum, alum, mineral pitch, bituminous shales, with traces of coal, have been found all along this portion of the cordillera of the Andes; a variety of saline deposits, including common and Epsom salts, are also found in the province. Like the other provinces of the Argentine Confederation, Mendoza is a federal state, owing little dependence upon the central government. The executive power is vested in a governor elected by the junta or provincial assembly.

Mendoza, the capital of the province and the centre of its commerce, is situated at the foot of the Andes, 2891 feet above the level of the Atlantic, in a country irrigated by numerous cuts from the Rio de Mendoza, in 32° 53' S. lat., 69° 6' W. long.: population, about 10,000. It is a neat and pleasant city; the houses, a large proportion of which are built of mud (adobe), are only one story high, and have porticoes. The Alameda, or public walk, is nearly a mile, well planted and kept, and is considered to be one of the finest in South America. The climate is dry and noted for its salubrity. Around the city are numerous well cultivated vineyards. *San Martin*, or *Villa-Nueva*, W. of Mendoza, is a thriving place, with some 1500 inhabitants.

MENEHOULD, ST. [MARNE.]

MENIN. [FLANDERS, WEST.]

MENLOUGH. [GALWAY.]

MENORCA, or MINORCA, is the second in size of the Balearic Islands. It is situated in the Mediterranean, off the eastern coast of Spain, between 39° 47' and 40° 21' N. lat., 3° 50' and 4° 23' E. long. It lies 24 miles E.N.E. from Mallorca, about 130 miles S.E. from Barcelona and the coast of Cataluña, 160 miles E. by S. from the mouth of the Ebro, the nearest part of Valencia, and about 190 miles N. from the territory of Algiers in Africa. The circumference is about 62 miles, and the area about 300 square miles. In form it is irregular; being in length 33 miles, and in the broadest part 13 miles. The population is about 44,000.

Coast, Surface, &c.—The coast is indented on every side with small bays or deep creeks, and surrounded with islets, rocks, and shoals. The surface of the country is a gently undulating plain, rocky and barren, or partially clothed with wild olives and corn. The southern shore is the most level. The soil is for the most part poor and sandy; but is much richer on the slopes of the hills than on the low grounds. The only eminence deserving the name of mountain is Monte Toro, 4793 feet high, in the centre of the island. It is in the form of a cone, with a flat summit surmounted by a convent which formerly belonged to the Augustines, and to which pilgrimages were made by the natives with bare feet. Mount St. Agatha, the eminence next in importance, is supposed to have been a military post in the time of the Romans, and traces of a Moorish fortification are still visible on its summit. Two miles south of Ciudadela is a curious grotto, called La Cava Perella, full of stalactites and stalagmites; and in the same vicinity is another cavern containing a pool or lake of salt-water.

The mineral productions of Menorca are limestone, freestone, marble of various colours, slate, of which a quarry is worked at Cape Mola on the east side of the island, gypsum, used for cement, and potters'-clay. There are a few lead-mines, very unproductive, and iron-ore is found in small quantities.

The spring of the year is generally clear, mild, and temperate; the summer is intensely hot; the autumn is the season of the annual rains, which are exceedingly heavy; the winter is often cold, though snow and ice are rare. On the whole the climate is less agreeable than that of Mallorca; the air is more humid; and the summer heats more oppressive, which arises from the comparatively level character of the island.

The vegetation of Menorca is very similar to that of Mallorca, though it is much less abundant, and the trees seldom attain to so large a size. Aromatic plants and herbs, many with medicinal qualities, grow in profusion. Wheat, barley, and a little maize are cultivated, though not enough for the consumption of the island. Olive-trees grow almost without culture; little oil is made from their fruit, which is generally preserved for eating. Vines are plentiful, and produce both white and red wine. Fruit is abundant: there are oranges, lemons, pomegranates, figs, apples, pears, and almonds; the melons are of superior flavour. Date-palms grow in sheltered spots, but yield no fruit. Capers grow spontaneously in all parts of the island. Flax, hemp, saffron, and the cotton-tree thrive well, but are little attended to. Vegetables are no less abundant than fruit, and consist chiefly of peas, beans, onions, cauliflowers, broccoli, tomatoes, endive, cucumbers, and gourds, all excellent in quality. The island is rich in cattle, sheep, goats, and pigs; and also in game, as partridges, quails, and rabbits; woodcocks, snipes, and teal are plentiful in winter. Fish, especially anchovies, with oysters, lobsters, and other crustacea, abound on the coasts. Lizards swarm, and there are a few venomous reptiles, but no beasts of prey.

The natives are engaged either in agriculture, fishing, or commerce. The imports consist of corn, oil, brandy, tobacco, coffee, sugar, spices, hardware and cutlery, linen and woollen goods, timber, cordage, tar, and gunpowder. The exports are wines, wool, cheese, salt, honey, and wax. The possession of Menorca by the English during the last century did much to promote its trade and commerce; but since the island has reverted to the Spaniards, trade and commerce have greatly declined.

Menorca is divided into four terminos, or districts—Ciudadela, Mahon, Alhayer, and the united terminos of Ferarias and Mercadal. In each is a town of the same name, the capital of the district.

Ciudadela, formerly the capital of Menorca, is situated on the north-west coast, on a small port, shallow and difficult of entrance. The city is fortified, and its walls are partly of Moorish, partly of more recent construction: its population is above 4000. The streets are narrow, crooked, and badly paved; many of the houses are neat, and some handsome. A cathedral, two parish churches, convents (now converted to civil and military purposes), an hospital, a barrack, with a government-house, are the public buildings.

Port Mahon, now the capital of Menorca, stands on the south-eastern shore of the island, in 39° 52' N. lat., 4° 21' E. long., 24 miles from Ciudadela, with which it communicates by a carriage-road. *Port Mahon*, the *Portus Magonis* of the Romans, is said to have been founded by and called after Mago, a distinguished Carthaginian commander. It is picturesquely situated near the bottom of a deep and narrow bay, on rocks much elevated above the sea, and in many places undermined by the waves. *Port Mahon* was formerly surrounded with walls, the only relic of which is a gateway of Moorish architecture. The streets are steep, narrow, crooked, and badly paved; the governor's house, town-hall, hospital, barracks, and other public buildings, are scarcely worthy of notice; the private houses are neat and clean, built with taste, but often without regard to comfort, for, many being on the English model, they are ill adapted to the sultry climate. Some of their roofs are tiled, and some flat-terraced in the oriental style: the population in 1845 was 13,102. The harbour of *Port Mahon* is one of the best in the Mediterranean. A large fleet of line-of-battle ships may ride within it, in seven or eight fathoms water, perfectly sheltered from every wind. *Port Mahon* alone made the possession of Menorca an object of contention among the maritime nations of Europe during the past century. In the harbour are four rocky islets: on one stands an hospital; on another a quarantine establishment; on a third a lazaretto; and on the fourth an arsenal with naval storehouses—all erected by the English.

The other ports of Menorca are—*Fornels*, a well-sheltered bay, capable of holding a large fleet; and *Adaya*, a small harbour, full of rocks and shoals, and only entered by fishing-craft.

Mercadal, 13 miles N.W. from *Port Mahon*, has a population of 4000. *Alhayer* and *Ferarias*, the other district-capitals, are little more than villages.

Menorca is not rich in antiquities. About two miles from *Alhayer* is a rude pyramidal ruin of Druidical character, ascribed to the Phœnicians, the earliest colonists of the island; but whether it be temple, tomb, or watch-tower, is yet disputed. Punic, Greek, Roman, Gothic, and Arab coins have been found; and also small statues of bronze, vases, lamps, urns, &c., chiefly of Roman origin.

In character and manners the inhabitants of Menorca resemble those of Mallorca. They are equally attached to their native soil, and to their customs and religion. The same dress and language are common to both.

A sketch of the history of the Balearic Islands has been given in the article *BALÆRIC ISLANDS*.

(*Dameto and Mut, History of the Balearic Kingdom*; *Armstrong, History of the Island of Minorca*; *Laborde, Itinéraire Descriptif de l'Espagne*; *St. Sauveur, Travels through the Balearic and Pithyusian Islands*; *Madox, Diccionario Geographico de España*.)

MENS. [ISÈRE.]

MENTZ. [MAINZ.]

MEON, EAST and WEST. [HAMPSHIRE.]

MEQUINENZA. [ARAGON.]

MEQUINEZ. [MAROCCO.]

MER. [LOIR-ET-CHER.]

MERCARA. [COORG.]

MERCIA. [ENGLAND.]

MERDRIGNAC. [CÔTES-DU-NORD.]

MERE, Wiltshire, a market-town, and the seat of a Poor-Law Union, in the parish of Mere, is situated in 51° 5' N. lat., 2° 15' W. long., distant 22 miles W. by N. from Salisbury, and 102 miles W.S.W. from London. The population of the parish in 1851 was 2991. The living is a vicarage in the archdeaconry and diocese of Salisbury. Mere Poor-Law Union contains 12 parishes and townships, with an area of 30,919 acres, and a population in 1851 of 8431. The manor of Mere belonged in the reign of Henry III. to the king's brother, Richard, earl of Cornwall and king of the Romans, who built a castle here, the site of which may still be traced. Mere consists chiefly of one street on the London and Exeter road. The town is lighted with gas. The church, which is on the south side of the town, is a handsome building, chiefly of perpendicular character, having a western tower, with battlements and pinnacles. Independents and Primitive Methodists have chapels, and there are National and British schools. An ancient market-cross stands in the centre of the town. Flax-spinning, silk-throwing, and brick-making employ some of the inhabitants. A little woollen cloth is made. The market is on Thursday, and there are large fairs on May 17th and October 10th.

MERGUL. [TENASSERIM.]

MERIDA. [ESTREMADURA, Spanish.]

MERIDEN, Warwickshire, a village, and the seat of a Poor-Law Union, in the parish of Meriden, is situated in 52° 27' N. lat., 1° 38' W. long., distant 6 miles W. by N. from Coventry, and 97 miles N.W. from London. The population of the parish of Meriden in 1851 was 965. The living is a vicarage in the archdeaconry of Coventry and diocese of Worcester. Meriden Poor-Law Union contains 18 parishes and townships, with an area of 48,118 acres, and a population in 1851 of 11,275. Besides the parish church, there are in Meriden National schools.

MERIONETHSHIRE, a county of North Wales, bounded N. by Caernarvonshire and Denbighshire, N.E. by Denbighshire, E. and S. by Montgomeryshire, S. by Cardiganshire, and S.W. and W. by Cardigan Bay, an inlet of the Irish Sea. It lies between 52° 31' and 53° 1' N. lat., and 3° 12' and 4° 8' W. long. The area of the county is estimated at 602 square miles, or 385,291 statute acres. The population in 1851 was 38,343.

Coast-line.—The northern part of the coast is formed by the estuary of which the *Traeth Mawr* and the *Traeth Bach* are portions. The *Traeth Mawr* (of which a considerable portion, now the *Vale of Tremadoc*, has been recovered from the sea by an extensive embankment) forms the boundary between Caernarvonshire and Merionethshire. The *Traeth Bach* belongs entirely to Merionethshire: it penetrates several miles inland, and receives the rivers *Fellrhyd*, or *Bychan*, and *Dwyrhyd*. It is dry at low water, except a narrow channel in the centre.

From the *Traeth Bach* the coast runs south about 6 miles past *Harlech* to the little headland on which stands the village of *Mochraes*, or *Mochras*. From the *Traeth Bach* to the town of *Harlech* the immediate neighbourhood of the sea is low and marshy. Between *Harlech* and *Mochraes* it rises into cliffs. It is skirted by sands dry at low water, and at some distance out to sea are three sandbanks, the '*Dutch Bank*,' the '*Pontigal Bank*,' and the '*Sarn-Badrig*' (*St. Patrick's Causeway*) or '*Sarn-Badrhywg*' (*Ship-breaking Causeway*), which runs from the immediate neighbourhood of the coast 22 miles out to sea in a south-west direction. It is dry at the ebb in spring tides, and in storms is marked by fearful breakers. From *Mochraes* the coast runs south-south-east 8 miles to the river *Maw*, at the mouth of which stands the town of *Barmouth*. From the *Maw* the coast runs southward 14 miles to the wide estuary of the *Dovey*, taking a circuit convex to the sea, and rising into cliffs midway between the rivers. At the southern extremity of these cliffs the river *Towy*, or *Diswynwy*, flows into the sea. The whole extent of the Merionethshire coast is about 38 miles.

Surface, Geology, Mineralogy.—Merionethshire is the most mountainous of all the Welsh counties, and contains some of the loftiest peaks in North Wales; there are however no peaks so high nor precipices so abrupt as those of Caernarvonshire. The principal mountain chain traverses the county from north-east to south-west, skirting the valleys of the *Dee*, the *Wnion*, and the *Maw*. The principal summits of this chain are—*Cader Berwyn*, or *Ferwyn*, on the border of this county and Montgomeryshire, 7 miles south from *Corwen*, 2563 feet above the sea; *Arran Mowddy*, near the *Wnion*, above *Dolgelley*, 2955 feet; and *Penny-Gadair* (summit of *Cader Idris*), 3 miles south-west from *Dolgelley*, 2914 feet. West of *Bala*, and near the centre of the county, is a group of mountains, of which *Arrenig Mawr*, 2809 feet, is the highest point. From this central group branches run westward to the sea in the neighbourhood of *Harlech*, and north-westward to join the group of *Snowdon*. There are no plains. Of these mountains the most celebrated for its picturesque character is *Cader Idris*. It consists of an immense rocky mass, of rather difficult ascent, on the summit of

which is a small plain, with two rocky heads of equal height, one looking to the north and the other to the south. The view from its summit is very extensive: the mountain rises so far above all the hills which lie farther east, that the Wrekin in the plain of Shropshire is visible from it. Its sides, though mostly destitute of vegetation, present some variety, from having several small lakes imbedded in the depressions of the rock. The rocks themselves are of primitive formation, consisting chiefly of different kinds of porphyry.

The county is almost entirely occupied with the slate rocks which predominate in North Wales. Along the valley of the Dee, as far up as Bala and the valley of the Alwen, a bluish-gray limestone is found, which is quarried for lime, the principal manure employed in the county. Great quantities of white limestone are quarried and burnt for lime near Corwen. This limestone is surrounded on every side by primitive argillaceous slate, which occupies the eastern side of the county. The slates of this formation are quarried in the neighbourhood of Corwen. In the western part of the county the rocks are chiefly slaty, forming abrupt and rugged mountains of desolate appearance. Lead and copper mines are worked near Towyn at the mouth of the Disynwy, and copper-mines in the neighbourhood of Barmouth. Slates are quarried in the Berwyn Mountains, and at Festiniog.

Hydrography and Communications.—The principal rivers belonging to the county are the Dee, the Maw, and the Dovey, with their respective affluents. The *Maw*, otherwise called *Mawddach*, rises near the centre of the county, and has a southern course of 8 miles to its junction with the Llynauddon, which lies more to the westward, and is of about equal length. From the junction of the Llynauddon the Mawddach flows south-south-west 4 miles to the junction of the Wnion (12 miles long), which rises close to the source of the Dee, and flows along the same valley, but in an opposite direction. For the remainder of its course, which is about 8 miles south-west, the Maw is a tide river; expanding into an estuary in some places a mile wide, and in great part dry at low water. The *Dovey*, or *Dyfi*, rises just within the border of the county, east of the mountain Arran Mowddy, in the Berwyn chain. From its source it flows south-west nearly 30 miles through a winding vale into the Bay of Cardigan; receives a number of small mountain streams, of which the Tafalag, the Afon, the Dulas, and the Cwmcelli are the principal. A part of the course of the Dovey itself and of the Tafalag, and the whole course of the Afon and the Dulas, belong to Montgomeryshire. The lower part of the course of the Dovey is on the border of Merionethshire, which it separates first from Montgomeryshire, and then from Cardiganshire. Near the mouth it expands into a wide estuary, the greater part of which is dry at low water. The Dovey is navigable up to Machynlleth, 12 miles from its mouth. The *Disynwy* rises in the Berwyn Mountains, a little north-east of Cader Idris, and flows south-west 16 miles into the sea between the Maw and the Dovey. About 3 miles from its source it expands into a small lake, called Llyn-y-Myngil, which in width nearly fills the valley of Tal-y-Llyn, leaving only a narrow road on one side, and extends in length about a mile. The Disynwy above its mouth expands into an estuary of about a mile wide, but just at the mouth is contracted into a very narrow channel. The largest of the numerous lakes in the county is Llyn-Tegid, or Bala Lake. [BALA.]

The principal roads are those from London by Shrewsbury to Corwen and Bangor, to Bala and Caernarvon, and to Dolgelley and Barmouth, with branches to Towyn. There is no railway in the county.

Divisions, Towns, &c.—This county, called by the Welsh Meirionnydd, or Meirionnydd, is the only one in Wales that, with the addition merely of the word 'shire,' retains its ancient designation. Writers are not agreed as to the ancient division of the county; the present divisions, with their relative situations, are as follows:—Ardwdwy, or Arduddwy, north-west; Edermion, or Edeyrnion, north-east; Estimrder, or Estu-maner, south; Penllyn, north and north-east; Talybont, or Tal-y-bont, and Mowddy, south and south-east.

There are five ancient market-towns, namely, BALA and DOLGELLEY, the assize towns; HARLECH, CORWEN, and Dinas-y-Mowddy; and two, where markets have been established of late years, namely, Towyn and BARMOUTH. The places printed in small capitals are described under their respective titles, the others we notice here:—

Dinas-y-Mowddy, in the parish of Mallwydd, 10 miles E. from Dolgelley, population of the parish 1201 in 1851, is situated on a shelf of rock at the junction of the Cerris with the Dovey. It consists of a few mean cottages. Mallwydd parish church is a spacious edifice; there are Dissenting chapels and a Free school. Flannel is made in the neighbourhood. The scenery about Mallwydd is very fine; and many anglers resort here in the season.

Harlech, is in the parish of Llandandwg, near the shore of Cardigan Bay, 22 miles N.W. from Dolgelley. The population of the parish in 1851 was 749. A British fortress, called originally Twr Brouwen, and at an after period, Caer Collwyn, occupied the site of the present castle erected by Edward I. In the civil war of Charles I. the castle changed masters once or twice, but was finally taken by the Parliamentarians under General Mytton, March 1647. Harlech is now little more than a village. The ruins of the castle are situated on a lofty and precipitous rock facing the bay, and rising above an extensive marsh once occupied by the sea. Its walls are tolerably perfect; they form a square of about 70 yards each way, with a round tower at each

corner, and on each side of the entrance. The church is modern. The market has almost fallen into disuse; there are several fairs, chiefly for live stock. The county election is held here.

Towyn, is pleasantly situated near the coast, between the estuaries of the Disynwy and Dovey, 16 miles S.S.W. from Dolgelley. The population was 2769 in 1851. The houses are built chiefly of a coarse gray stone quarried in the neighbourhood. The town is frequented in summer for bathing. The church contains some venerable monuments; in the churchyard are two rude pillars, one of them 7 feet high, adorned with a cross, and bearing an inscription in commemoration of St. Cadvan. There are a dissenting chapel, and a school partly endowed. In a field near the church a medicinal spring has been inclosed, and two baths have been formed. Some flannels are manufactured. Races are held near the town. There is a yearly fair. The bathing village and port of *Aberdovey* on the estuary of the Dovey, is in Towyn parish. There are a chapel of ease and Dissenting chapels here. Slate-quarries are worked near Aberdovey, and a considerable share of the coasting trade is carried on at the port, which is a member of Aberystwith.

The only other places that require notice are Maentwrog and Trawsfynydd. *Maentwrog* is pleasantly situated near the foot of the Vale of Festiniog, 17 miles N. by W. from Dolgelley. The population in 1851 was 894. The village contains a neat church, a Methodist chapel, and Free schools. During the season the place is much resorted to by tourists. Tan-y-Bwlch a very celebrated tourists' hotel is near Maentwrog. In the neighbourhood are extensive slate-quarries. Many excellent residences are in the vicinity. *Trawsfynydd* is on the road from Festiniog to Dolgelley: population, 1498 in 1851. The village consists of neat houses, a church, and a chapel. The mountain scenery around is very fine.

Divisions for Ecclesiastical and Legal Purposes.—The county of Merioneth is partly in the archdeaconry of Merioneth and diocese of Bangor, and partly in the archdeaconry and diocese of St. Asaph. By the Poor-Law Commissioners the county is divided into 4 Unions—Bala, Corwen, Dolgelley, and Festiniog, containing 48 parishes and townships, with a population in 1851 of 51,211. The county is in the North Wales circuit; the Lent assizes and the Epiphany and Midsummer quarter sessions are held at Bala; the Midsummer assizes and the Easter and Michaelmas quarter sessions at Dolgelley, where is the county jail. County courts are held at Bala, Corwen, and Dolgelley. The county returns one member to the Imperial Parliament.

History, Antiquities, &c.—In the earliest period of the authentic history of the island, Merionethshire was included in the territory of the Ordovices. [BRITANNIA.] In the Roman division of the island it was included in the province of Britannia Secunda. There are several traces of Roman works in this county. There are remains of camps near BALA. Tommen-y-Mŵr, 'the mount within the wall,' a station, of which the ditch and bank, with vestiges of a wall, remain, near Festiniog, is supposed to be the Heiri Mons of Richard of Cirencester, though Stukeley places it near Bala. Castell Prysor, a hilly fort about 3 miles E. from Trawsfynydd, is considered by Pennant to have been originally Roman. The Dovey River is believed to be the Stucia of Ptolemaeus. A Roman road from Maridunum, or Muridunum (Caer-marthen), to Segontium (Caer Seiont, near Caernarvon) led through the county. It may be traced in the neighbourhood of Trawsfynydd through Tommen-y-Mŵr, where it is called Sarn-Helen, a name which is interpreted by some 'the road or causeway of Helen,' the wife of the usurper Maximus, who assumed the purple (A.D. 381) in the time of the emperors Gratian and Theodosius; and by others 'the road of the legion.' The Sarn-Helen is now entirely covered with turf, and is to be distinguished only by its elevation above the rest of the surface; but on digging, the layers of stone of which it was made are discoverable throughout its course: the aggregate breadth of these layers is about 24 feet. There are several tumuli or barrows near the road. There is a group of other monuments, probably sepulchral, near Rhyd-ar-Helen, a quarter of a mile from the Sarn-Helen, of considerable antiquity. In the neighbourhood of Rhiw Goch, not far from Trawsfynydd, is a grave, called the Grave of Porus, covered with an inscribed stone, evidently Roman; and near it is a great upright monumental or banta stone, of a kind frequent in Wales and in northern Europe. Roman coins, sepulchral urns, and other antiquities have been dug up in various places.

A stone inclosure, or fort, and several other British antiquities are near Llanddewi, between Barmouth and Harlech; and in the same neighbourhood are earnedds, cromlechs, and other primeval remains.

During the Saxon period and the reigns of the earlier English kings of the Norman dynasty, Merionethshire does not appear to have been the scene of events of historical interest. In proportion however as the consolidation of the Anglo-Norman power enabled the English to press the Welsh more closely, these previously unassailed fastnesses became the scene of contest. The invasion of Henry II., and the stop put to his progress by the Welsh, under Owen Gwynedd (1165), are noticed under CORWEN.

The county was probably conquered by Edward I., a little before the final conquest of Wales, as Harlech Castle was completed before 1283. Merionethshire was the scene of the rebellion of Owen Glyndwr. Harlech Castle was one of his conquests.

In the war of the Roses Harlech was held for the Lancastrians, but taken by Sir Richard Herbert. After the war was concluded the county became and long continued to be the scene of great confusion. A multitude of outlaws and felons established themselves near Dinas-y-Mowddy, and perpetrated a variety of crimes. To quell these outrages a commission was granted by Queen Mary to two gentlemen of the county—one of them Lewis Owen, vice-chamberlain and baron of the exchequer of North Wales. In pursuance of this commission 80 of the band were seized and punished. To revenge this severity Mr. Owen was waylaid and murdered in 1555, at a place since called Llydiart-y-Barwn, 'the baron's gate.' The vigorous measures to which this outrage gave rise led to the extirpation of the banditti, some of whom were executed, and the rest fled. In the civil war of Charles I. Harlech Castle was the object of contention. The repeated captures of this place, and a skirmish near Dolgelley, were however the only incidents of the contest which occurred within the county.

The principal remains of the middle ages are Harlech Castle, already described, and the ruins of Cymmer Abbey, near Dolgelley, with two or three smaller castellated buildings. Llys-Bradwen, between Dolgelley and Towyn, is the ruin of a rude edifice, the house of an ancient Welsh chieftain; and near Llanfihangel-y-Pennant are the remains of a castle supposed to be the castle of Bere, belonging to the last Llewellyn, prince of North Wales, and taken from him by William de Valence, earl of Pembroke, a short time previous to the final conquest of Wales.

Religious Worship, Education, &c.—According to the Returns of the Census in 1851, the Calvinistic Methodists appear to have the largest number of adherents of any of the religious bodies in the county; Wesleyan Methodists, Episcopalians, Independents, and Baptists have also numerous places of worship and Sunday schools. In 1851 there were 4 literary institutions in the county, with 187 members, and 357 volumes in their libraries. In 1853 the county possessed two savings banks, at Bala and Dolgelley; the amount owing to depositors on November 20th 1853 was \$1,366. 18s. 3d.

MEROE. [ETHIOPIA.]

MERSEBURG, one of the three governments into which the Prussian province of Saxony is divided, has an area of 3994 square miles, with a population of 742,644 at the end of 1849. The eastern and larger part of the government is flat, with gentle eminences, but no mountains; the western portion is more mountainous than level, being partly occupied by branches of the Harz and the Thüringerwald: this portion however contains extensive and fertile levels; and the whole of the government, though the soil is unequal, may be called fertile. The principal rivers are—the Elbe and its tributaries, the Schwarze Elster, on the right bank; the Mulde and the Saale on the left bank. The Saale receives the White Elster and the Unstrutt. The government is traversed by the Magdeburg-Leipzig and Thüringian railways, which meet at Halle.

Merseburg, the chief town of the government, is situated on the Saale, 10 miles by railway S. by W. from Halle, and has about 10,500 inhabitants. It is an old irregularly built town, with narrow crooked streets, consisting of the town itself, the Close, and the two suburbs Altenburg and Neumarkt, the latter lying on the opposite bank of the Saale, over which there is a large stone bridge. The town is surrounded with walls, and has four gates. The most remarkable buildings are—a fine palace, now used for the government offices; the cathedral, which has one of the largest organs in Germany; the cathedral school; the monastery of St. Peter, in the suburb of Altenburg; the palace of Count Zechi; the military hospital; and the new town-hall. There are manufactories of linen- and woollen-cloths, paper, tobacco, and vinegar, and extensive breweries and distilleries. The trade of Merseburg is considerable.

Dürrenberg, a small village between Merseburg and Lützen, has important salt-works, which produce about 40,000 tons of salt yearly.

Eilenburg, a town of about 9000 inhabitants, stands N.E. of Merseburg, on an island in the Mulde, which is reached by two bridges. The town, which is surrounded by walls and ditches, has manufactures of printed cotton, vinegar, starch, brandy, woollen-yarn, &c.

Eisleben, the birthplace of Luther, is situated 16 miles N.W. from Halle, on a hill above the Böse, and contains 4 churches, a gymnasium, several schools, 2 hospitals, and 7528 inhabitants, who are engaged in a brisk inland trade, in the manufacture of potashes and tobacco, and in the copper-mines and smelting-works of the neighbourhood.

Halle forms the subject of a separate article. [HALLE.]

Lützen, a village S. by E. of Merseburg, on the high road from Leipzig to Weissenfels, has given name to two celebrated battles, the first fought in 1632, in which the Imperialists were defeated by the Swedes under Gustav-Adolf, who lost his life on the field; the second in 1813, in which the French under the Emperor Napoleon I. defeated the combined armies of Prussia and Russia.

Naumburg, a station on the Thuringian railway, 28 miles from Halle, near the right bank of the Saale, a little above the point where that river is joined by the Unstrutt, is a well-built town, surrounded by walls which separate it from several suburbs. The chief buildings are the church of St. Wendel, the court-house, the town-hall, and the gymnasium. This town is the seat of the court of appeal for the governments of Merseburg and Erfurt. It has about 18,000 inhabitants, who manufacture broadcloth, linen, stockings, gloves, leather,

starch, soap, vinegar, beer, brandy, and chemical products. Two great annual fairs are held here, one in June, the other in December, for the sale of all kinds of industrial produce; besides these three other annual fairs are held for the sale of horses and cattle.

Sangerhausen, a well-built walled town, situated at the foot of the Harz Mountains, 31 miles N.W. from Merseburg, has 6000 inhabitants, many of whom are engaged in the copper mines and works near the town.

Torgau is a strongly fortified town, situated in a low marshy country on the left bank of the Elbe, which is here spanned by a bridge partly of wood and partly of stone. The population is about 7000; they manufacture woollen-cloth, linen, leather, and soap, and trade in corn, timber, and lime.

Weissenfels, a town of 8500 inhabitants, 11 miles by railway N.E. from Naumburg, stands on the right bank of the Saale, which here becomes navigable, and is crossed by a wooden bridge. It is a walled town, entered by four gates, which lead to as many suburbs. On a rock outside the town stands an old castle, now used as barracks. A training house for schoolmasters, a gymnasium, an asylum for deaf mutes, two hospitals, and an almshouse, are the principal institutions of the town. Jewellery, porcelain, leather, and merino, are the chief manufactures. The remains of Gustav Adolf, king of Sweden, who fell at the battle of Lützen, are buried in the convent church now no longer used.

Wittenberg, a fortified town N.N.W. of Torgau, situated on the Elbe, which is here crossed by a wooden bridge 1000 feet long, is celebrated for its university now suppressed, in which Luther was a professor in 1508. A colossal statue of Luther was erected in the market-place in 1817, and the university church contains the tombs of him and Melancthon. The town has a theological seminary, a gymnasium, several woollen and linen factories, breweries, distilleries, dye-houses, and 8500 inhabitants, who are also engaged in gardening and in the Elbe fisheries. The university of Wittenberg was incorporated with that of Halle in 1817.

Zetta, a walled town entered by six gates, built on the slope of a steep hill, on the right bank of the Elster, 18 miles S.E. from Naumburg, contains a fine old castle, called Moritzburg. four churches, a gymnasium, a library of 12,000 volumes, several schools, and about 10,000 inhabitants, who manufacture calico, broadcloth, leather, starch, beer, spirits, pottery, gloves, ribands, &c.

MERSEY ISLAND. [ESSEX.]

MERSEY RIVER. [CHESHIRE; LANCASHIRE.]

MERTHYR TYDVIL, or TYDFIL, Glamorganhire, a parliamentary borough and the seat of a Poor-Law Union, in the parish of Merthyr Tydvil, is situated in a valley near the north-eastern corner of the county, in 51° 45' N. lat., 3° 11' W. long, distant 21 miles N. by W. from Cardiff, and 171 miles W. by N. from London. The population of the borough, in which is included the adjoining town of Dowlais, in 1851 was 68,080. The living is a rectory in the archdeaconry and diocese of Llandaff. The borough returns one member to the Imperial Parliament. Merthyr Tydvil Poor-Law Union contains 9 parishes, with an area of 118,716 acres, and a population in 1851 of 76,813. Dowlais is noticed under GLAMORGANSHIRE.

Merthyr Tydvil is the principal seat of the iron district of South Wales. The town, which is situated in the valley of the Taff, consists mainly of workmen's houses, and is irregularly built. Previous to the appointment of the Local Board of Health in 1851, the town was entirely without drainage, and the water supply was miserably bad. Such was the filthy state of the place, that cholera found its victims ready for its approach, and many lives were sacrificed. The town has been somewhat improved in its condition, but much yet remains to be done.

According to the Returns of the Census in 1851, there were then 84 places of worship in Merthyr Tydvil, of which 20 belonged to Independents, 19 to Particular Baptists, 10 each to the Church of England, Wesleyan Methodists, and Welsh Calvinistic Methodists, and 6 to Mormons. The number of Sunday schools was 68, with 13,395 scholars. Of day schools there were 59, of which 16 were public schools with 2544 scholars, and 43 private schools with 1185 scholars. A library and reading-room has upwards of 1800 volumes; the number of subscribers in 1851 was 138.

Merthyr Tydvil was not represented in Parliament till the passing of the Reform Act. The mining operations of this place were comparatively unimportant prior to the year 1755. There are now four great iron-works, the largest in the empire. Some coal is exported. Communication between Merthyr Tydvil and the sea at Cardiff is maintained by the Cardiff Canal. Merthyr has communication with Cardiff by the Taff Vale railway, and with Swansea and Llanelli by the Vale of Neath railway. There are two market-houses. The market-day is Saturday, and fairs are held on May 14th and the first Mondays in July and August. A county court is held.

MERTOLA. [ALENTRO.]

MERTON. [SURREY.]

MERVILLE. [NORF.]

MERY-SUR-SEINE. [AUBE.]

MESOLONGHI, in Ætolia, a small town in Greece, is situated in a marshy plain on the northern side of the Gulf of Patras, near its entrance, and right opposite Cape Kologria or Papas in the Morea.

It became remarkable during the last Greek insurrection against the Turks, in consequence of its siege and the heroic resistance of the Greek garrison.

Mesolonghi is built on the edge of a marshy plain, bounded N. by the high ridge of Zygos, the ancient Aracynthus, and is protected towards the sea by a lagune extending about 10 miles along the coast and 5 miles in width; and hence perhaps the name of the town, which seems to be a contraction of the Italian words 'mezzo' and 'laguna.' With the exception of a few very tortuous channels, the lagune is impassable for any craft drawing more water than the 'monoxyla,' or small boats of the inhabitants. The main channel in the south is commanded by the mud-bank of Vassiladi, on which the Greeks had built a small fort; and the main channel in the north, by the islets of Poros and Anatoliko. At the time of the outbreak of the Greek revolution the town contained several thousand inhabitants, who derived wealth from their extensive fisheries. The fortifications were in such a neglected state that Lord Byron advised the Greeks to strengthen the place by additional works; but the Turks left them only time to add a rampart of earth faced with stones, and a ditch, which surrounded the town on the land side. After the progress of Reshid Pasha, the Turkish commander in Northern Greece, in the beginning of 1825, many Greek palikars and others flocked to Mesolonghi with their families, so that the garrison was increased to about 5000 fighting men. The chief was the veteran Nothi-Bozzaris; the body of officers was increased by many foreign volunteers, mostly German noblemen and gentlemen. On the 25th of April, 1825, Reshid Pasha appeared in sight of the town, with an army of 20,000 men and a numerous battering train, to which the besiegers could only oppose 48 bad iron guns of calibre varying from 4- to 48-pounders, two brass 10-inch mortars, one howitzer of 5 inches, and one mountain howitzer of 4½ inches. The Turks made the first trench on the 5th of May, and on the night of the 11th a terrible bombardment began. Bombardments and stormings now succeeded each other during two months, but the fire was well answered from the rampart, and the Greeks made frequent sallies, in which the besiegers were almost always defeated with great loss, especially on the 2nd of July. The Hydriotic fleet being stationed at the entrance of the lagune, there was no lack of ammunition and provisions in the town, till, on the 10th of the same month, the great Ottoman fleet appeared off the place, and, after having obliged the Hydriotic to avoid a certain defeat by a hasty retreat, landed a strong body of Turks, under Hussein Bei. On the 28th of July, the 2nd of August, and in the night of the 3rd, the fortress was furiously assaulted, and a terrible cannonade carried destruction among the houses and their inhabitants; but the Greeks stood their ground, and were excited to hopes of certain victory when, a few days afterwards, the great Greek fleet under Miaulis and Sakhtouri came in sight, and after a severe conflict defeated and dispersed the Turkish fleet. The maritime blockade was now at an end, and in the beginning of September the garrison was still 4000 strong, with an additional population of 10,000 women, children, and aged or infirm men. By orders of Sultan Mahmud, Ibráhim Pasha, who commanded in the Morea, then took the chief command, with Reshid Pasha as his first lieutenant.

Towards the end of November the combined fleet of Turkey, Egypt, and Barbary, drove the Greek fleet from the lagune, and kept a strict watch over its entrance. In the first week of January 1826 Ibráhim Pasha appeared in the Turkish camp with 14,000 Egyptians, and an ample supply of provisions and ammunition. Although the inhabitants were on the verge of starvation they would not capitulate, and continued their deadly sorties, when at last, Ibráhim, after having taken the islands of Poros and Anatoliko, made the town a heap of ruins by an uninterrupted bombardment from the 25th to the 27th of January, and after that continued his terrible assaults. On the 6th of April however his forces were driven back with immense slaughter, and had the Greeks availed themselves of the confusion in the Egyptian camp, they might have escaped with their families. Their ammunition and food being completely exhausted, so that even cats and rats were devoured with avidity, the garrison resolved to cut its way through the Egyptian camp. Three thousand fighting men were to rush headlong upon the besiegers on the 22nd of April, and cut a way for 5000 women and children, while the retreat was to be covered by a thousand men, and the fortress guarded by a few devoted warriors who were ready to sacrifice their lives for the safety of their brethren. But the plan was betrayed to Ibráhim Pasha, and when the heroes of Mesolonghi appeared outside their shattered stronghold, they were suddenly surrounded by the main body of the Egyptians. A dreadful conflict ensued. Five hundred men were cut down by the infuriated besiegers; 1800 persons, of whom 200 were females, escaped; of these, however, 600 were starved to death in the mountains; and Ibráhim boasted of having taken prisoners 3000 soldiers, and from 3000 to 4000 women and children.

Thus fell Mesolonghi after a siege of twelve months, and after 100,000 shot and shells had been exchanged between the besieged and the besiegers. Its melancholy fate excited the sympathy of all Europe, and there is scarcely a modern language in which poems were not written on the heroes of Mesolonghi. Lord Byron died at Mesolonghi April 19, 1824.

(Gordon, *History of the Greek Revolution.*)

MESOPOTAMIA (from the Greek μέσος, middle, and ποταμός, river), 'the country between the rivers,' is a term which was used by the Greek and Roman geographers (Strabo and others) to comprehend all the countries which lie between the rivers Euphrates and Tigris, and it is still in use. The Arabs and Turks call this country, by the corresponding name of Al Jezirah, or 'the island.' Mesopotamia was called in the Old Testament Aram-Naharaim, that is, 'Aram,' or 'Syria between the two rivers.' By ancient geographers it was considered to be bounded N. by Mount Masius (Karajah-Dagh), a branch of Mount Taurus, and S. by the Median Wall and the canals which connected the Tigris and Euphrates, by which it was separated from Babylonia. The name did not come into use till after the time of the Macedonian conquest of Asia. The southern part of Mesopotamia Xenophon calls Arabia ('Anab.,' i. 5, sec. 1); and other writers included it, especially the northern part, under the general name of Syria. (Strabo, p. 737.) It was considered by the Romans a division of Syria. (Mela, i. 11; Pliny, v. 13.) The northern part of Mesopotamia, as thus restricted, was in ancient times divided into two parts by the river Aborras or Chaboras (Khabour), called Araxes by Xenophon ('Anab.,' i. 4, sec. 19), which rises in Mount Masius, and receiving the Mygdonius (Jakhjakhah) on the east, flows into the Euphrates at Circesium, the Carchemiah of the Old Testament. Of these divisions the western was called Oaroen, and the eastern Mygdonia.

The name Mesopotamia, taken in its proper sense, ought to include all the country that is inclosed, or nearly so, between the two rivers; but from the boundaries ascribed to Mesopotamia by Strabo and others it is clear that the upper plain of the Tigris was not comprised in this designation. This plain, lying between the Kharzan-Dagh or Mush-Dagh, the ancient Niphates, on the north, and the Karajah-Dagh (Mons Masius) and Jebel-Mardin on the south, has been already partially described in the article ARMENIA (vol. i., 514-517). We shall here add some further particulars concerning it, and then notice successively the great southern plain of Mesopotamia, which embraces all the countries between the two rivers, from 36° 30' N. lat. to the Chalu or Median Wall, which begins on the banks of the Tigris, near 34° N. lat., and terminates on the Euphrates, near 33° 30' N. lat.; and, lastly, the plain of Babylonia (Irak-Arabi), which extends southward from the Median Wall to the confluence of the two rivers.

The upper Plain of the Tigris is included in the hilly region of Mesopotamia, which extends south from the Kharzan-Tagh to the great caravan-road that runs from Bir-eh-jik, on the Euphrates, to Mosul on the Tigris, through Urfah or Orfah, Mardin, and Nisabiu. This region lies between 38° 30' and 37° N. lat., and between 38° and 43° E. long., and extends about 100 miles from north to south, and 250 miles from east to west, so that its area may be roughly estimated at 25,000 square miles.

This country may be considered as a lower terrace of the table-land of Armenia. The northern districts are about 2500 feet above the sea-level, from which elevation it gradually descends to about 1000 feet, or somewhat more, where it is contiguous to the southern plain of Mesopotamia along the caravan-road. Only the most eastern part of this road between Tel-Rumaláh and Mosul is at a lower level, and runs through the Great Desert Plain.

The highest part of this region is that which on the west borders on the banks of the Euphrates between Izoglu and Gerger, where the river forms its 300 cataracts; and on the east on the upper course of the Tigris between its source and the town of Diarbekr, which is nearly 2500 feet above the sea: the source of the Tigris is nearly 5000 feet. The level of the surface of the Euphrates near the confluence of the Kara-Su and Murad is upwards of 2500 feet, and at Gerger probably less than 1800 feet. But the rocky mountain masses which rise abruptly from the water's edge, at many places perpendicularly, generally attain near the river an elevation of between 2000 and 3000 feet, and a greater height at some distance from it. The highest portion of this tract must therefore be more than 5000 feet, and it may be 6000 feet. In the depressions are small villages surrounded by walnut-trees and a little cultivation, but the inhabitants derive their subsistence chiefly from their cattle and sheep.

East of this mountain tract lies the Plain of Diarbekr, or of the Upper Tigris, which extends from some miles west of the town of Diarbekr to some distance east of the town of Sert, about 120 miles in length, and from the Kharzan Mountains on the north to the Karajah-Dagh on the south, from 40 to 50 miles; on the east it is shut up by the mountains of Kurdistan. The southern slope of Kharzan, or Mush-Dagh, is in many places interrupted by terraces from two to three miles in width. These terraces are generally used as pasture-grounds; they are cut by wide valleys, which descend from the summit of the range to the plain below, and are drained by feeders of the Tigris, already noticed in the article ARMENIA. Rich crops of wheat and barley are obtained everywhere, and in some places, where irrigation can be practised, rice is grown. The sides of the hills which inclose the valleys, and the valleys themselves, are partly covered with orchards and plantations, consisting of walnuts, figs, vines, pomegranates, mulberries, and the fruit-trees of Northern Europe. In some places cotton, melons, and plantains are grown to some extent. The steeper portions of the mountains are chiefly covered with woods, in which the manna and gall oaks abound. In some parts the steep

declivities of the hills have been transformed into terraces, which are planted with fruit-trees and irrigated.

The Plain of Diarbekr itself is arid, much less fertile, and not cultivated with such care as these valleys. Its surface may at the lower part be about 1700 to 1800 feet above the sea-level. There are many tracts which are quite level, and others have an undulating surface; a few are hilly. The rivers, especially the Tigris, run in beds deeply depressed below the general level of the country, which renders it difficult and expensive to use the waters for irrigation; and as the summers are hot and dry, only those tracts can be cultivated which have a better soil. The others are only used as pasture-ground during the wet season, and until the grass is dried up by the heat. In some parts the surface is bare of mould, and consists of naked rocks. There are no trees on this plain except mulberries and poplars, which are planted in some places. Corn and barley are grown, and some cotton, and also maize. In the vicinity of the town of Diarbekr cultivation is carried on with more vigour: flax is also grown.

A few miles from the right bank of the Tigris, where the river runs from west to east, the plain is bordered by rocky masses, which rise with rather a steep ascent to 2000 feet above the general level of the plain. Though they appear to form a range, these masses constitute only the outer border of a table-land which occupies the whole country between the Euphrates and Tigris, north of 37° N. lat., and compels the Tigris to run eastward and the Euphrates west, near 38° N. lat. These two rivers are hardly 30 miles apart; but 60 miles farther south, between Rumkalah on the Euphrates and Jezirah Ibn Omar on the Tigris, they are more than 220 miles from each other. The highest part of this table-land runs from north-west to south-east, forming the Karajah-Dagh, which with its continuation the Jebel Mardin, is described in the article ARMENIA, vol. i, col. 516.

Near the banks of the Euphrates where the mountain masses have sunk down to 1200 or even 800 feet above the level of the river, the edge of the masses is split and indented, and numerous small valleys are found between the high ridges. In these valleys some corn is cultivated, but the largest part of them is covered with orchards, consisting of olives, pomegranates, mulberries, pears, peaches, and quinces; all of them have also excellent vine plantations. In some parts cotton is cultivated.

The country through which the caravan road between Bir-eh-jik and Mosul runs, has great variety of surface and soil. Between Bir-eh-jik and Urfah it is hilly, and contains many cultivated tracts. Farther east, as far as Mardin, cultivated and wooded tracts, mostly situated in depressions, or valleys alternate with plains, which in some cases afford pasture, and in others are quite sterile. This tract is very uneven, and the ridges running south and north rise to high hills, generally of a conical shape. These ridges continue to Nisibin, but are less frequent. Between them run some watercourses, which are used for irrigation, and soon lost in the desert country that lies farther south. East of Nisibin cultivation ceases; but as in this part there are numerous watercourses, the adjacent country has pasture even during the summer months.

The climate of this region is much colder than that of Europe in the same parallel. In January and February a great quantity of snow falls. The spring hardly exceeds six weeks, and in May the dry season begins, in which hardly any rain falls to the end of October or the commencement of November. The thermometer rises to 90°, and all grass and minor vegetation dries up. Pasture is then only found in the vicinity of the pools and cisterns, which are common in many parts of the table-land. Nature becomes reanimated in the month of November, when very heavy rains fall. Among the products of this region are wheat, beans, barley, rice, lentiles, durrha; cucumbers, melons, pumpkins; mulberries, pomegranates, walnuts, figs, cherries, plums, apples, pears, quinces, almonds, chestnuts, filberts, &c.; tobacco, sesamum, castor-oil; hemp, flax, safflower, cotton; capers, mustard, liquorice, and asparagus. The four last grow wild.

Sheep, cattle, and goats, constitute the wealth of the nomadic tribes. There are two kinds of sheep, the Tartarian, with the fat tail, which often weighs 15 lbs., and the Arabian, whose tail is not much thicker than that of our sheep. Horses are numerous; asses are also kept in great numbers. Camels are used on the caravan road.

The most common wild animals are wild boars, deer of two or three different kinds, wolves, foxes, hyenas, jackals, bears, polecats, martens, marmots, hamsters (*Cricetus vulgaris*), squirrels, porcupines, and hares. There are several kinds of vultures, falcons, and owls; ravens, crows, jackdaws, thrushes, beccaficos, and other smaller birds. Fish abound in both rivers, the Euphrates and the Tigris, and in several of their confluent. There are also several kinds of turtles, snakes, and lizards.

The hilly region of Mesopotamia constitutes the pashalik of Diarbekr; but the most south-eastern districts of it are sometimes placed under the pasha of Mosul. The most remarkable places are situated either in the plain of Diarbekr or along the caravan road between Bir-eh-jik and Mosul. In the plain of Diarbekr are—

Diarbekr. [DIARBEKR.] North of Diarbekr, on the southern declivity of the Kharzan-Tagh, are rich copper mines of Arghana Masden. [ARMENIA.] The towns of *Ilijeh* and *Khimi* are noticed under ARMENIA.

Along the caravan road are the towns of Urfah, or Orfah, Mardin,

and Nisibin. *Urfah* (*Orfa*, the ancient *Edessa*), the most western, is at the base of a hill, and is a well-built large place, which is frequently compared with Damascus. It is surrounded by high and strong walls 7 miles in circuit, and has between 40,000 and 50,000 inhabitants. The most remarkable of its numerous mosques is the grand mosque, which in its exterior and interior exhibits a considerable degree of magnificence. With this building are united several medreses, where young men are instructed in the Koran, divinity, and the law. Edessa was the chief town of Osroene. It was also called Antiochia and Callirrhoe (Plin., v. 21), and is supposed to be the Erech of the Old Testament. (Gen., x. 10.) Edessa suffered greatly by an earthquake in the time of Justinian, who rebuilt a considerable part of the town, and gave it the name of Justinopolis. Orfa was plundered by the army of Timur in 1393, but it soon recovered its former importance. South of Orfa was the ancient town of *Charra*, the *Haran* of the Scriptures, where Abraham's family dwelt after they had left Ur of the Chaldees. In the time of Hezekiah, Haran had been conquered by the Assyrians. It is mentioned by Ezekiel as a place of commercial importance. *Charra* is memorable in Roman history for the defeat of Crassus, (Dion. Cassius, xl. 25; Pliny, v. 21).

Mardin is noticed in a separate article. [MARDIN.]

Nisibin (the ancient *Nisibis*), farther east, had sunk down to the condition of a miserable village, but in modern times the Turks have partially rebuilt it. Nisibis, the chief town of Mygdonia, also called Antiochia Mygdonica, was situated on the river Mygdonius, in the midst of a fertile plain at the foot of Mount Masius. It was surrounded by three brick walls, and was very strongly fortified. Sapor was repulsed in three separate attacks upon the town, but it was ceded to him by treaty in A.D. 363. The Zoba of the Old Testament (1 Sam., xiv. 47; 2 Sam., viii. 3) is supposed to be the same town as Nisibis, since the Syriac writers frequently mention Nisibis under the former name. To the north of Nisibis was *Daras* (*Dara*), which was fortified by Anastasius I. (A.D. 506), who gave to it the name of Anastasiopolis. (Procop., 'Pers.,' i. 10.) There are considerable ruins both of Nisibis and Daras.

The town of *Suverek*, or *Severek*, lies on the direct road between Urfah and Diarbekr, in a depression in the midst of the table-land. In the surrounding country wheat is raised to a considerable extent, and orchards are numerous. The place contains 2000 families.

The only place, except Diarbekr, built on the banks of the Tigris which requires notice is Jezirah-Ibn-Omar (the Island of the son of Omar), which was built on an island in the river. It was long the seat of a rebellious chief of the Kurds, and contains a population of about 1000.

The Great Southern Plain, sometimes called the Desert of Mesopotamia, extends from the great caravan-road leading from Bir-eh-jik to Mosul to the Median Wall, or from 37° N. lat. to 33° 30' N. lat., and between 38° and 44° E. long. At its northern extremity it is nearly 300 miles wide; but as the Euphrates and Tigris approach nearer to one another in their course to the south, the country grows narrower, and at its southern extremity it is hardly 50 miles wide. The length from north-west to south-east may be about 250 miles, and the average width about 150 miles. This gives an area of 37,500 square miles.

The level of this region at its northern extremity and in the vicinity of Mardin, is between 1300 and 1400 feet above the sea, but it decreases as it approaches the rivers; Mosul on the Tigris is only about 400 feet, and Bir-eh-jik on the Euphrates 650 feet above the sea-level. The course of the rivers and streams shows that it descends towards the south. At its southern extremity near the Median Wall it probably does not exceed 200 feet above the sea.

The country is a plain, but there are a few isolated ridges of high hills, which however do not cover a great extent of country. The best known of these ridges are the Jebel-Makhul on the banks of the Tigris, between 35° 30' and 35° N. lat.; the Sinjar Hills, south of Nisibin, north of 36° N. lat., and between 41° and 42° E. long.; and the Abd-al-aziz Hills, near 36° 30' N. lat., and between 39° and 40° E. long.

The most fertile portion of this region is in the north-western corner, between the Abd-al-aziz Hills and the Euphrates; it is drained by the river Belik, which runs about a hundred miles, and falls into the Euphrates at Racca. This region comprehends the districts which are known by the names of Saruj and Harran. In Saruj alone it is stated that there are more than forty large villages, inhabited by agriculturists, and that twenty of them cultivated rice. The country is considered as the granary of Syria, and no part of the last-mentioned province can vie with it in fertility and agricultural productions. *Harran*, which lies to the east of Saruj, is stated to contain a large portion of alluvial land, and to be equally fertile.

The country between the caravan-road and the Sinjar Hills is nearly a level plain, which even at the end of the dry season is mostly covered with coarse grass and prickly plants. In some places there are tracts of marshy ground, with long reeds, and interspersed with many large pools of sweet water; at a few places the soft soil is impregnated with salt. There are in this part many Tells or mounds of conical shape from 80 to 150 feet in height; they appear to be artificial, and some of them mark the sites of ancient towns. The portion of this tract which is under cultivation is small.

The *Sinjar Hills* run east and west with a slight inclination to the

south. They extend in length about 50 miles, and in breadth from 7 to 9 miles. The highest part of the hills is near the eastern extremity, where they rise about 1500 feet above the plain. This is an agricultural district. Considerable quantities of wheat, barley, and cotton are raised in the lower and more level parts, and the sides of the hills are covered with plantations of fig-trees and vines, which yield articles of export. A portion of the hills is covered with oak-trees, the acorns of which afford a plentiful supply of food to the numerous wild boars that frequent the hills. The number of the inhabitants, who are Yezidis, is stated to exceed 6000.

The plain between the Sinjar Hills and the Tigris has an undulating surface, and is for the most part barren, and covered with coarse scanty grass and thorny shrubs; there are large tracts of barren marshy soil, strongly impregnated with saline matter. The most common vegetable production is an oat-grass, which at many places covers tracts of several miles in extent, to the exclusion of all other plants except a few flowers. Cultivation is only carried on in some of the beds of temporary watercourses, and between some low ridges of rocks, where wheat and barley are cultivated. Some tracts are covered with wormwood. In the vicinity of the Tigris the cultivated tracts are more extensive. This river flows here in a valley from 8 to 10 miles wide: the projecting headlands of the higher country form large embayments, which have a fertile alluvial soil, overgrown in their natural state with grass and small tamarisks, but where cultivated giving abundant crops of grain or rice. In proceeding from Mosul southward the cultivated tracts decrease in number, as the agricultural inhabitants are too much exposed to the predatory incursions of the Shammar Arabs, who are in possession of the uncultivated interior of this part of Mesopotamia.

The Jebel-Makbul extends about 40 miles along the Tigris, and at a very short distance from the banks. It must be considered as the continuation of the Jebel-Hamri, which near 35° comes close up to the left bank of the Tigris from the south-east. The Jebel-Makbul may rise about 600 feet above the level of this river: it consists mostly of two ridges, and is composed of transparent gypsum. In its present state it is a waste. At its western base is a large tract of country with a sandy soil, which contains a great number of bitter wells that are frequently visited by the nomadic tribes of the Arabs. The banks of the Tigris between the Jebel-Makbul and the town of Tekrit are uninhabited on account of the neighbourhood of these tribes. Between Tekrit and the Median Wall the alluvial tract on the banks of the Tigris grows much wider, and appears to have been formerly a well-cultivated country, which was irrigated from a large canal that still exists under the name of Ishaki, and extends from the town of Tekrit to Baghdad; a great number of smaller canals for irrigation are connected with it. But at present the canal rarely contains water, as the whole work has gone to decay from want of attention; and this tract, which has an exceedingly fertile soil, is without inhabitants, and almost without cultivation, except a few isolated spots.

The higher ground west of this alluvial tract, as far as the river Tharthar, is described in article BAGHDAD, Pashalic of. On the left bank of the Tharthar are the extensive ruins of Al-Hadhr (the ancient Hatra). The Tharthar falls into a salt-lake called El-Milh, or Ashlik.

The country contiguous to the banks of the Euphrates is much better cultivated than that which skirts the Tigris. Between Bir-el-Jik and Balis the Euphrates runs in a narrow bed between very high rocks; there is no bottom along the banks of the river, and the adjacent country is sterile and uncultivated. But between Balis and Raeca the high grounds present themselves as low and rounded hills, and they are from one to six miles distant from the banks of the river. The bottom in these parts is an alluvium. On the banks of the river are tamarisk-bushes. A great part of the low plain is occupied by swamps, and the more elevated tracts between the swamps are either overgrown with tamarisk-bushes or used as pasture-ground. There is hardly any cultivation. In these parts the bed of the river is wider, and there are several islands in it. A few date-trees are planted.

At the mouth of the Khabur are some extensive woods, composed of high trees, especially tamarisks and poplars. Lower down the low and level flats increase in extent, and here also cultivation is much more attended to; but still by far the greater part of the bottom is swampy or only used as pasture. The number of islands increases as we proceed farther south; they are partly bare and partly well wooded with tamarisks. Before reaching Annah the cultivation begins to be more general. Round this place a large tract is well cultivated; corn, cotton, French beans, and sesamum are raised to a great extent; the plantations of dates are extensive, and the numerous orchards yield oranges, lemons, pomegranates, figs, and olives. The olive-tree is not met with farther south; but the other trees and branches of agriculture are greatly attended to in the bottom of the Euphrates as far down as Hit. The banks of the river present a continual plantation of date-trees; and between them and the low rounded gently-sloping hills at the back the bottom is, with the exception of some swampy ground, in a high state of cultivation and full of villages. The great fertility of this tract is mainly to be ascribed to the system of irrigation which has been introduced. A great number of canals traverse the river bottom in its width, extending from 200 to 2000 yards from the banks, and the water, raised by machines, is distributed over the

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adjacent lands. The numerous islands which occur in this part of the course of the Euphrates are mostly cultivated, and on some of them towns are built.

Opposite the town of Hit the bottom is only a mile wide, and nearly without vegetation, as the surface is mostly composed of gravel, intermixed with flint and pieces of chalk. There are only a few date-trees, poplars, and tamarisks; and at a few places are isolated fields of wheat, barley, or sesamum. Below this place the high grounds disappear entirely, and the whole country is very little elevated above the level of the river. The soil of this tract is extremely soft, and as the banks of the Euphrates are very low, it is annually subject to inundations, which leave behind them large pools and lagunes, the water of which is generally salt. The whole tract is in possession of nomadic tribes, who find here during the dry season abundant pasture for their buffaloes and horses. The number of islands in the river decreases, and they are no longer cultivable; their soft soil consists of sand and mud. Such is the country between Hit and the Median Wall, which is noticed in the article BAGHDAD, vol. i., col. 820.

This region is divided between the pashalics of Mosul and Baghdad. No remarkable places are found, except the towns built on the banks of the two rivers which inclose the region. On those of the Tigris are MOSUL and Tekrit. Tekrit is built on a cliff, and occupies the eastern part of the site of an ancient town, the ruins of which are very extensive. [BAGHDAD, Pashalic of, vol. i., col. 819.]

Circesium (*Kerkeraiah*), at the union of the Khabur with the Euphrates, was a very ancient town: it is called Carchemish in the Old Testament. It was the most advanced fort held by the Romans in this direction, and was strongly fortified by Diocletian. The Khabur is the Kebar of the Old Testament.

The largest towns on the Euphrates are the following:—*Annah* (the ancient Anatho), which is partly built on the western bank, and partly on an island of the Euphrates, contains 1800 houses, and is considered the capital of the Arab tribes inhabiting the country west of the river. Farther down lies *Hedisah*, on an island in the river, in the midst of date plantations, and contains more than 400 houses. *El-Uz* is also a considerable place, and like Annah partly built on an island. *Jibbah*, another town built on an island, contains 500 houses, and is a thriving place. *Hit* (the Is of Herodotus) contains bitumen springs, which are mentioned by Herodotus (i. 179). It is built round a hill, and has good houses of stone. In the vicinity there is very little cultivation, and the inhabitants derive their subsistence from making salt, preparing bitumen, manufacturing woollen-stuffs, and building boats. The number of bitumen springs in the neighbourhood of this place is very great, and the produce of a single spring is sufficient to meet the demand, though it is used in these parts as fuel. A great number of river-boats of different sizes and forms are made here. They consist of wicker-work, made of branches from an inch and a half to two inches in thickness. The interstices are filled up with bark or straw, and then the whole is caulked with bitumen. In such boats the bitumen, salt, and prepared lime are taken to Hillah, Bassora, and Baghdad.

The plain of Babylonia, or Irak Arabi, extends from the Median Wall (34° N. lat.) to the confluence of the Euphrates and Tigris at Kornah (31° N. lat.), and between 44° and 47° E. long. In length it does not much exceed 200 miles, and in breadth it varies considerably. Between Felujah and Baghdad it is not more than 40 miles wide, but lower down it widens to 100 miles: 80 miles may be the average width. This gives an area of 16,000 square miles to the region, which is noticed under BABYLONIA; see also BAGHDAD, Pashalic of.

The banks of the Euphrates, from the place where the Saklawiyeh Canal (the most northern of the canals from the Euphrates to the Tigris) branches off, to the ruins of Babylon and the town of Hillah, are of moderate height. The country adjacent to them is of indifferent fertility, and is mostly overgrown with grass, thistles, and mimosa. Cultivation is limited to a few spots, and as the pasture-grounds are also indifferent, the number of cattle, sheep, and goats is not great. It appears to be little inhabited, and only from time to time a grove of date-trees is seen. Below Hillah the country improves greatly; a large portion of it is under cultivation, and the plantations of dates are more numerous. It is a populous country: between Hillah and Diwaniyeh a number of large villages are observed.

A short distance below Diwaniyeh begin the marshes of the Euphrates, which lower down are called the marshes of Lemlun or Lamlun. They extend from Diwaniyeh to El Karayin, a distance of upwards of 80 miles in a straight line, and they vary in width from 6 to 20 miles. This tract is the most productive and most populous on the banks of the Euphrates, and is inhabited by an Arab tribe called the Kasahel, who are estimated at half a million, which however is probably an exaggeration. The river runs between low banks, from which the country on both sides rises imperceptibly towards the interior, where it extends in level flats, between which are many extensive depressions which are swampy all the year round. The soil of this tract consists of a firm tenacious clay of a dark-blue colour, in which numerous shells are imbedded. The soil is very fertile when irrigated, and the means of irrigation are abundant. The Euphrates divides into numerous branches, so as to convert a large tract of the marshes into islands. The marshes are also traversed by two large canals,

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ons on each side of the river. That on the Mesopotamian side is called the canal of Yusuf. It begins about half an hour above Diwaniyeh and terminates at El Karayin. The canal of the Arabian side is called the canal of Old Lamlun. It branches off from the Euphrates about 19 miles below Diwaniyeh, and rejoins it a short distance above the mouth of the Yusuf Canal. The two canals are connected with the Euphrates by numerous other canals of smaller dimensions, and other canals again carry the means of irrigation to those parts of the marshes which are more distant from the river. Great quantities of rice are grown in this marshy region; buffaloes abound; plantations of dates cover the banks of all the canals. There are also a few plantations of fig-trees. During the inundations the whole surface of these marshes is under water, with the exception of those places which are inclosed by embankments, and some more elevated tracts on which the villages are built. The villages also are frequently inundated, and when this happens the inhabitants convert the roofs of their reed-built huts into boats, or place their families on buffaloes, and in this way reach a more elevated spot. As it is very difficult to enter their country with any force, they are nearly independent. The Euphrates in their country contracts very much in width, so as to be at some places not 200 feet across, and the Kasahel Arabs levy a very arbitrary toll on all the river boats which navigate between the lower and middle course of the river.

The marshy swamps terminate at El Karayin, and with them the large canals for irrigation: farther downward only short narrow cuts are met with, which serve to irrigate the tracts adjacent to the banks of the river, and do not advance far inland. The banks are much more elevated, though not high, and in most places overgrown with bushes. This country inhabited by the Montefik Arabs, exhibits a mixture of cultivation and pastoral occupation. As the country is rather fertile, it is well inhabited, but not so populous as the marshes of Lamlun. The date plantations are as numerous and extensive as at any place higher up the river, but less care is bestowed upon them and on the cultivation of rice and wheat. Those inhabitants who still adhere to a nomadic life have large herds and flocks of horses, camels, buffaloes, sheep, and goats. The tract of ground between the mouth of the two canals, Shat-el-Kar and Shat-el-Hiyeh is swampy and well wooded, but little inhabited. But below the last-mentioned water-course the country rather improves; the banks of the river present almost a continuous forest of date-trees, between which the villages and hamlets are so numerous that they almost touch one another; on approaching the place where the two rivers unite, the banks of the rivers sink lower, and large tracts are only swamps overgrown with reeds, but in many places extensive fields still occur, on which wheat, rice, and barley are grown. The uncultivated grounds are used as pastures for the numerous herds of buffaloes. From 10 to 12 miles from the confluence of the rivers, the waters of the Tigris are so abundant that the country is converted into a swamp, which during part of the year is covered with water many feet deep, and in the dry season it is cut up by numerous watercourses. From neglect of the embankments the marshes are greatly on the increase in Lower Mesopotamia. [BAGHDAD, vol. i., cols. 819, 820.]

The Euphrates fertilises the low country which extends on both of its banks below the town of Diwaniyeh. The detritus brought down by the river is formed by the abrasion of chalk, lime, and gypsum, which form a rather hard clay, not fertile itself, but becoming so when irrigated. The water in the Euphrates is lowest from the middle of November to the end of the year. It then begins to rise slowly, and continues to rise to the middle of January, in consequence of the great rains in central Armenia at the beginning of winter. No difference in the level of the water is observed between the middle of January and the vernal equinox, when the great rise begins (consequent on the melting of the snow on the Armenian highlands), and continues to the end of May. It is then found that opposite the town of Annah it is from 11 to 12 feet above the lowest level, and farther down to the marshes of Lamlun from 15 to 18 feet. Were this great volume of water permitted to rush down on the low country, it would entirely submerge it, and convert it into an immense swamp. To prevent this the great canals of Babylonia were made, as they all occur above Hillah, or the place where the Euphrates enters the low country. The canals carried the superabundant water into the Tigris, and also gave to the adjacent country the means of irrigation. They appear still in some small degree to serve these purposes, but for the most part they are out of repair, all of them, even the Saklawiyeh, are either dry or nearly so during three or four months. As these canals at present are not kept in good order, they cannot carry away the great volume of water, and a larger quantity descends to the low country, destroys the embankments, and converts a great part of the marshes of Lamlun and of the low country farther down into swamps. From the end of May to November the waters of the Euphrates are continually but slowly on the decrease.

The Tigris also inundates the adjacent countries; but its inundations are more destructive than useful, on account of the great irregularity with which the inundations occur, and their difference in different years. This irregularity in the inundations of the Tigris is chiefly to be ascribed to the numerous large rivers which originate in the mountains of Kurdistan, and join the Tigris in its middle course; while the Euphrates, after the junction of its two principal

branches, the Kara-su and Murad, is not joined by any river of consequence. The affluents of the Tigris rise in the mountains of Kurdistan, which for many months being covered with deep snow, bring down an immense volume of water when the snow melts. The Zab Ala, or Greater Zab, at that time brings down a volume superior to that of the Tigris above the point of union. The other affluents, the Zab Asfal, or Lesser Zab, the Adhem, and the Diyalah, are also large rivers. [BAGHDAD, Pashalic of.] The Tigris begins to rise in November, owing to the great rains which then fall in its upper basin. It rises and falls at intervals until the supply of water from the mountainous countries is stopped by the frost. In the middle of March begins the great rise, which continues to the end of May. After that period its waters alternately rise and fall during June, when they begin to decrease quickly, owing to the great rapidity of the current. Between August and November the volume of water has decreased so much that only vessels drawing four feet can navigate the river, and even such vessels encounter great difficulties. The Tigris and its great affluents flow in beds which consist of hard rocks, and a small quantity of detritus is brought down by them. It does not raise its bed by a deposit, but, on the contrary, scours it out deeper. This is probably the reason why the canals for irrigation are at present without water during the greater part of the year. Even the Shat Eidha, an ancient bed of the Tigris in the plain of Baghdad, has very little water in it.

The country along the banks of the Tigris, from the northern extremity of the Median Wall to its confluence with the Euphrates, is nearly a desert, except in the immediate neighbourhood of Baghdad, which is not supplied with provisions from the lands in its vicinity, but from the country which lies farther north. Baghdad is indeed surrounded with extensive gardens and some fields, but they extend only a few miles from the walls, and are surrounded by an uncultivated country. North of the town the plain is traversed by the great canal called the Ishahi, which extends from the neighbourhood of Tekrit to the Saklawiyeh Canal, but is without water. There are also many other canals of smaller dimensions in the same state. The remainder of this tract is pasture-ground for the herds of the nomadic tribes during the summer. South of Baghdad there is still less cultivation. The country is quite flat, and in most parts a grassy prairie, well watered; in others, covered with extensive swamps. A few small cultivated spots appear at great intervals. Herds of buffaloes, however, and the black tents of the nomadic Arabs, are common. There are hardly two or three villages which have a permanent population. As we approach the confluence of the Tigris and Euphrates, nothing is seen but stagnant water, swamps, and morasses, in which single families have settled, who live on the milk of their buffaloes and the little rice that they can raise.

Numerous high mounds are seen in several parts of Babylonia and of the great plain of Mesopotamia, marking the sites of ancient cities; some of these are enumerated in the articles BABYLON and BABYLONIA. [See also ASSYRIA; BAGHDAD, Pashalic of.] The climate and products of this part of Mesopotamia will be found noticed under BAGHDAD. [BAGHDAD, Pashalic of; BABYLONIA.] Besides the town of Baghdad, a few places occur on the banks of the Euphrates which require notice.

Hillah is a fortified place with about 25,000 inhabitants, Arabs, Persians, Turks, Jews, Armenians, and Indians, in the midst of a number of canals, which are partly filled up. It carries on a considerable commerce with all the towns on the Euphrates, mostly in river-barges of 50 to 80 tons. The imports consist especially of rice, dates, fish, oil, coffee, cotton-stuffs, and Indian goods, part of which are re-exported to Hit and Annah.

Diwaniyeh, lower down, a considerable place, with 1500 houses, is inclosed by a wall. Numerous river-barges are employed in carrying the produce of the rich country in its vicinity to other places.

Suk el Sheykh, the capital of the Montefik Arabs, contains from 6000 to 7000 families, whose habitations are dispersed among the large plantations of dates which cover the country. It is the principal if not the only market which is visited by the nomadic tribes of Nejd in Arabia. They bring to this place cattle, horses, wool, and gum; and take in return lead, fire-arms, ores of different kinds, and culinary utensils. From this place the British settlements in Hindustan obtain horses.

From the sway of the kings of Assyria Mesopotamia passed successively to that of the Babylonians and Medians, and then it was subjected by the Persian Cyrus. After the battle of Issus it fell into the power of the Macedonians, and after the death of Alexander his generals Antigonus and Seleucus successively got possession of it. Seleucus founded the kingdom of Syria, of which Mesopotamia formed a portion, until the countries belonging to the Syrian kingdom were divided between the Romans and Parthians. During many centuries Mesopotamia was the theatre of the wars in which these two nations contended for superiority, until the Parthians were supplanted by the Persian dynasty of the Sassanides, when Mesopotamia was disputed between them and the Greek emperor of Constantinople. But at last the Arabians appeared, and their kalifs established the seat of their wide-spreading empire in Mesopotamia. After these princes had lost their power, Mesopotamia fell into the hands of the Turkish princes, the Seljuks and Atabecks. The Mongols overran the country, and

then Mesopotamia again returned to a distracted state, until the Osmanlis, who had got a firm footing in Asia Minor, began to extend their conquests over this part of Asia. Their progress was for a time interrupted by the famous Timur, but after his death the Osmanlis again acquired the ascendancy, and subjected the whole of Mesopotamia to their dominion in the beginning of the 16th century.

(Ker Porter, *Travels in Ancient Babylonia*; Fraser, *Travels in Koordistan and Mesopotamia*; Kinneir, *Journey through Asia Minor, Armenia, and Koordistan*; Buckingham, *Travels in Mesopotamia*; Rich, *Narrative of a Journey to the Site of Babylon*; Keppel, *Personal Narrative of Travels in Babylonia, Assyria, &c.*; Southgate, *Narrative of a Tour through Armenia*; Ainsworth, *Travels and Researches in Assyria, &c.*; Chesney, *Report on the Steam Navigation to India*; London *Geographical Journal*, vols. vi., vii., ix., x.; Ritter, *Erkunde von Asien*, vols. x. and xi.; Dr. Layard, *Discoveries, &c.*)

MESSENE. [MESSENA.]

MESSENA, a country of ancient Greece, was bounded E. by Laconia, N. by Elis and Arcadia, and S. and W. by the sea. It was separated from Laconia by the mountain chain of Taygetus; and from Elis and Arcadia by the river Neda and the high land which runs between the bed of the Neda and the sources of the Pamisus. Its area is calculated by Mr. Clinton at 1162 square miles ('Fasti Hell.', ii. p. 385). It forms a nome in the modern kingdom of Greece, and had 98,805 inhabitants in 1852.

Messenia is described by Pausanias as the most fertile province in Peloponnesus (iv. 15, § 3); and Euripides, in a passage quoted by Strabo (viii. p. 366), speaks of it as a land well watered, very fertile, with beautiful pastures for cattle, and possessing a climate neither too cold in winter nor too hot in summer. The western part of Messenia is drained by the river Pamisus (now Pynratza), which rises in the mountains between Arcadia and Messenia, and flows southward into the Messenian bay (Gulf of Koroni). The basin of the Pamisus is divided into two distinct parts, which are separated from each other on the east by high land that stretches from Taygetus to the Pamisus, and on the western side of the river by Mount Ithome. The upper part, usually called the plain of Stenyklerus, is of small extent and moderate fertility; but the lower part south of Ithome is an extensive plain, celebrated in ancient times for its great fertility, whence it was frequently called Macaria, or the 'blessed.' Leake describes it as covered with plantations of the vine, the fig, and the mulberry, and "as rich in cultivation as can well be imagined." The western part of Messenia is diversified by hills and valleys, but contains no high mountains.

Messenia, called by Homer Messene, is said by Pausanias to have derived its name from Messena, the wife of Polycaon, the first king of the country, who is described as the younger son of Lelex, king of Laconia (iv. 1, § 1, 2). After the lapse of five generations, the sovereignty is said to have passed into the hands of Perieres, the son of Æolus. At the time of the Trojan war Messenia appears to have been subject to Menelaus, with the exception of Pylus and probably part of the western coast, which was under the dominion of Nestor. After the death of Menelaus, the Neleid princes of Pylus are said by Strabo (viii. p. 359) to have obtained the whole of the country. On the division of the Peloponnesus, after the Dorian conquest under the Heraclids, Messenia fell to the share of Cresphontes, who fixed his capital in Stenyklerus, and divided the country into five districts. (Strabo, p. 361.) Pylus however appears to have retained its independence till a much later date.

In the middle of the 8th century before the Christian era, a series of disputes and skirmishes arose on the borders of Messenia and Laconia, which gave rise to a confirmed hatred between the two nations. Prompted by this feeling, the Spartans are said to have bound themselves by an oath never to return home till Messenia was subdued; and they commenced the contest by a midnight attack on Amphibia, a frontier town, which they took, and put the inhabitants to the sword. This was the commencement of what is called the first Messenian war, the date of which is usually given, though it cannot be fixed with certainty, as B.C. 743. After a contest of twenty years, during which the Messenian king Aristodemus distinguished himself by deeds of heroic valour, the Messenians were subdued and reduced to the condition of the Laconian helots. They bore the yoke for 39 years, and then took up arms against their oppressors (B.C. 685) under the conduct of Aristomenes, a noble youth of the royal blood. The Messenians however were again subdued B.C. 668; and those who remained in their native country were treated with the greatest rigour. The majority of freemen however withdrew from Messenia, and a considerable number, under the two sons of Aristomenes, sailed to Italy, and settled at Rhegium. They afterwards obtained possession of Zancle, on the opposite coast of Sicily, and called it Messene, which has retained the same name (Messina) to the present day.

The Messenians again revolted in B.C. 464. This war, usually called the third Messenian war, lasted ten years, at the end of which time the Messenians, who had occupied the strongly-fortified mountain of Ithome, surrendered on condition of being allowed to retire from the Peloponnesus. The Athenians, who were not at that time on good terms with Sparta, gladly allowed them to settle at Naupestum, a town at the entrance of the Corinthian Gulf, which they had lately taken from the Locri Ozolæ. (Thucyd. i. 101, 103; Paus. iv. 24, sec. 2;

Diod., xi. 70.) This place however the Messenians were obliged to quit, when, at the end of the Peloponnesian war, the Spartans became masters of Greece; but after the supremacy of Sparta had been overthrown at the battle of Leuctra, Epaminondas formed the design of restoring the independence of Messenia, and accordingly sent messengers to Italy, Sicily, and all parts of Greece, to invite the long-exiled Messenians to return to their native country. Numbers obeyed the summons; and in B.C. 369 a town was built at the foot of Ithome, which they called Messene. The independence of the Messenians was guaranteed by the peace concluded B.C. 361; and Messenia continued to remain an independent state till the dissolution of the Achaean confederacy. In the Messenian state, as restored by Epaminondas, the ancient national manners are said to have been retained; and the dialect remained, up to the time of Pausanias, the purest Doric that was spoken in the Peloponnesus (iv. 27, sec. 5; Müller, 'Dorians.')

The chief towns on the western coast were Pylus and Methone, or Methone. The Bay of Pylus (Navarino), which is protected from the swell of the sea by the island of Sphacteria (Sphagia), is the best harbour in the Peloponnesus. Pylus was situated at the foot of Mount Ægaleus, according to Strabo, and must not be confounded with the fortress which was erected by the Athenians in the Peloponnesian war at the northern entrance of the bay, on the spot called Coryphasium by the Lacedæmonians. (Thucyd. iv. 108, 104.) Methone, or Methone (Modon), is said by Pausanias (iv. 35, sec. 1) to have been anciently called Pedasus, a town mentioned by Homer; it appears to have been a place of some importance in the time of Pausanias. Passing the promontory Acritas (Cape Gallo) we enter upon the Messenian Gulf, at present called Koroni: forty stadia north of Acritas was Asine (Paus. iv. 34, sec. 7), originally inhabited by the Dryopes. Following the coast we come to Colonides, 40 stadia N. from Asine; and afterwards to Æpea, which was called Corone after the restoration of the Messenians. At the head of the gulf, and east of the river Nedon, was Phæra, or Phara, which was annexed to Laconia by Augustus (Paus. iv. 30, sec. 2); and on the eastern coast of the gulf were Abia, which is mentioned by Homer, according to Pausanias (iv. 30, sec. 1) under the name of Ira, and Leuctrum, or Leuctra, which belonged at one time to Laconia. (Strabo, p. 361; Tac., 'Ann.,' iv. 43.) It is difficult to determine the boundaries of Laconia and Messenia, as they differed at various times. In the time of Pausanias the boundary was a woody hollow called Chœrius, 20 stadia S. from Abia (iv. 30, sec. 1). Strabo blames Euripides for making the river Pamisus the boundary (p. 366); but perhaps Euripides referred to a small river of the same name, which Strabo himself tells us was in the vicinity of Leuctrum (p. 361).

The only town inland of any importance was Messene, situated, as already mentioned, at the foot of Mount Ithome, on the summit of which was the citadel. Strabo speaks of this citadel and of Acrocorinthus as the two strongest places in the Peloponnesus (p. 361); and the account of Pausanias, who praises the strong fortifications of the town, is confirmed by the solid and beautiful masonry which remains to the present day.

MESSINA, a province of Sicily, comprehends the north-east extremity of the island, and is bounded W. by the province of Palermo, S. by that of Catania, N. by the Mediterranean, and E. by the Faro or Strait of Messina, which divides it from Calabria. The greatest length of the province is 60 miles, and its breadth is 30 miles. The population in 1851 amounted to 349,484. A continuation of the mountainous ridge which runs across Sicily from west to east, known to the ancients under the various names of Nebrodes, Herai, Pelorias, &c., covers the greater part of the interior of the province, and terminates at Cape Pelorum. A number of torrents during the rainy season descend from both sides of the ridge, but they are nearly dry in summer. On the south-west the province of Messina skirts the base of Ætna, the mass of which belongs to the province of Catania. It has no great plains, but it contains many valleys. Its chief products are wine, oil, and fruit of every sort. The province is divided into 4 distretti and 116 communes. The towns of the province are:—MESSINA. *Melazzo*, the ancient Myles, a sea-port town on a promontory of the northern coast facing the Lipari islands, 15 miles W. from Messina, with a castle and 7000 inhabitants, many of whom are employed as sailors and fishermen. It exports much wine from the neighbouring districts, and also oil. The red Faro wine, which is made nearer to Messina, is better than that of the district of Melazzo. *Patti*, on the same coast, 15 miles S.W. from Melazzo, and not far from the ruins of the ancient Tyndaris, has several churches and convents, and between 4000 and 5000 inhabitants. *Taormina*, the ancient *Tauromenium*, on the east coast of the island, and at the north-east base of the group of Ætna, an old-looking town with about 4000 inhabitants, is built upon a steep cliff towering above the sea; its ancient remains comprise a vast theatre capable of accommodating 40,000 persons, a ruined aqueduct and reservoir, sepulchres, and other ruins scattered around. *Castro Reale*, in a valley rich in oil and wine, has about 12,000 inhabitants in the commune. *Randazzo*, at the north base of Ætna, in a very fertile district, has 5000 inhabitants.

The islands of Lipari are included in the administrative province of Messina. [LIPARI ISLANDS.]

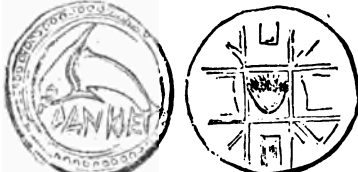
MESSINA, the Town of, lies on the north-east coast of Sicily opposite the Calabrian coast, from which it is separated by the Strait

of Faro, here about four miles wide. The town of Messina is built partly on the slope of a steep hill, and partly along the sea-shore at the foot of the hill. The port is formed by a strip of sandy beach projecting into the sea at the south side of the city, and sweeping round in the form of a semicircle. From the sickle-like form of this strip of land the town received from its first Greek inhabitants the name of Zankle, or Dankle, which in the Sicilian dialect meant a scythe. The name, as stated in the article MESSENIA, was afterwards changed into Messene. On this narrow tract of land are the citadel, the lazaretto, the lighthouse, and the castle of Salvatore at the entrance of the harbour, which faces the north. The harbour, which is more than two miles in circumference, is one of the best in the Mediterranean. The lighthouse at the entrance of the harbour of Messina stands in 38° 11' 10" N. lat., 15° 34' 7" E. long. The larger part of the town rises in the form of a crescent on the west side of the harbour, along which is a handsome quay backed by a row of fine buildings called La Palazzata: this quay constitutes the fashionable promenade of the town.

Messina has many remarkable buildings; the cathedral, the church of La Candelara, and that of the Capuchins, contain some fine paintings. The royal palace, the archiepiscopal palace, that of the senate, the seminary, the great hospital, the arsenal, the loggia or exchange, the granaries, the royal college, the bank, and the two theatres, are all worthy of notice. The public library, founded by Constantine Lascaris, is rich in Greek manuscripts. Messina is an archbishop's see, has a court of appeal for the province, a commercial tribunal, a royal college called Accademia Carolina for the study of law and medicine, and about 60,000 inhabitants.

Messina is the most trading town of Sicily; large vessels load and discharge close to the quays. It exports oil, currants, oranges, raisins, wine, brandy, almonds, lemons, sumach, lamb-skins and kid-skins, liquorice, silk, linseed, salt-fish, and other produce of the island. The imports comprise cotton and woollen manufactures, coffee, sugar, and other colonial produce, hardware, &c. The spinning and weaving of silk, and the manufacture of damask and satin, employ several thousand hands. The tunny and other fisheries are actively plied. Messina took part in the abortive attempt made by the Sicilians in 1848 to shake off the yoke of Naples; and it was the first place upon which retribution fell, being taken by General Filangieri, in September of that year, after an obstinate resistance, during which the town suffered severely.

The Faro, or Strait of Messina, which here separates Sicily from Italy, is about 22 miles long from north to south; its breadth varies from 10 miles to about 2½ miles at its northern extremity between the Faro tower and the rock of Scylla. The whirlpool of Charybdis, so celebrated in ancient times, is fixed by some opposite to Scylla, by others opposite the harbour of Messina. [CALABRIA.] The depth of the strait is very great, and a strong current runs through it.



Coin of Zankle (Messina). British Museum.

MESSINGHAM. [LINCOLNSHIRE.]
MESURADO, CAPE. [LIBERIA.]
METHERINGHAM. [LINCOLNSHIRE.]
METHWOLD. [NOFOLK.]
METHYMNA. [LESBOS.]

METZ, capital of the French department of Moselle, is built on the Moselle at the point where that river is joined by the Seille, in 49° 7' 14" N. lat., 6° 10' 46" E. long., 580 feet above the level of the sea, 170 miles in a straight line, 245 miles by railway through Nancy, E. by N. from Paris, and has 43,484 inhabitants in the commune, besides the garrison, which numbers 10,000 men. The town is washed on the west by the Moselle, which makes a bend and traverses the town; the Seille enters the city on the south, dividing into two branches, one of which flows between the ramparts, the other runs through the town and drives several mills: these two rivers are crossed by 17 bridges. Metz is, after Strasbourg, the strongest fortress in France. It is girt by a regular system of fortifications, and entered by nine gates furnished with drawbridges. The defences were constructed by Marshals Vauban and Belle-Isle; amongst the most important of the works erected by them are—the fort of Belle-Croix, which is built on a hill, and commands all the east of the town from the gate Des-Allemands to the Moselle; and the fort of La-Double-Couronne, which defends the southern part of the city.

This city existed in the time of the Romans, to whom it was known by the name *Divodurum*, which was the chief town of the *Mediomatrici*. At a later date it took the name of the nation, *Mediomatrici*, for which, early in the 5th century, was substituted the shorter designation of *Mettis*, or *Metis*, whence the modern Metz. In the civil dissensions which followed the death of Nero, A.D. 70, *Divodurum* was nearly destroyed by a sudden outbreak of the troops of Vitellius.

(Tacitus, 'Histor.' i. 63.) *Divodurum* was ruined in the invasion of the Huns under Attila, 452; but afterwards became the capital of Austrasia, which was sometimes termed the kingdom of Metz. In the division of the Carolingian empire, Metz was comprehended in the kingdom of Lotharingia, or Lorraine.

Metz is in general a well-built town; the houses are mostly of cut stone; the quarter that lies on the right bank of the Moselle stands high, and contains many steep streets; on the left bank the site is level. The streets however are in most instances narrow, crooked, and ill laid out; many of the houses are adorned with bas-reliefs. In the centre of the town is the esplanade, which stands on high ground, and is one of the finest promenades in Europe, formed by numerous avenues of trees, and commanding a fine view over the rich valley of the Moselle; near it is a vast space on which the troops in garrison are exercised. Amongst the many remarkable structures of Metz must be mentioned—the arsenal, which is of vast extent, and amongst other stores contains 80,000 muskets; the cathedral, founded in 1014, but not finished till 1546; the elegance, delicacy, and boldness of this structure have been always much admired; of its lightness some idea may be formed from the circumstance that the total area of its windows (many of them of the best age of glass-painting) amounts to no less than 4869 square yards; the church of Notre-Dame-de-la-Ronde and that of the abbey of St. Vincent, both of which are ancient and remarkable structures; the college buildings, formerly the abbey of St. Vincent; the military hospital, a vast building contiguous to the barracks and close to the Moselle; and the palais-de-justice, in which the courts are held and the public library of 30,000 volumes is kept. Next to these the prefect's residence, the town-house, the mint, the churches of St. Martin, St. Nicolas, and Sainte-Segolène, and another library of 10,000 volumes of select works, and rich in manuscripts by Vauban, Monge, and other writers on fortification and the art of war, are the most notable objects in the town.

Metz gives title to a bishop, whose see is the department of Moselle; it is the seat of a high court of justice for the department of Ardennes and Moselle. Besides a tribunal of first instance, a tribunal and chamber of commerce, the city possesses an exchange, an artillery and engineering school, an endowed college, several literary and scientific societies, a diocesan school, an ecclesiastical college, and several other schools, in which lectures are delivered gratuitously on midwifery, botany, drawing, painting, and music.

Amongst the industrial products of the town are broad-cloth, flannel, and other woollen stuffs, hosiery, plush, small wares, muslin embroidery, room-paper, glue, ground chicory, cotton-twist, excellent beer, nails, tiles, and leather. The commerce is composed of these articles, and of wine, brandy, confectionery, groceries, furniture, hides, iron, &c. A railroad, 25 miles in length, joins Metz to Nancy on the Paris-Strasbourg line, and is continued eastward to the Russian frontier at Forbach, whence it runs to Mannheim and Spire on the Rhine. The Calvinists have a consistorial church at Metz, the Jews a consistorial synagogue and a central rabbinical school.

(*Dictionnaire de la France.*)

MEUDON. [SEINE-ET-OISE.]

MEULAN. [SEINE-ET-OISE.]

MEUNY. [LOIRET.]

MEURTHE, a department in the north-east of France, bounded N. by that of Moselle, E. by that of Bas-Rhin, S. by that of Vosges, and W. by that of Meuse. It lies between 48° 22' and 49° 2' N. lat., 5° 42' and 7° 16' E. long. Its form is compact; the greatest length from east to west is 70 miles; its greatest breadth, at right angles to the length, is 46 miles. The area is 2353 square miles. The population in 1841 was 444,603; in 1851 it amounted to 450,423, giving 191.42 inhabitants to the square mile, or 16.84 above the average per square mile for the whole of France. The department is formed out of the old duchies of Lorraine and Bar, and a part of the territory called the *Trois-Evêchés*. This last comprised the territories of the three cities of Metz, Toul, and Verdun, which for a long time were imperial towns, and as such subject to the bishops who resided in them. In 1552 these districts were united to France by Henri II.

The department is remarkable for the beauty of its scenery, the fertility of its soil, and the variety of its productions. The principal chain of the Vosges Mountains runs along the eastern boundary, reaching in one of its summits to the height of 1148 feet above the plain. The rest of the department presents a pleasing variety of hills, dales, and well-watered valleys—the hills, which branch off from the Vosges, nowhere exceeding 650 feet in height, and nearly all running in a north-western direction. The hill slopes and a considerable portion of the plains are covered with dense forests.

The department takes its name from the river *Meurthe*, which rises in the E. of the department of Vosges, and running first north and then north-west, past St. Dié and Raon-l'Étape, enters the department of Meurthe, below this last town: here it flows through a fine valley, fertilised by the deposits of its frequent inundations, in a general north-west direction past Lunéville, Rosières, and Nancy, a little below which last-named city it falls into the Moselle, on the right bank, after a course of 100 miles. Great quantities of fir planks for Holland, rough timber, and fire-wood, are floated down this river, which is navigable for only 6 miles above its junction with the Moselle. Its principal feeders on the right bank are—the *Plaine*, which forms part

of the southern boundary of the department; the *Vézouse*, which joins the Meurthe at Lunéville; and the *Saron*, which flows westward from one of the numerous tarns on the western side of the Vosges Mountains, and enters the Meurthe a few miles east-south-east of Nancy. On its left bank the Meurthe receives the *Mortagne* a few miles south of Lunéville. The west of the department is drained by the *Moselle*, which here receives the *Madon* on its left bank. The *Seille*, which springs from one of the lakes in the east of the department, flows through a very fertile valley, first west and then north, falling into the *Moselle* at Metz, in the department of Moselle. The *Sarre* rises on the western side of the main chain of the Vosges Mountains, in the south-east of the department, and flows generally north as far as Sarreguemine, in the department of Moselle. Below this town it enters the Prussian Rhein-Province, through which it runs north-west to its junction with the *Moselle* a few miles above Trèves. The department is traversed by 8 state, 15 departmental, and a great number of parish roads. The Paris-Strasbourg railway crosses the department, passing through Nancy, whence a branch runs north to Metz and Forbach, and is continued to Mannheim on the Rhine. The canal Des-Salines, which runs from Deuze to Sarrealbe in Moselle, unites the Seille with the Sarre.

The plains and valleys of the department are very fertile in wheat, barley, and oats. About 400,000 quarters of wheat are grown annually, of which a large portion is sold in the markets of the department of Vosges for the supply of some of the more southern departments. From the time that the old ordinance of the dukes of Lorraine against planting the vine in soils fit to yield wheat fell into disregard, a large breadth of the best lands was laid out in vineyards; and in favourable years, which however are few, owing to the frequency of late frosts in the spring, a very large quantity of wine is made; in ordinary years the produce is 20,064,000 gallons. The surplus over the home consumption is sold into Alsace and the department of Vosges. In the arrondissement of Sarrebourg, where the climate, owing to the proximity of the Vosges Mountains, is colder than in the rest of the department, the vine is not cultivated at all. Rapes is extensively grown, both for green food and for making oil. Hay is abundantly produced along all the river bottoms. Potatoes, potherbs of all kinds, and fruits are largely cultivated. Horses, which are small, are used for draught and in the plough, except on the slopes of Vosges, where the ox is more frequently seen at farm labour. Cows also are small; they are however of a tolerable breed and good milkers. Hogs are numerous; pork is a staple article of the food and consequently of the commerce of the people. The forests still contain the deer, the roebuck, and the wild boar; wolves, foxes, and weasels are common enough.

The Vosges Mountains in this department are composed chiefly of the new red-sandstone and the subjacent secondary rocks; the rest of the department is occupied by the rocks that intervene between the chalk and the red-sandstone. Iron ore is found, but too poor to be worth digging for. Building stone, marble, and limestone are quarried; lithographic stone, red and gray granite, grindstone-grit, glass-sand, potters'-clay, &c., are found. A mine of salt-rock at Vic, and several salt-springs, are the most valuable mineral treasures of the department.

The industrial activity of the department has been greatly developed within the last few years, and is exerted on a great variety of products, among which are—woollen-cloth, calico, canvass, embroidered muslins and cambrics, playing-cards, room-paper, cut- and plate-glass, tobacco-pipes, oil, mineral acids, cotton-twist, gloves, beet-root sugar, candles, basket and wood-work, &c. There are also some iron- and bell-foundries, numerous glass-works, tan-yards, paper-mills, dye-houses, and potteries. Of the articles just enumerated or indicated and of its agricultural produce the commerce of the department is composed. About 100 fairs are held in the course of the year.

The inhabitants are a mingled German and French race; the German language is still spoken in the east of the department. They are in general a grave people—deficient in the usual vivacity of Frenchmen; but they are among the most industrious and orderly of the inhabitants of France. The department is distinguished for the number of successful candidates it sends to the entrance examinations of the École Polytechnique in Paris.

The department contains 1,505,929 acres. Of this area 750,328 acres are under tillage; 452,862 acres are forest and wood land; 177,554 acres are grass land; 40,455 acres are under vine culture; 15,736 acres are laid out in gardens, orchards, and nurseries; 15,250 acres are covered with heaths and moors; and 21,685 acres are occupied by rivers, lakes, and canals.

The department is divided into five arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Nancy	8	121	147,978
2. Château-Salins	5	150	68,634
3. Lunéville	6	201	88,978
4. Sarrebourg	5	118	76,667
5. Toul	5	127	68,166
Total	29	717	450,423

1. Of the first arrondissement and of the whole department the chief town is NANCY. *St-Nicolas-du-Port*, 5 miles E. by S. from Nancy, has a handsome gothic church, and 3178 inhabitants, who manufacture linen, brandy, cotton and woollen yarn, leather, and beer. *Pont-à-Mousson*, a station on the railway to Metz, 16 miles N. from Nancy, takes its name from the bridge here thrown across the *Moselle*, and from the old fortress of *Mousson*, which is built on a hill east of the town. It is surrounded by ramparts. The most remarkable objects in the town are—a gothic church built about the end of the 13th century; the town-hall; the large cavalry barracks; the hospital; and a square, surrounded by arcades. *Pont-à-Mousson* has ecclesiastical and communal colleges and 8010 inhabitants. The manufactures consist of coarse woollens, pottery, tobacco-pipes, beet-root sugar, beer, leather, and tiles. *Rosières-aux-Salines*, a station on the Strasbourg railway, 10 miles S.E. from Nancy, is built at the foot of a vine-clad hill above the Meurthe, and has 2332 inhabitants. It was formerly fortified, and flourished on account of its brine-springs; these however have not been worked since 1760.

2. In the second arrondissement the chief town *Château-Salins*, stands 17 miles N.E. from Nancy, in a pretty valley watered by a feeder of the Seille, and has a tribunal of first instance, glass-works, tan-yards, and a population of 2394. *Dieuse*, or *Duze*, famous for its salt-springs, stands on the right bank of the Seille, 10 miles E. of *Château-Salins*, and has a college and 3964 inhabitants. In Roman times the town bore the name *Decam Pagi*, and was considered an important post on the military road from Metz to Strasbourg. *Vic*, S. of *Château-Salins*, in a narrow valley drained by the Seille, has salt-springs, a tribunal of first instance, and 3277 inhabitants.

3. In the third arrondissement the chief town is LUNÉVILLE. *Baccarat*, situated on the Meurthe, which is here crossed by a bridge of nine arches, is famous for its manufacture of cut glass, and has 3216 inhabitants, who manufacture also common glass, calico, iron-mongery, chemical products, leather, &c. *Blamont*, a well-built town, situated in a fine corn and grass country E. of Lunéville on the *Vézouse*, has a population of 2577. *Gerbeviller*, formerly a fortified town, stands in a plain on the left bank of the *Mortagne*, and has 2208 inhabitants.

4. Of the fourth arrondissement the chief town, *Sarrebourg* is situated in a fertile country on the right bank of the *Sarre*, 48 miles by the Paris-Strasbourg railway E. from Nancy, and has a tribunal of first instance and 2493 inhabitants in the commune, who manufacture cotton-cloth, flax, scythes, saws, tin-ware, and chemical products. The position of the town at the opening of an important pass in the Vosges Mountains, makes it a place of importance in a military point of view. *Phalbourg*, 9 miles N.E. of Sarrebourg, at the entrance of the defiles of the Vosges, and near the Paris-Strasbourg railroad, is a well-built and strongly fortified town, with a population of 4947. The most remarkable structures are—a large church, built in the reign of Louis XIV.; the college buildings; the barracks; the arsenal; the town-hall; and the market-house.

5. The fifth arrondissement is named from its chief town, *Toul*, which stands at the foot of vine-clad hills, in a fertile plain on the *Moselle*, here crossed by a stone bridge of seven arches, at a distance of 21 miles by railway W. from Nancy, and has a tribunal of first instance, a college, and 8937 inhabitants. The town is irregularly built, but contains some good structures. Among the objects deserving of notice are—the cathedral, which contains some fine sculptures; the church of *St-Gengoult*; the town-hall; the two hospitals; the barracks; the corn-market; and the ramparts, which are flanked with nine bastions. This town is noted for its embroidery; pottery, beer, and leather are made.

The department forms the see of the Bishop of Nancy, is included in the jurisdiction of the High Court and within the limits of the University-Academy of Nancy, and belongs to the 5th Military Division, of which Metz is head-quarters. It returns three members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1858.*)

MEUSE, the ancient *Mosa*, and the Dutch *Maas*, a river which rises in the plateau of Langres, in the department of Haute-Marne, and flows first in a general northern direction and then west into the German Ocean, having drained portions of France, Belgium, and Holland. Its upper current is formed by two small streams that unite at *Fort-Fillières*; but it is only after passing the village and the ruined castle of Meuse that the name of Meuse is applied to the river. Having traversed in a direction of north by east the eastern part of Haute-Marne, the Meuse enters the department of Vosges, where, flowing under ground for four miles, it reappears a little south-west of *Neufchâteau*, not far north of which it crosses the boundary of the department of Meuse. Through the whole length of this department it flows north by west in a narrow valley past Commercy, Verdun (where it becomes navigable), and Stenay. On entering the department of Ardennes it has a very winding course, first north-west past Sedan, Mézières, and Charleville, and then north by east past Fumay and the fortress of Givet, just below which it enters the kingdom of Belgium. Here it traverses the province of Namur in the direction of north by west, as far as the town of Namur, whence it flows north-east to Liège, and then turning north by east it forms the boundary between Dutch and Belgian Limburg; and continuing in the same

direction to a few miles below Venloo, it turns nearly north-west as far as Grave. From the neighbourhood of Grave it flows west, and separates North Brabant from Guelderland and Holland. Below Gorcum it divides into two arms: of these, the northern one, flowing through the province of Holland, takes the name of Merwe, as far as Dort, where it subdivides into two branches, the northern one called the Maas, the southern one the Oude Maas, which inclose between them the island of Ysselmonde; these branches, uniting on the eastern side of the Isle of Rosenburg, form a wide current, which enters the North Sea to the north-west of the island of Voorn. The southern arm, having passed through the Biesbosch, takes the name of Hollands-Diep as far as Willemstad, below which it also subdivides into two branches: one of these, first called Haring-Vliet, and more to westward Flakke, enters the North Sea by a wide estuary between the islands of Voorn and Over-Flakkee; the other flows into the North Sea between the islands of Over-Flakkee and Schouwen, having first sent part of its waters to the eastward of Schouwen Island into the Ooster Schelde. The whole course of this river is 552 miles in length, 256 miles of which are in France; it is navigable from Verdun to its mouth, a distance of 430 miles—133 miles of these are in France. The principal feeders of the Meuse in France are the Mouzon, the Vair, the Chiers, and the Semoy on the right bank, and the Bar on the left; in Belgium the Lesse and the Ourthe on the right, and the Sambre on the left bank; in Holland, the Roer, the Niers, the Linge, the three branches of the Rhine known as the Waal, the Leek, and the Yssel, on the right bank, and the Dommel and the Merk on the left. Many of these rivers are navigable; those that are not so are available for floating timber. Down the Meuse itself the chief articles of transport are marble, slates, iron, timber, and corn.

The basin of the Meuse is for the most part very narrow, the French part of it being a mere strip of a few miles in width, hemmed in between high hills; lower down, where it includes the valleys of the Sambre and the Ourthe, it attains its greatest width, which is about 90 miles. North of Liège the basin again becomes narrow, and so continues to the final bend of the river westward, where in some places the width of the basin is between 30 and 40 miles. The lower part of the basin of Meuse includes a good deal of fertile flat land, with not a few marshes and peat bogs; the upper part of it is in general fertile, and presents some pretty and some bold scenery. The basin of the Meuse communicates with those of the Rhine, the Seine, and the Schelde by means of canals.

MEUSE, a department in the north-east of France, is bounded N. by the duchy of Luxembourg and the department of Ardennes, E. by the departments of Moselle and Meurthe, S. by those of Vosges and Haute-Marne, and W. by the departments of Marne and Ardennes. Its form approximates to that of an oval; its greatest length from north to south is 80 miles; its greatest breadth is 46 miles, but the average width does not exceed 33 miles. The area is 2405.9 square miles. The population in 1841 was 326,872; in 1851 it amounted to 328,657, giving 137.6 inhabitants to a square mile, or 37.98 below the average per square mile for all France. The department was formed chiefly out of the duchy of Lorraine and Bar; and the rest of it out of a part of the Trois-Évêchés and portions of the counties of Champagne and Clermont.

The Faucilles Mountains, which, running through the department of Haute-Marne and Vosges, connect the plateau of Langres with the principal chain of the Vosges Mountains, send out two ranges of hills that inclose the narrow valley of the Meuse, and traverse the department of Meuse from south-south-east to north-north-west, terminating northward in the wooded heights of the Ardennes. From these two ranges, which nowhere exceed the height of 1600 feet, numerous lateral offshoots spring, so that the surface presents a great variety of hill and dale, and plain and valley. The more western of the two ranges is often designated by the name of the Argonne Hills; it forms the watershed between the Meuse and the Seine. The eastern range, which in general is more properly described as a high table-land, divides the feeders of the Meuse from those of the Moselle. These heights, which consist of fossiliferous rocks, are in many places covered with extensive forests, in others with pastures, whereon great numbers of cattle are fed. The lower slopes are laid out in vineyards, which yield ordinary white and red wines of the first class. The soil of the plains is in general shallow and unproductive; but the river valleys, especially those of the Meuse and the Orain, are of the greatest fertility, and cultivated with the utmost care.

The chief river is the MEUSE, which gives name to the department, and is navigable from Verdun to its mouth. The west and south-west of the department are drained by the AISNE and its feeder the Aire; and by the Orain and the Saulx, which unite their waters, and, swelled by the Chee, flow into the Marne a little below Vitry-sur-Marne, in the department of Marne. The Madine and the Ornes flow north-east into the Moselle. The Oison and the Othain drain the northern district, and flow north-west into the Chiers, a feeder of the Meuse. The department is crossed by 9 state, 12 departmental, and a great number of cross roads. The Paris-Strasbourg railroad traverses the department, passing through Bar-le-Duc and Commercy. The climate is mild in the valleys, but harsh and cold on the hills and on the high table-land east of the Meuse.

Of the usual bread-stuffs more than is enough for the consumption

is raised. Hemp, flax, and oleaginous seeds are cultivated. Cattle, swine, and goats are numerous; horses are small. Gooseberries and strawberries are grown in very large quantities in the neighbourhood of Bar-le-Duc and Ligny, whence they are largely exported in the preserved state. Gruyère and cream cheese are made in the arrondissement of Commercy. About 22,000,000 gallons of wine are made annually, two-thirds of which are consumed on the spot, and the remainder is exported to Belgium.

The department is occupied by the rocks that intervene between the chalk and the new red-sandstone. Several iron-mines are worked; good building-stone, marl, potters'-clay, and slates are found. Fossils of great variety, and some of large dimensions, are met with.

The chief manufactures are—iron, made in 40 forges and furnaces, cotton cloth and twist, hosiery, oil, glass, paper, pottery, beer, leather, brandy, &c. The commerce of the department is fed by the articles already enumerated, and by timber, oak-staves, clover-seed, butter, fat pork, hides, wool, confectionary, &c. Above 100 fairs are held in the course of the year.

The department of Meuse contains 1,539,794 acres. Of the whole area 328,302 acres are under cultivation; 442,920 acres are covered with woods and forests; 34,349 acres are under vine culture; 122,252 acres are meadow and grass land; 18,254 acres are laid out in gardens, orchards, and plantations of various kinds; 29,634 acres consist of barren moorland; 15,294 acres are covered with rivers, ponds, marshes, or canals; and 35,649 acres are occupied as roads, streets, and squares.

The department is divided into four arrondissements, which, with their subdivisions and populations, are as follows:—

Arrondissements,	Cantons.	Communes.	Population in 1851.
1. Bar-le-Duc . . .	8	128	86,353
2. Commercy . . .	7	181	87,664
3. Montmédy . . .	6	132	69,096
4. Verdun . . .	7	150	85,539
Total . . .	28	591	328,657

1. Of the first arrondissement the chief town is BAR-LE-DUC, which is also the capital of the department. *Ancerville*, a small place S. of Bar-le-Duc, has 2181 inhabitants. *Ligny*, a well-built town, prettily situated on the left bank of the Orain, has several iron-forges and smelting furnaces, a cotton-spinning factory, tanyards, and a population of 3147. The town is noted for its manufacture of anvils.

2. In the second arrondissement the chief town, *Commercy*, stands on the left bank of the Meuse, in 48° 45' 54" N. lat., 5° 35' 41" E. long., 20 miles in a straight line, 25 miles by railway, E. from Bar-le-Duc, and has a tribunal of first instance, a college, and 3735 inhabitants in the commune. The town is well built, and has several pretty promenades. The barracks, riding-school, town-hall, and corn-market are the most remarkable buildings. In the environs, which are very beautiful, there are several iron-forges and smelting-furnaces. The manufactures of Commercy are calico, cutlery, beer, and leather. *St-Mihiel*, a pretty well-built town, with a college and 6462 inhabitants, is situated on the right bank of the Meuse, which here flows through a narrow valley shut in by high hills. The church of *St-Étienne* contains a fine sculptured representation of the Entombment of Christ. Cotton cloth and yarn, iron, carpenter's tools, and leather, are the chief industrial products. *Vaucouleurs*, a town of 2500 inhabitants, stands on the slopes of a hill above the left bank of the Meuse, 12 miles S. from Commercy, and has manufactures of cotton cloth, cotton hosiery, and leather.

3. In the third arrondissement the chief town, *Montmédy*, is situated at the foot and on the slope of a hill above the Chiers, a feeder of the Meuse, in 49° 31' 6" N. lat., 5° 21' 55" E. long., 964 feet above the level of the sea, and has a college, a tribunal of first instance, and 2132 inhabitants in the commune. It is an ill-built place, with narrow crooked streets and badly constructed houses. This town, being situated on the frontier of France, is regularly fortified: its defences have been repaired and strengthened within a few years. It has hydraulic saw-mills, tanyards, oil-mills, and some hosiery manufactures. *Stenay*, a well-built town, 8 miles W. from Montmédy, is situated in a fertile spot on the right bank of the Meuse, which forms several islands and drives the machinery of several iron forges below the town. The inhabitants, who number 3775, manufacture beet-root sugar, wine-casks, beer, leather, iron, and bricks.

4. In the fourth arrondissement the chief town, *Verdun*, stands on the Meuse, which here begins to be navigable, in 49° 9' 20" N. lat., 5° 19' 52" E. long., 1030 feet above the level of the sea, at a distance of 145 miles E. from Paris; and has tribunals of first instance and of commerce, a diocesan school, communal and ecclesiastical colleges, and 13,649 inhabitants in the commune exclusive of the garrison. The town is defended by a citadel constructed by Vauban, and by ten detached redoubts. The Meuse flows through the town in five branches, which unite outside the fortifications. Verdun is in general well built; but the streets, some of which are steep, are badly paved. An esplanade, planted with trees, divides the citadel from the town. The residence of the bishop of Verdun, the public library, which contains

14,000 volumes, the cavalry barracks, the military stores, the promenades, and the great sluices, by means of which the environs can be inundated, are the principal objects of notice. Verdun is famous for its sugar-plums and liquors. Cotton- and woollen-yarn, beer, and leather are also manufactured. *Clermont-en-Argonne*, a small town of about 1500 inhabitants, 14 miles W. from Verdun, on the slope of a high hill, in the vicinity of extensive forests, was formerly fortified, and the capital of a county to which it gave name. After the incorporation of Lorraine with France its fortifications were demolished. Clermont is well fortified; it stands on the high road from Paris to Metz. *Etain*, a well-built town, 12 miles E. from Verdun, stands on the left bank of the Orne, a feeder of the Moselle, and has a college, and 2961 inhabitants, who manufacture cloth, hats, cotton cloth and yarn, leather, and lina. *Varennes-en-Argonne*, a small place of 1600 inhabitants, on the left bank of the Aire, a feeder of the Aisne, 15 miles W. from Verdun, deserves notice as being the place where Louis XVI., his queen, and two children, in their flight from Paris, were arrested, on the night of the 21st of June, 1791.

The department forms the sea of the Bishop of Verdun, is included in the jurisdiction of the High Court and within the limits of the University-Academy of Nancy, and belongs to the 5th Military Division, of which Metz is head-quarters. It returns two members to the Legislative Assembly of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

MEVAGISSY. [CORNWALL.]

MEWAR. [HINDUSTAN.]

MEXICO, Republic of, occupies the north-western portion of the isthmus which connects North and South America, and the south-western extremity of North America, and lies between 15° and 33° N. lat., and 87° and 117° W. long. It is bounded E. by the Gulf of Mexico; S.E. by the British colony of Belize or British Honduras, and the republic of Guatemala; S.W. and W. by the Pacific Ocean, which here forms the long Gulf of California, the whole of which is included within the limits of Mexico; and N. by the United States of North America, the state of California being on the north-west, that of New Mexico north, and Texas north-east. By a recent treaty (known as the Gadsden Treaty) Mexico transferred a large portion of her northern territory to the United States on condition of receiving the sum of 10,000,000 dollars. The boundary line between Mexico and the United States as defined by this treaty, is formed on the north-east by the Rio Grande del Norte from its mouth up to a league above the town of El Paso del Norte (about 31° 30' N. lat.), thence south-west one league south of Lake Guzman to 31° N. lat.; along which parallel it is carried westward to 111° W. long., whence it ascends north-west to the confluence of the Rio Gila with the Colorado; it then descends the Colorado to 32° N. lat., along which parallel it is carried to the Pacific. The area of Mexico is about 1,000,000 square miles; the population within the present limits probably does not exceed 6,000,000.

Surface; Soil; Climate; Rivers.—Mexico is divided by nature into three regions, each of which is marked by different features. The first comprehends the countries lying to the east of the isthmus of Tehuantepec, which is crossed by the meridian of 95° W. long.: we shall call it the Eastern Region. The second extends from the meridian of 95° N. lat. in a curved line to the mouth of the Rio del Norte on the east (26° N. lat.), and to the confluence of the Gila with the Colorado (32° 45' N. lat.) on the west: it comprises the Central and Northern Region, or Anahuac. The third or Lower California comprehends the peninsula of that name on the west of the Gulf of California.

The Eastern Region comprehends the peninsula of Yucatan, the western declivity of the table-land of Guatemala, the plain of Tabasco, and the isthmus of Tehuantepec. Along the northern and western shores of the peninsula of Yucatan, there are no harbours, but only roadsteads, which during the northern gales are very unsafe; but along the eastern shores there are several harbours. The shores are sandy and flat. The level country extends to a considerable distance inland, whilst the centre of the peninsula is occupied by a long and comparatively narrow table-land inclosed by two ranges of low hills. The country along the Bay of Honduras is well watered, and exhibits a vigorous vegetation, both in its trees, which are of heavy growth, and in the great variety of its plants; but the soil is nearly uncultivated, the scanty population being chiefly employed in cutting mahogany, with fustic and several other dye-woods. The hilly district in the interior, as well as the flat country on the northern coast, has a sandy soil, and spring-water is everywhere extremely scarce. The vegetation is scanty; the trees are stunted, and the plants of a languid growth, except during the rainy season (from May to September); but as the climate, though exceedingly hot, is healthy, it is much better inhabited and cultivated than the eastern shores. The hills in the interior grow higher towards the point where the peninsula is connected with the table-land of Guatemala, the larger and higher portion of which belongs to the state of GUATEMALA. From the ridge which traverses this table-land the country descends rather rapidly to the west, until it meets the plain of Tabasco, north of 17° N. lat. Its surface being furrowed by numerous watercourses it is rather a succession of ridges of hills and valleys than an inclined plane. The climate is in general healthy; and according to the different elevations of the

surface, either the productions of the West Indies, or wheat and European plants are grown.

The plain of Tabasco begins on the east, at some distance east of the lagune of Terminos, and extends westward to Partida Rock, a moderately elevated cape, in which a range of hills, including the volcano of Tuxla, terminates (96° W. long.) on the shores of the Gulf of Mexico. This plain is more than 250 miles long, and extends inland from 50 to 120 miles. Its surface is level, and the soil alluvial. Being very fertile, it is covered with a thick forest of heavy growth but is little cultivated, being generally under water for several months during the rainy season, and consequently very unhealthy. Besides maize, plantains, and manioc, it produces a large quantity of coconuts and some coffee. Vanilla and indigo are stated to be common in the woods. The coast is generally low; but between the lagune of Terminos and the mouth of Tabasco River are the heights of San Gabriel, a range of hills running east and west about 30 miles, at a short distance from the shore; and where the plain terminates on the west is Cape Partida Rock, the extremity of a somewhat elevated and rocky shore, which extends about 30 miles. The Laguna de Terminos is about 60 miles long from north-north-east to south-south-west, and 30 miles wide on an average; but in many places it has hardly 4 feet of water, and the three or four channels by which it is connected with the gulf are hardly passable for large boats. The plain of Tabasco is watered by a considerable river, the Rio de Tabasco, and its two branches the Usumasinta and the Grijalva. The Rio de Tabasco rises in two branches on the eastern corner of the table-land of Guatemala, and flowing in a direction generally north by west, forms a considerable cataract south of 17° N. lat., where it descends from the table-land. Above this waterfall it is navigable for canoes, and below it for larger boats. This is also the case with its tributary, Chacamas, which rises in the most northern offsets of the table-land of Guatemala. The Usumasinta joins the Rio de Tabasco a few miles above its mouth, after a course of more than 300 miles. The Grijalva rises in the range of high hills in Guatemala, between the towns of Totonicapán and Gueguetenágo, and runs with many bends in a north-west direction, in a wide valley, until it issues from it near the isthmus of Tehuantepec, where it turns to the north-east by a bold sweep, and receives the name of Rio de Tabasco. It is navigable for vessels of moderate size as far as Villa Hermosa. After having joined the Usumasinta, it falls into the Gulf of Mexico at Port Victoria, after a course of about 350 miles.

The plain of Tabasco occupies the northern portion and about one half of the isthmus of Tehuantepec. The southern half comprehends a mountain ridge and a smaller plain. The most western declivity of the table-land of Guatemala assumes the form of several nearly parallel ridges at about 94° W. long., which running due east and west connect the last-mentioned table-land with the elevated plains of Anahuac. These ridges occupy between 35 and 40 miles of the isthmus. They are called Cerro Pelado, and probably do not rise above 2000 feet. Being entirely covered with trees of heavy growth, the district is also known as the Forest of Tarifa. The southern plain, or that of Tehuantepec, is about 25 miles wide, and extends along the Pacific from the boundary of Guatemala to some distance west of the town of Tehuantepec. It has a very hot but rather dry climate, and the soil, though not distinguished by fertility, is capable of producing several tropical plants. It is traversed by the river Chimalapa, which descends from the Cerro Pelado, and is navigable to San Miguel de Chimalapa, a distance of about 30 miles. On the same Cerro, but within the northern ridges, rises the Rio Huasacualco, which breaking through some of the ridges, is joined by numerous small rivers, which descend from the western declivity of the table-land of Mixtecapán, and soon becomes a powerful river, though it is not navigable on account of rapids or cataracts. As soon as it enters the plain of Tabasco its course is gentle, and there is no further obstruction to the navigation; but its mouth, which is situated in the south-western recess of the Gulf of Mexico, is choked by a bar and shoals.

The Central and Northern Region of the Mexican States may be called Anahuac, though this name was used before the Spanish conquest to designate only the country as far north as 21°. In its natural features it exhibits great variety. The eastern coast is low and sandy from the Punta de Rocca Partida (18° 40' N. lat.) to the mouth of the Rio del Norte, about 25° 45' N. lat. It runs on in a continuous line, without being broken by inlets or bays; and consequently contains no harbours except those formed by the mouths of the rivers; and even these are only unsafe roadsteads, as the rivers of this coast (between 18° 40' and 22° N. lat.), with the exception of the Rio Alvarado, have little water except in the rainy season. North of 22° N. lat., several rivers of considerable size fall into the sea, but except at their mouths the coast cannot be approached by vessels, as it is lined by long, low, and narrow sand-banks, which lie parallel to, and from two to six miles from it. The country adjacent to the shores, and from three to ten miles inland, is very low, but is defended from the sea by sand-hills rising from 50 to 200 feet high. The soil is sandy and almost destitute of vegetation. At the back of this low sandy tract the country rises gradually to the foot of an extremely steep ascent, which constitutes the eastern edge of the extensive table-land farther west. The country which lies between the shores and the steep ascent is only about 60 miles wide south of 22° N. lat.;

farther north it widens to about 150 miles; as it approaches the northern limit of the Republic the land rises rapidly, towards the interior attaining an elevation of 2500 or 3000 feet at a distance of only 50 miles from the sea.

This tract is comprehended in the Tierras Calientes, or 'Hot Countries.' The seasons are divided into the winter, or the season of the north winds; and the summer, or season of the breezes. The winter lasts from October to April, during which time the north winds (los nortes) are prevalent, and frequently blow with the force of a hurricane, sometimes for days together. They are the terror of navigators on these shores. During this period the coast is healthy, and the vomito-prieto, or yellow fever, ceases. The mean heat of this season is 71° of Fahrenheit, but during the north winds the thermometer sometimes descends to 60°. Rain is not rare during this season, but the showers are only of short duration. During the summer the heat is great: the mean temperature is about 81°, and in July and August it is about 82°. The rains are not heavy before June, but in that month they descend in torrents nearly every day for several hours. Towards the end of the summer, in September and October, the vomito prieto is prevalent in the lower part of the country, and very destructive among the white inhabitants. The mean annual heat of this tract is 77°. It is well adapted for the cultivation of all tropical products, and as its soil, with the exception of the sandy shores, is possessed of a considerable degree of fertility, it produces rich crops of maize and rice where it can be irrigated. Bananas, pine-apples, oranges, and manioc are also cultivated. The products adapted for exportation are chiefly coffee, sugar, and cocoa, and a small quantity of cotton; vanilla and jalap are collected in the woods, with which a great part of this region, especially that near the steep ascent, is thickly covered.

The steep ascent which bounds this tract on the west rises in some places in terraces which lie between the declivities, and in such places the ascent occupies a considerable space; but in other parts it rises from 5000 to 6000 feet in a distance generally not exceeding 10 miles in width, and frequently much less. The acclivity is so steep that on the whole line, nearly 600 miles, there are only two places where it is practicable for carriages, namely, at Xalapa, near Vera Cruz (19° N. lat.), and at Santillo, west of Monterey (26° N. lat.). The rocks are generally too steep to maintain any vegetation beyond a few plants, but in the narrow ravines which intersect the acclivity a vigorous vegetation is found; in the lower part there are many oak-trees, and in the higher large pines.

The steep ascent just described constitutes the outer edge of the elevated plains of Anahuac, which extend westward to a great distance. The edge itself is lined by a continuous series of hills rising in general only to a moderate elevation above the table-lands, but some of them attain a great height, as the Cofre de Perote, near the road leading from Vera Cruz to Mexico, which is 13,415 feet above the sea-level, and 5723 feet above its base; and the peak of Orizáva, which attains a height of 17,373 feet. The heights which line the margin of the table-land do not form a continuous chain, but appear rather isolated in the southern districts.

The elevated plains of Anahuac are divided into two parts by a range of mountains which traverses them in a general eastern and western direction, and is called Sierra Madre. This chain begins not far from the eastern edge, near 21° N. lat., west of Tlacolula, with the mountains of La Encarnación, whence it continues in a west-by-north direction to San Felipe (21° 40' N. lat.), which town is situated in a comparatively small plain inclosed by two branches of the range. Here an elevated and wide offset branches off to the southward, and stretches over the plain for about 50 miles, terminating with the group in which the mines of Guanajuato are situated.

West of San Felipe the range declines to the north-north-west, and its continuity is broken into isolated ridges, as the Sierra de Altamira, about 20 miles east of Aguas Calientes, and the group of mountains which contain the mines of Zacatecas. But at no great distance west of Zacatecas the Sierra Madre re-appears as a mountain range, and occupies a width of 100 miles from east to west. The mountains of La Encarnación rise more than 10,000 feet above the sea, and about 4000 feet above their base; those inclosing the plain of San Felipe are probably as high.

The elevated plains which spread out west of the steep ascent occupy the greatest part of the surface of Mexico. They are widest between 19° and 20° N. lat., where they occupy 360 miles from east to west. This extensive tract of country however is not one plain, but divided into four plains unequal in extent, and separated from each other by ranges of hills which rise from 500 to 2000 feet above their base. The most eastern plain has the town of Tlascala nearly in its centre. Its surface, which is pretty level, is from 7000 to 7500 feet above the sea; and it occupies the space between 97° and 98° 30' W. long., 18° 30' and 20° N. lat. Two lofty, but isolated peaks, the Cerro de Pizarro and Mount Malinche, are near the road which leads from the sea to Mexico. The parts of this plain which are contiguous to the eastern edge of the table-land are very sterile, the ground being covered with lava, and producing only a coarse grass, on which sheep pasture. This sterile tract, known as 'El Mal Pais,' occupies about one-third of the plain. Farther west the soil improves, and in many places the ground is covered with maize, wheat, and barley, or laid out in plantations of American aloes. The chain of hills which divides the

plain of Tlascala from that of Tenochtitlan contains the peak of Istaccihuatl (15,704 feet above the sea), and the volcano of Popocatepetl (17,884 feet), which last is the highest mountain in Mexico. The plain of Tenochtitlan, lying west of that of Tlascala, is between 19° and 20° N. lat., 98° 30' and 99° 30' W. long., and about 7480 feet above the sea. Farther west is the plain of Toluca, which extends to 100° W. long., and is somewhat smaller in extent than that of Tenochtitlan, but likewise surrounded by chains of hills. In the southern chain is the Nevado de Toluca, which is 15,160 feet above the sea, and through the northern chain the Rio de Lerma forces its course. The surface of this plain is in many places uneven and broken, but it contains also extensive levels. As it is nearly 9000 feet above the sea-level it is too cold to produce wheat, and it serves chiefly as pasture-ground. The most western of these extensive plains is that of Michoacan, which between 19° and 20° N. lat. extends from 100° to 104° W. long., and approaches the Pacific within about 30 miles. Its surface in the eastern districts is about 6500 feet high, but towards the west it sinks down to 5500 feet. This plain exhibits several broken and high ridges of hills, which inclose valleys of moderate width and great fertility. The mountains are covered with a fine growth of timber. The level country is fertile, and produces abundantly every kind of grain; but its elevation above the sea is too great to admit the cultivation of tropical products. Nearly in the centre of this plain is the Lake of Patzcuaro, famous in the history of the ancient kingdom of Michoacan, whose capital, Tzintzontzan, was built on its banks. Towards the western extremity of the plain is the lofty peak of Tancitaro.

From the western edge of the table-land of Michoacan, on which the small town of Zapotlan is built, the country declines rapidly to the plain of Colima, which seems to resemble in most respects the low tract along the Gulf of Mexico. On this plain the isolated volcano of Colima rises to a great height. This country is fertile, and is capable of producing all the tropical plants; but it is badly cultivated.

On the north the table-lands just mentioned border on others of a similar description. On the south the country descends rapidly and with a very irregular surface, except where it borders on the plain of Tlascala. This plain is joined on the south by that of Mixtecapan, which stretches from about 18° 30' N. lat. southward to the very shores of the Pacific, where it terminates with high mountains, leaving only a narrow tract between them and the sea, from the plain of Tehuantepec on the east to the mouth of the Rio Yopez on the west, a space of 300 miles. This whole region, with the exception of a few depressions and the low tract on the coast, forms a broken table-land about 5000 feet above the sea. Maize and other grains are grown in abundance, and a great quantity of cochineal is collected.

The table-land of Mixtecapan, stretching south and north, and extending westward to 98° 30' W. long., forms nearly a right angle with the table-land which stretches east and west over the Mexican isthmus, between 19° and 20° N. lat. The countries which fill up this angle are covered with numerous narrow ridges running generally east and west, with intervening valleys sometimes wide enough to be called plains. Both the ranges and the valleys grow lower as they approach the shores of the Pacific. Sugar plantations occur at Istla (3100 feet) and at Cuantla y Amilpas, not more than 30 or 40 miles south of the table-land of Tenochtitlan. Farther south the descent is less rapid, as the valleys, which are only 30 or 40 miles from the Pacific, are still about 2000 feet above it. The descent again becomes more rapid near the shores, on the margin of which is a narrow level tract intersected with salt lagoons. This region is traversed from east to west by a river of considerable magnitude, but too rapid to be navigable, the Rio de Zacatula, whose course exceeds 200 miles, its source being near the western edge of the plain of Mixtecapan. Towards the northern margin of this region is the volcano of Jorullo, which stands in the middle of a plain 2890 feet above the sea, the volcano itself being 4114 feet above the sea. This volcano was formed on the 29th of September, 1759, in a violent eruption, by which a surface of between 24 and 30 square miles was raised several feet above the level of the plain. The volcano is surrounded by numerous conical hills of moderate elevation, from which smoke is continually issuing. From the mouth of the Rio de Zacatula westward a low level extends along the Pacific, which joins that of Colima, and spreads about 30 or 40 miles inland. It is a tierra caliente resembling in climate, fertility, and productions the low coast along the Gulf of Mexico, and, like the latter, it is very unhealthy; but the yellow fever, or vomito prieto, does not visit the shores of the Pacific. The mean annual temperature of these shores is considerably higher than that of the shores of the Gulf of Mexico, the thermometer even during the cold season hardly descending below 82°, and nearly all the year round maintaining itself in the day-time between 86° and 95°. The gales by which it is visited rather resemble hurricanes, and blow during the months of July and August from the south-west: sometimes they occur as late as September and October. From October to May the air is in general calm, and the sky cloudless; but the sun is nearly invisible on account of a fog, of an olive colour, which covers the whole sky in its upper regions, and does not affect the hygrometer.

North of 20° N. lat. is the table-land of Queretaro, which extends to the ridge of the Sierra Madre, on the east to about 21° N. lat., but

on the west to 21° 30'. That portion of it which lies east of 100° W. long. is in general about 6500 feet above the sea-level. Its surface is broken by single groups or short ranges of hills, which rise from 1000 to 1500 feet above the plain; but still there occur many level tracts of considerable extent and great fertility. This region contains numerous productive mines. The western and greater portion of the table-land (between 100° and 102° W. long.) is nearly a plain, rarely interrupted by hills. The central part of it is occupied by one of the richest agricultural districts on the Mexican isthmus, known under the name of Baxio. It is 100 miles long and 30 miles wide, and covered with corn-fields, which, being irrigated by canals, yield rich crops of maize and wheat. In the other districts many sterile tracts occur, which are either covered with stones, and then called 'pedregal,' or with lava, when they always receive in Mexico the name of 'mal país.' The remainder is rather fertile, but by far the greater part of it cannot be irrigated, and is used only as pasture-ground. On this table-land there are many 'barrancas,' or depressions in the level country, having a steep declivity, and descending frequently 1000 feet below the general surface of the country. These depressions are sometimes 3 or 4 miles wide, and still longer: they are covered with trees of a vigorous growth, which form a striking contrast with the bare surface of the table-land. Their climate is considerably milder than that of the country about them, and approaches in some cases to that of the *tierras calientes*. Vegetation follows the course of a small stream which runs in the centre of the barranca. Several small towns are built in these depressions of the table-land.

The plain of Queretaro descends very gradually to the west, but with a broken surface, so as to present a succession of hills and valleys with some intervening plains, usually of no great extent; the plains in some places occupy the summit of the higher country, and are called 'mesa' (table-land). The descent terminates about the meridian of Zapotlan, or Zapotlanéjo (102° 30'), where the productions of the *tierras calientes* appear, and the general level of the country extending to the shores of the Pacific may be estimated at about 4000 feet above the sea. This region, called the Plain of Xalisco, has a very uneven surface, being in many places intersected with hills, which frequently rise to a great height, with a steep ascent; though extended flat tracts are numerous, among which that about the town of Guadalajara is distinguished by fertility. Maize and wheat constitute the principal articles of agriculture. In this country is the lake of Chapála, which is about 90 miles long and from 12 to 18 miles broad: the surrounding hills rise to a considerable elevation, and descend rapidly to the water's edge. The lake contains the island of Mescála, on which a number of Indians resisted the arms of the Spaniards from 1811 to 1814.

The Rio Santiago, or Rio Grande, the largest of the rivers of the Mexican isthmus, principally traverses the regions just mentioned, having its mouth at S. Blas (21° 32' N. lat., 105° 18' W. long.). This river rises in a lake situated at the base of the range which divides the table-land of Toluca from that of Tenochtitlan, and in an extensive morass surrounding the small town of Lerma, whence it is called, in the upper part of its course, Rio de Lerma. Its course is rather gentle, until it breaks through the range of hills which separates the table-land of Toluca from that of Queretaro. It flows through the Baxio, and its waters are abundantly used for irrigation. Where it leaves the plain of Queretaro it is closely hemmed in by precipitous mountains, full of rapids and bars, and runs quickly over a stony bed. On approaching the lake of Chapála its course again becomes gentle, and before it enters the lake it passes through an extensive level tract, which is inundated by the river during the rains, and is swampy all the year round. It issues from the lake on the north side not far from the town of Ocotlan, where it is 200 yards wide, and flows with an even and uninterrupted course to the Puente del Rio Grande, near Guadalajara, where there occur in the space of less than three miles between 50 and 60 falls. Farther down, though less obstructed, it is still very rapid, and is not used for navigation. Its entire course considerably exceeds 400 miles.

The eastern part of the table-lands is drained by the river Panuoc, which rises in the Lake of Zumpango, on the table-land of Tenochtitlan. The waters of this lake are carried by the canal called the Desague de Huehuetoca to the Rio de Tula, or Mootezuma, which runs in a northern direction, inclining a little to the east, to Tamasinchali, where it is called the Rio de San Juan. From this place it passes in the same direction to Miraflores, San Juan, and Tanquichi. In this latter part of its course the river, which near its source is extremely rapid, becomes more gentle, and canoes may ascend it to San Juan; but above Tanquichi the rapids are numerous and violent. Five miles above Panuoc a ledge of rocks runs across the river, which, except in the rainy season, has only four feet of water on it, and thus prevents large vessels from ascending it farther. Schooners sail up to Panuoc, which is 80 miles by water and about 40 miles by land from the sea. The course of the river below Panuoc is exceedingly winding. It traverses a low and frequently swampy tract, covered with extensive forests, in which mahogany and different kinds of dye-wood are cut. At its mouth the river forms the harbour of Tampico.

The climate of these table-lands varies in proportion to their elevation above the sea. In those of Tenochtitlan and Tlascala, which are nearly equal in this respect, the mean annual temperature is 62°. In

winter the thermometer generally ranges between 45° and 47°, and sometimes, though rarely, descends below 32°. In summer it never exceeds 75° in the shade. On the table-land of Toluca, which is the most elevated, the air is so cold during the greatest part of the day that the thermometer generally varies between 42° and 46°. On the table-land of Valladolid, Mixtecapan, and Michoacan, which are considerably lower than Tenochtitlan, the mean annual temperature probably varies between 66° and 68°. All these countries, being more than 5000 feet above the sea-level, are called by the inhabitants *Tierras Frias* (Cold Countries). The seasons on the table-lands are only two, that of the rains (*estacion de las aguas*) and the dry season, or summer (*el estio*). The rains commence in June or July, and terminate in September or October; the rainy season consequently lasts only four months. The rains occur earlier in the countries approaching the eastern shores, and extend afterwards farther west. They are accompanied by thunderstorms, which are experienced successively at Mexico, Guadalajara, and on the western shores. Though the rains are much less abundant on the table-lands than on the coast, they would be sufficient to maintain a vigorous vegetation but for the rapid evaporation, and the peculiar nature of the soil, which covers rocks of a porous nature. Consequently all these table-lands have rather an arid soil, which can only be employed in the cultivation of grain where it can be watered; and even many of the rivers disappear in fissures of the rocks. The plains are entirely destitute of trees, but are covered with several kinds of cactus. For want of the means of irrigation, perhaps nine-tenths of the table-lands are only used as pasture; and the grass is sufficient for that purpose to the months of March and April, when the south-east wind, called *Viento de la Mistica*, begins to prevail, which, being very dry and hot, withers the smaller plants and grass. The elevated table-lands of Mexico, like those of Tibet and Central Asia, which are still more arid, have also a large portion of their surface covered with muriate of soda and other saline substances in the dry season, like a hoar-frost, which considerably diminish the productive powers of the soil. The countries which are elevated from 2500 to 4000 feet above the sea, such as the broken region lying between the table-lands of Tenochtitlan, and Toluca and Michoacan on one side, and between the table-land of Mixtecapan on the other, and the uneven plain of Xalisco, are called *Tierras Templadas*. Their mean annual temperature amounts to between 75° and 78°, and they enjoy nearly a continual spring, as the difference of the temperature in the colder and hotter season does not exceed 8°, or at the utmost 10°. These tracts produce the tropical fruits and the sugar-cane in abundance, and, as well as the table-lands themselves, enjoy a very healthy climate all the year round, whilst the inhabitants of the low tracts along the coast are subject to dangerous diseases.

We pass to the countries lying to the north and east of the Sierra Madre. The country, which is bordered by this range on the south and west, is a plain nearly 700 miles long, and from 100 to 300 miles wide, terminating on the north-east on the banks of the Rio del Norte, and at the Sierra de las Espuelas, the most northern offset of the Sierra Madre. Of the southern portion some districts, being possessed of the means of irrigating the land, are distinguished by fertility, as the country about San Luis de Potosi, and the Valle del Maiz, which lies on the banks of the Rio Tamoin, a tributary of the Rio Panuoc. A great portion of the country serves as pasture-ground for numerous herds of cattle, sheep, and goats. The rains are less abundant than farther south, and fall mostly in October and November; the heat in summer is less and the cold in winter greater than on the table-land of Queretaro.

The northern portion of the plain is still less favoured by nature. It suffers greatly from the scarcity of rain, which in the southern districts is far from being abundant, and north of 27° N. lat. is very rare. It is consequently badly supplied with water, the springs being few in number, and the water of a very disagreeable taste, owing to the soil containing a great portion of carbonate of soda. The plain contains numerous dry salt-lakes, whence large quantities of carbonate of soda are collected and taken to different parts of the republic for the manufacture of soap. All the rivers which water this plain rise along the eastern declivity of the Sierra Madre, and, running northward, are lost in some lake having no communication with the sea, with the exception of the Rio Conchos, which rises with several branches between 26° and 28° N. lat., and falls into the Rio del Norte near 31° N. lat. In the southern districts are the Rio Grande de las Nieves, which runs about 800 miles, and loses itself in the Lake of Parras; and the Rio Nassa, which after a course of about 200 miles enters the Lake of Mapimi. In the northern districts are the Rio de San Buenaventura, and the Rio de las Casas Grandes, which run hardly more than 100 miles, and fall into the lakes of Santa Maria and of Guzman. The cultivable land of this plain is limited to the river-bottoms, which extend from two to four miles along the banks, and produce maize and other grain. In the valley of the Rio Nassa cotton is grown, and in the neighbourhood of the Lake of Parras are extensive vineyards, from which a good wine is obtained. All the extensive tracts which separate the river-bottoms from one another are level, and consist mostly of a firm soil, the sandy or stony tract being rare and of comparatively small extent; but they are quite destitute of wood or even shrubs, and in certain seasons even dry grass is rare. Gales

of wind are very frequent, and from whatever point of the compass they blow they are very cold, and raise immense clouds of dust filled with saline particles. Within this plain is situated a mountainous region, called the Bolson di Mapimi, which occupies the tract of land extending from the northern shores of the Lake of Mapimi to the banks of the great southern bend of the Rio del Norte: it is said to contain an abundance of metals.

The Sierra Madre, which extends along the western side of this plain in a north-western direction, descends towards it in terraces, separated from each other by abrupt declivities, and traversed by deep and steep transverse valleys. The crest of the chain is situated towards its western declivity, and between the ridges which compose the mountain region are longitudinal valleys, narrow, but of considerable extent, which contain rich mines. Towards the plains which lie along the Pacific the descent is very rapid, and only furrowed by ravines.

The country between the Sierra Madre and the Pacific is naturally divided into two different regions—the plains of Cinaloa and the hilly region of Sonora. The former extends between 24° and 28° N. lat., and the latter between 28° and 32° N. lat. The plains are perfectly level, and only hills of moderate elevation divide them from the Sierra Madre. Their soil consists of a sandy clay, almost without a pebble. The rains set in regularly on the 24th of June, and last about two months. The greatest heat is experienced before the rains, from the month of March, when the country is parched up and resembles a desert. The rivers running across the plain flow in beds considerably below its surface, and it does not appear that even after the most abundant rains they rise high enough to water the adjacent tracts. The most considerable of these rivers are the Rio de Culiacan, the Rio del Fuerte, and the Rio Mayo, each of which may run upwards of 100 miles in a wide and deep bed.

Sonora, which begins at some distance north of the Rio Mayo, has likewise a tract of level and low land along the sea, but it soon rises to some elevation, and then extends nearly on a level many miles inland. This part of the country is rather sterile from want of moisture. The hilly country begins from 30 to 40 miles from the shore, and is traversed by several ridges running south and north, parallel to the Sierra Madre. In some places the hills rise to the height of mountains. Between these hills run rivers in valleys, generally several miles wide, and possessed of a considerable degree of fertility. The largest is the Yaqui, which is formed by two branches—the Rio Babispe, 200 miles long, flowing along the base of the Sierra Madre southward, and the Rio Oposura, 120 miles long, which runs parallel to it farther west. After their junction they take the name of Rio Yaqui, and flow about 150 miles more, until they fall into the Gulf of California, south of 28° N. lat. The central districts of Sonora are also traversed from north to south by the rivers Arispe and Dolores, which flow parallel to each other until they unite a few miles above the town of Pitic at San Jaunita; a few miles below Pitic the united river enters a lake of some extent, which has no communication with the sea. In the north-western corner of Sonora the Rio de San Ignacio enters from New Mexico, runs more than 100 miles, and is likewise lost in a lake. None of these rivers are navigated, but they are used to irrigate the valleys, in which maize and wheat are grown to a considerable extent. As this part of Mexico is situated within the temperate zone, it partakes of the great changes in temperature which commonly occur in these countries. The thermometer ranges during the year between 30° and 95°. During the northern and north-eastern winds, which blow from the Rocky Mountains, it sometimes freezes every night for several weeks at Pitic (29° N. lat.), and the thermometer then sinks as low as 18° in the night-time; but the summer is excessively hot, and the hot weather continues for several months. The rains take place much later here than farther south.

The third division, or Lower California, is described under CALIFORNIA (vol. ii, col. 243). The Gulf of California, which lies between the west coast of the district just described and Lower California, and belongs wholly to Mexico, is also noticed in a separate article. [CALIFORNIA, GULF OF.]

The Rio del Norte, also called in its lower course Rio Grande, and often incorrectly Rio Bravo, forms in its lower course the boundary between Mexico and the United States. Including its windings, its course is nearly 1800 miles. It rises in the most northern angle of the Vale of New Mexico, near 40° N. lat., not far from the sources of the Arkansas, a tributary of the Mississippi, and of the Rio Colorado, which falls into the most northern recess of the Gulf of California. The Rio del Norte runs southward from 40° to 29° N. lat., and belongs wholly to the United States to a league above the town of El Paso del Norte, 31° 40' N. lat. It here is of great service for irrigating the fertile district which surrounds the Paso del Norte, and its water is considerably diminished. Afterwards it receives a small supply of water by the Rio Conchos; and after having changed its course by a great bend to the east and north-east, it receives a larger supply by the Rio Puerco, which runs in a longitudinal valley east of the Sierra de Sacramento; but as its course lies through an arid plain, which is rarely refreshed by abundant rains, the volume of its waters is too small even for small craft, until it has changed its course to the south-east, and has arrived at the Presidio de Rio Grande, nearly 800 miles from its mouth. In this neighbourhood the river leaves the elevated

plain and descends into the lower country which extends along the shores of the Gulf of Mexico. From Loredo downward it may be navigated by steamboats of light draught. Small sailing-vessels ascend to Matamoros, 60 miles above the mouth; but larger ones cannot enter the river on account of its bar and numerous shoals.

Productions.—As there is so great a difference in the climate of the different regions of Mexico, there must be a corresponding variety in their productions. Humboldt asserts that within these states almost all the vegetable productions may be grown which are found between the equator and the polar circle. The agricultural productions which actually are grown prove the justice of this observation. On the highest of the table-lands, that of Toluca (9000 feet), wheat does not succeed, nor does it succeed in Europe beyond 60° N. lat. On this table-land agriculture is limited to the cultivation of barley and the plantations of the American aloe, which may be considered as the vineyards of Mexico, the juice of this plant being converted into a kind of wine called 'pulque.' Most of the table-lands however are from 6000 to 7500 feet above the sea; and as their climate may be compared with that of the southern countries of Europe, we find that they produce all the *Cerealia* of Europe with the exception of oats, which are not used, as horses in Mexico are fed on barley. The wheat is of large size and excellent quality. The fruits also are those of Europe, as cherries, peaches, plums, apricots, apples, pears, figs, and pomegranates. The vegetables too are those of Europe, among which capsicum, called 'chile,' is most abundantly grown, as it is used all over the country nearly as salt is in Europe. The plantations of American aloes on these table-lands are also very extensive. The difference between the agricultural productions of the Tierras Templadas and Calientes is not well established. Maize is grown everywhere, and constitutes the principal food of the lower classes. It is the only grain which is cultivated for food, rice being only grown to a small extent in the wet countries along the Rio Huasacualco; but the plantations of plantains and those of manioc are extensive, and *Oxalis tuberosa*, *Dioscorea alata*, and *Batatas* are also cultivated on a large scale. Oranges and lemons, which do not succeed on the table-land, are abundant in the Tierras Templadas; olives and grapes succeed well; and besides these many fruits of hot countries, especially pine-apples, guavas, and others.

The agriculture of the table-lands does not supply any article for exportation. Cotton is grown along the shores of the Pacific, and coffee on the eastern coast, west of the town of Vera Cruz; sugar is cultivated in many places, but to a much less extent than formerly; cocoa is collected in the low country along the river Huasacualco; and indigo along the southern coast, but only for home consumption. Tobacco, which in many parts succeeds very well, is only permitted by the government to be grown in certain places. Three valuable plants grow wild in the forests, at the base of the steep ascent which divides the low eastern coast from the table-lands, and supply articles of export—the jalapa, sarsaparilla, and the vanilla.

All the domestic animals, which have been brought over from Europe by the Spaniards, have multiplied greatly in Mexico, owing to the wide tracts which are not or cannot be cultivated, and which afford pasture-ground for nine or ten months of the year. Cattle are abundant, both on the table-lands and the lower tracts; among the latter, especially on the wet plain of Tabasco and the arid plain of Yucatan. Jerked beef and horns are exported. Sheep are numerous on the table-lands, and wool is an article of exportation. Horses abound generally; and both horses and mules are exported in great numbers to the United States. In winter American buffaloes pasture on the plains along the lower course of the Rio del Norte. Carnivorous wild animals are not numerous. Gams is abundant, especially deer and hares. Among the birds are various kinds of parrots, mackaws, and humming-birds. The lakes abound in fish. The cochineal insect is reared with great care on the table-land of Mixtecapan, whence by far the greatest part is brought to the market of the world. In the Gulf of California pearl-shells are found, and formerly many pearls were collected.

Mexico is noted for its mines of gold and silver. The gold-mines occur chiefly on the western side of the Sierra Madre, north of 24° N. lat.: the silver-mines are richest on the mountains which rise on the table-lands, and in those which border their margin. It is said that quite recently gold has been found in large quantities in Lower California by some Indians. The working of the mines has been very imperfectly carried on, owing in a great measure to the disturbed state of the country, and the difficulty of procuring competent directors and industrious miners. Besides the precious metals, Mexico has abundance of copper, iron, lead, and quicksilver, which are worked. Tin, antimony, and zinc have also been found. Carbonate of soda, which is necessary for the smelting of the silver-ore, is collected in several lakes, where it is found crystallised on the surface in great abundance, and it is also common in the upper layers of the soil in most parts of the table-land.

Manufactures and Commerce.—Before the Revolution (1810) there were many flourishing manufactures, the annual produce of which amounted to from eight to ten millions of Spanish dollars, or about two millions of English money. The most considerable were those of cotton and wool in the towns of Puebla, Cholula, Tlascala, Queretaro, Lagos, Guadalajara, and Tezcoco. The manufactures of soap,

leather, and saddlery were also considerable. The manufacturers owed their prosperity to the high price at which, under a system of monopoly, European goods were sold in that country. After the harbours were thrown open to a free-trade (in 1820) they began to decline. The manufactures of cotton and wool are now of little importance. Cigars, hats, soap, leather, saddlery, glass, earthenware, and other articles of ordinary use are made in large quantities, but the factories are ill-conducted.

The commercial intercourse between the coast and the table-lands is difficult on account of the steep ascent to the table-lands from the coast. On the east there are only two carriage-roads, as has been already observed, which lead to the table-land; and on the western coast the communication between Acapulco and Mexico, and between San Blas and Guadalajara, is carried on by roads which are only passable to mules and horses. No such obstacle exists between the harbours of Mazatlan and Guaymas on the western coast, and the country farther back, but no road leads from them over the Sierra Madre, by which the goods landed at these places could be carried to Durango or the towns of the northern plain. Even in those parts where there is no obstacle to the use of carriages, the goods are commonly carried by mules, on account of the great number of these animals, and the low price at which they are bought.

The maritime commerce is considerable. In the beginning of the present century the exports, according to Humboldt, amounted to twenty-two millions of Spanish dollars, and the imports to fifteen millions of dollars. After the declaration of independence they greatly declined, and have never since nearly equalled that amount. At the present time however they are probably not much under twenty millions of dollars. The exports consist chiefly of gold and silver, which amount in value to nearly seven-eighths of the whole, of cochineal, sugar, indigo, salt meat, hides, sarsaparilla, vanilla, jalap, soap, campeachy wood, fustic, Tabascan pepper, and coffee. Little, if any, commercial intercourse exists between Central America and Mexico, but a considerable number of mules and horses, and some wool, are exported to the United States of North America.

The imports amount in value to somewhat over 15,000,000 dollars. The value of goods sent from the United Kingdom to Mexico in 1858 was 791,940*l.*, being more than double that of 1852 (366,020*l.*). The imports from Great Britain consist principally of cotton, linen, and woollen goods, hardware and cutlery, machinery, &c. From British colonies Mexico receives large quantities of quicksilver, cinnamon, cocoa, and raw silks. The imports next in amount to those of Great Britain are those from France, Germany, and the United States. The commerce is mostly carried on in foreign vessels. The vessels of the United States of America almost exclusively visit the smaller ports; the larger British vessels are chiefly confined to the harbours of Vera Cruz, Tampico, and Tamaulipas; next in number are the vessels of France, from Bordeaux and Havre, and lastly those of the free German towns of Hamburg and Bremen.

Inhabitants.—The population of Mexico is composed of creoles or descendants of Europeans, of Indians or natives, and of those of mixed blood. The number of Europeans, who are called Gachupines, and formerly amounted to 80,000 individuals, has been much reduced by the expulsion of the natives of Spain; and though many individuals of other nations have settled in these states during the last thirty years, it is not likely that the whole number of Europeans now amounts to more than 30,000. Probably nearly half of the population still consists of the descendants of those nations which inhabited the country at the time of the Spanish invasion.

The natives who have submitted to the dominion of foreigners have attained different degrees of civilisation. Those who inhabit the country between 18° and 23° N. lat. were, on the arrival of the Spaniards, subjects to the kings of Tenochtitlan and Michoacan, or united in the republics of Tlaxcallan (Tlascala), Huexochingo, and Cholollan, and had then attained a considerable degree of civilisation, as is proved by the ruins of their religious buildings, or 'teocalis,' their causeways and dykes, their hieroglyphics, paintings, and sculptures; and though the objects of their agriculture were only few in number, their cultivation was extensive, and carried on with considerable care. [ASTRECS.] Their present condition is not worse than that of the lower classes who cultivate the ground in most parts of the European continent, but they appear to have fewer wants, and accordingly indulge more in indolence. Among them are some very rich families, but they are not distinguished by their mode of life or their dwellings from the other members of their tribe. In most places they live mixed with the whites and Metis; in others they occupy large tracts, to the exclusion of all foreigners. The countries north of 24° N. lat. were inhabited at the time of the conquest by tribes resembling those of the United States of North America. They were few in number, had no fixed dwellings, and lived mostly on the produce of the chase; and they speedily retired from the plains, which they had until then occupied, to the mountain tract called the Bolson de Mapimi, where they still continue their savage life. But in the hilly tract north of the Rio Mayo the natives resisted the invasion of the Spaniards, and were only subjected by the Jesuit missionaries. The padres accustomed them to a civilised life, and taught them the principal mechanical arts. Though these Indians inhabit the same country with the numerous white families which have spread among

them, they live in separate places, and no close intercourse exists between them, except for the purposes of trade.

The mixed race is mostly composed of the descendants of Europeans and the aboriginal tribes: these are called Metis, or Mestizos, and constitute more than one-fourth of the population. The descendants of Africans and Indians, and of Africans and Europeans, are much fewer. The former are called Zamboas, and the latter Mulattos. In the neighbourhood of Acapulco there are a few Chinese and Malays, who have emigrated from Asia. There are very few negroes in this country.

Political Divisions and Towns.—Mexico is divided into the following provinces or departments—the former states of the federal republic:—

1. Chiapa, called also Las Chiapas, comprehends the whole of the western declivity of the table-land of Guatemala, as far as it belongs to Mexico, and a portion of the plain of Tabasco. The soil is in general fertile, and the climate favourable to the growth of tropical productions; but almost the only article of commerce is logwood, which is floated down the rivers Usumasinta and Tabasco to Villa Hermosa. Near the banks of the Rio Chacamas, a tributary of the Usumasinta, are the extensive ruins of Palenque, in a country which at present is a desert overgrown with trees. *Ciudad de las Casas*, formerly Ciudad Real, the capital of Chiapa, stands near the centre of the province, in a very fertile country, and has about 4000 inhabitants. It has a college; and a monument was erected here in 1826 to Las Casas, the protector of the Indians, who was bishop of this province, and died in 1566. Some other towns are still more considerable—as *Chamula*, with 6000 inhabitants; *San Bartolomeo de las Llanos*, with 7500 inhabitants; *Comitan*, with 6000 inhabitants; and *Tuxtla*, with 4500 inhabitants.

2. Yucatan comprehends the peninsula of that name as far south as 18° N. lat. It exports much campeachy-wood and fustic, which grow mostly on the eastern coast, and on the western, south of 20° 30' N. lat., and also a considerable quantity of bees-wax. The rivers Champoton and Pacaitun are navigable, for small craft, for many miles inland. The capital is *Merida*, population 28,000, situated on an arid plain about 25 miles from the sea. It carries on a considerable commerce by means of the harbour of Sisal, which is properly only a roadstead formed by a sand-bank called Bajo Sisal, 12 miles long. Farther east is *Valladolid*, population 3000, in a district in which much cotton is grown. On the eastern coast is *Salamanca de Bacalar*, population 2000, whence much mahogany and fustic are shipped to Belize. On the western coast is CAMPEACHY, with a number of populous villages inhabited by Indians.

3. Tabasco extends over the greater part of the low plain, from the lake of Terminos on the east, to the Rio de Huasacualco on the west. It is traversed by the Rio de Tabasco. It exports cocoa, coffee, Tabasco pepper, indigo, and vanilla. The capital is *Villa Hermosa*, also called San Juan Bautista, population 8000, on the river Tabasco, about 50 miles from the sea, to which place vessels of moderate size may ascend the river.

4. Oaxaca extends over the whole of the table-land of Mixtecapan, and is rich in agricultural products: the industrious inhabitants rear the cochineal-insect and the silkworm, and apply themselves to the cultivation of indigo. It has some mines of gold and silver. Several antiquities occur on the table-land, among which are the ruins of the palace at Mitla, which differ from the ruins of the edifices erected by the Aztecs, and approach in style nearer to those of Greece. The capital, *Oaxaca*, population 40,000, is built in a depression of the table-land, 4800 feet above the sea-level. It has fine houses, squares, and aqueducts, and contains some manufactures of sugar, chocolate, and silk. *Tehuantepec*, population 7000, is situated about 10 miles from the sea, on a plain on which indigo and cocoa are grown; and salt is collected in the lagunes which skirt the sea. It carries on some commerce by the harbour called Ventosa, or Tehuantepec Road.

5. Vera Cruz comprehends the whole coast of the Gulf of Mexico, from the river Huasacualco on the south-east, to that of Panuco on the north-west, and, in some parts, extends over the mountains which border the table-lands on that side. Accordingly it exhibits a great variety in climate and vegetation: its most elevated parts are covered with pine forests. Within its boundary-line are situated the Peak of Orizava, the Coffre de Perote, and the small volcano of Tuxtla. Its commercial products are sugar, coffee, jalap, sarsaparilla, and vanilla. Tobacco is extensively grown. In the northern districts of this state, in a forest near the village of Papantla, is a pyramid built of hewn blocks of porphyry, which are worked with great care and skill. The capital is *Xalapa* (or Jalapa), built on a level spot, situated on the steep ascent, 4335 feet above the sea, in a very beautiful country: population, 13,000. To this place the merchants of Vera Cruz retire when the vomito prieto is raging along the coast. VERA CRUZ, the chief commercial town of Mexico, is noticed in a separate article. The roadstead is formed by several shoals, on the largest of which, called La Gallega, is built the fortress of San Juan de Ulloa. *Alvarado*, about 3 miles from the mouth of the Rio Alvarado, is a small town, which however carries on some commerce, having a good wide port. At the most northern extremity of the province is the town of *Tampico*, or rather Pueblo Viejo de Tampico, population 4000, built on the border of a large shallow lake, the Laguna de Tamiagua, which communicates with the Rio Panuco near its mouth. It carries on a

considerable commerce, which however has decreased since the new town, called Pueblo Nuevo de las Tumulipas, has been founded on the left bank of the river, about 3 miles from it. In the interior are the towns of *Cordova* and *Orizava*, built near the base of the steep ascent, each containing about 3000 inhabitants; in their neighbourhood much tobacco and coffee are grown.

6. Puebla comprehends by far the greater portion of the table-land of Tlascala, and also a considerable portion of the lower but very hilly country, which extends to the Pacific, between the table-lands of Mixtecapan, Tenochtitlan, and Michoacan. It contains the elevated peaks of the Popocatepetl and Istaccihuatl. The western and southern districts are fertile and well cultivated. In the country about the capital great quantities of carbonate of soda are collected. *Puebla*, the capital, formerly called *Puebla de los Angeles*, population 50,000, is built in a well-cultivated plain, on the south side of a hill which is wooded to its summit. The houses are of stone, large, and commodious. The churches and convents are very numerous, and generally well-built. The cathedral is considered the finest and most magnificent edifice in the whole republic. The town has some manufactures of cotton, wool, and earthenware, and a considerable trade. South-east of it is the town of *Tehuacan*; population, 10,000. CHOLULA is noticed in a separate article.

7. Tlascala lies between Puebla and Vera Cruz, and is chiefly occupied by Indians, whose former privileges have been confirmed by the republic. The capital, *Tlascala*, still surrounded by its ancient walls, is some 30 miles N. of Puebla, and has about 4000 inhabitants.

8. Mexico comprehends the two table-lands of Tenochtitlan and Toluca, the north-western part of the table-land of Tlascala, and a considerable part of the lower but much more hilly country, which lies to the south of the two first-mentioned table-lands, and extends from them to the Pacific. Nearly all the productions of the tropics, together with those of the temperate zone, might be grown in the different regions belonging to this province; the sugar cultivated in the plain of Cuantla y Amilpas, south of the table-land of Tenochtitlan, and in some other places, to a considerable extent, is consumed in the country. It contains several rich mines of silver, among others those of Real del Monte, Actopan, and Zimapan. There are also some mines of lead and iron. Carbonate of soda is collected in the districts surrounding the lakes of Tezcuco and San Christoval. In the vale of Tenochtitlan are several antiquities. Near the town of Tezcuco are two large Mexican pyramids, or teocallis; and about 20 miles farther north, near the small town of Teotihuacan, is a group of nearly 200 of such pyramids, two of which, erected in honour of the sun and moon respectively, are of great dimensions. On the mountainous descent by which the road leads from Tenochtitlan to the Pacific, near the town of Cuernavaca, are some remarkable ruins, which seem to have been a fortress; they are called the fortress of Xochialco. For the description of the capital of the republic, see MEXICO. The capital of the province is *Tezcuco*, situated on the eastern border of the lake of that name, whose waters formerly approached the town, but are now about 3 miles from it: population, 5000. *Chalco*, population 3000, lies at the eastern extremity of the lake of Chalco. *Toluca*, population 12,000, about 10 miles north of the Nevado de Toluca, has a fine cathedral, and is well-built. *Zimapan*, population 9000, is situated in the centre of the northern mining district. This state has two harbours on the Pacific, *Acapulco* and *Zacatula*, at the mouth of the Rio de Zacatula; but they are little frequented.

9. Michoacan extends over the whole of the table-land of Michoacan and the low country lying between it and the Pacific, and a portion of the hilly country south of these districts. The river Santiago traverses its north-eastern districts, and within its territories are the lake of Patzcuaro, the peak of Tancitaro, and the volcano of Xorullo. Its productions are various, but no article of export is supplied, except from the mines, which are situated along the eastern border of the province, in the mountain range which runs between the table-lands of Toluca and Michoacan. In the districts along the northern boundary-line carbonate of soda is collected. The capital is *Valladolid*, or *Morelia*, a large town, with 25,000 inhabitants. It contains a rich cathedral; and is well supplied with water by an aqueduct, erected at the expense of the bishops, who resided here. *Patzcuaro*, population 6000, is built near the lake of that name, at whose northern extremity is the town of *Tzintzoncan*, population 2500, formerly the capital of the kingdom of Michoacan. In the northern districts are *Zamora*, population 6000, and *Owisco*, a considerable place, on the banks of an extensive lake. *Tlalpujahua*, in the principal mining district, has 9000 inhabitants.

10. Xalisco, or Jalisco, comprehends the whole of the hilly region of Xalisco, and the lower country between it and the Pacific; its eastern districts extend over the hills which form the ascent to the table-land of Queretaro, and comprise also a small portion of that plain. Within its territories are the lake of Chapala, and the lower course of the Rio Santiago. The productions are as various as in all those states which are so diversified in climate; but it supplies for exportation only a small quantity of cotton and some cochineal. The mines are not very important. Carbonate of soda is collected on the eastern border, and salt is made along the coast. The capital is GUADALAJARA. The second place in importance is *Lagos*, near the eastern boundary, on the table-land of Queretaro, which

contains 15,000 inhabitants, and is well-built. Farther west is *San Juan de los Lagos*, nearly as large a town, built in a deep barranca, and noted for its annual fair, which is held in the month of December. *Tepic*, population 7000, is situated in a small plain, surrounded by volcanic hills, and considerably elevated above the Rio Santiago, which flows at some distance north of it. Between it and the town of Guadaluajara is a difficult mountain-pass, through the barranca of Michetiltic, and the populous town of *Tequila*. *San Blas*, the principal port of the state, is on the top of a rock 150 feet high, which is precipitous on three sides, and very steep on the fourth: it rises out of a low swampy plain, which in the rainy season is completely under water. At this season the place is unhealthy; and the inhabitants, amounting to 3000, remove to Tepic. The rocky islands called *Tres Marias* lie off this harbour. South of Cape Corrientes are the two small harbours of Navidad and Guatlan, which are little frequented.

11. Colima comprises the low country surrounding the Volcano de Colima. Much cotton is grown in this district. *Colima*, the capital, is built at the foot of the volcano of the same name. *Purificacion*, population 3000, is in the neighbourhood of some gold-mines.

12. Guanajuato comprehends the western districts of the table-land of Queretaro, a part of the Sierra Madre, and a tract north of that range. The widest and most fertile part of the Baxio lies within this territory, which exports great quantities of wheat and Indian corn. Rich mines surround the town of Guanajuato. Besides the capital [GUANAJUATO], it contains several populous places. In the Baxio are—*Zelaya*, with 10,000 inhabitants, and a fine cathedral; *Salamanca*, population 15,000; *Irapuato*, with 16,000 inhabitants, and manufactures of cotton; and *Villa de Leon*, population, 25,000. *San Felipe*, in a wide valley between two branches of the Sierra Madre, was formerly a considerable town, but is now in ruins. *San Miguel el Grande* has 16,000 inhabitants, and manufactures of cotton and iron.

13. Queretaro extends over the eastern portion of the table-land of Queretaro. It contains numerous and extensive fertile tracts, and a portion of the Baxio. It has some productive silver-mines, the most famous of which is El Doctor; and north of it is the quicksilver-mine of San Onofre. There are also some lead-mines. The capital is *Queretaro*, population 30,000, a well-built place, 6362 feet above the sea. It contains several large churches and other fine buildings; carries on some manufactures of cotton and woollen stuffs, and has a considerable trade. *Cadereita*, in the mining district, is a considerable place. *San Juan del Rio*, population 8000, is a mining town, 30 miles S.E. from Queretaro.

14. San Luis de Potosi comprehends by far the larger part of the southern portion of the great northern plain, and is traversed from west to east by the river Tamoin, an affluent of the Panuco. It is only rich in cattle. The mines are not numerous, but among them is the rich mine of Catorce. There are also some mines of copper. The capital, *San Luis de Potosi*, is a large town, containing, with the adjoining villages, 50,000 inhabitants. It has many large and substantial buildings, and numerous churches. The Palacio occupies one side of the Piazza de las Armas; and on the opposite side stands the cathedral.

15. Zacatecas extends on both sides of the Sierra Madre. The southern portion is productive in grain, and the northern arid plains contain abundance of cattle. Of the numerous mines, all of which are situated in the Sierra Madre, the most celebrated are those of Zacatecas and Sombrerete. The territory has nine lakes, from which carbonate of soda is collected in a crystallised state. Not far from the western boundary, an extensive tract is covered with immense ruins, called Los Edificios, which seem to mark one of the resting-places which the Aztecs erected on their emigration towards the south. Zacatecas contains several populous towns. Sombrerete, Fresnillo, Ierez, Pinos, and Nochistlan have each a population varying from 14,000 to 18,000: they are all situated near the mines. The capital, *Zacatecas*, with the adjacent village of Veta Grande, contains 28,000 inhabitants, and is built in a ravine between high hills. The streets are narrow and crooked, but the churches are very large buildings of stone: the most remarkable is La Búfa, which stands on a high eminence, and looks like a fortification. *Aguas Calientes*, situated towards the southern extremity of the state, in a richly cultivated country, has 35,000 inhabitants, and manufactures of cloth. Its cathedral has the appearance of a Moorish mosque.

16. Durango includes the Sierra Madre from 24° to 27° N. lat., and comprehends also an extensive tract of level country skirting the range on the east, and belonging to the great northern plain. The terraces by which the mountains descend on the east are rich in agricultural products, the plain itself in cattle, and the Sierra Madre in metals. The richest mines are near Guarisamey, San Dimas, and Gavilanes, situated in narrow valleys in the Sierra Madre, at an elevation of more than 9000 feet above the sea. There are also mines of lead and abundance of iron-ore. Between the town of Durango and that of Nombre de Dios is a sterile plain, called Brea, covered with basalt, about 30 miles long and 15 miles wide. It contains an extinct crater, more than 100 yards in circumference, and 30 yards deep. The capital is *Durango*, or *La Ciudad de Victoria*, population 22,000, a well-built place, with wide streets and several fine buildings. *Nombre de Dios* has 7000 inhabitants. *Papasquiaro*, in a valley of the Sierra Madre, near the rich mines, has a population of 6000. In the plain

are San Juan de Rio, with 10,000 inhabitants, and Villa de los Cinco Señores, on the Rio Naas, along the banks of which cotton is grown.

17. Cinaloa comprehends the low tract extending along the Pacific from 23° to 27° N. lat. The soil is sandy but yields good crops of maize and wheat where it admits of irrigation. There are several important mines of gold, silver, and copper. *Villa del Fuerte*, on the left bank of the Rio del Fuerte, population 8000, is the capital. *Rosario*, near the southern border of Cinaloa, population 6000, is the centre of a mining district, and has some commerce by means of the harbour of Mazatlan, 60 miles distant; at the entrance of which is the town of *Cosalá*, with a population of 5000. *Culiacan*, population 10,000, on the left bank of the river of the same name, just above the confluence of the Rio Mayo, and *Cinaloa* at the head of the Rio Cinaloa, population 9000, are the only other towns of any importance.

18. Sonora comprehends the hilly country north of Cinaloa: these two divisions formed the federal state of Occidente. There is a good deal of fertile soil, but agriculture is in a very backward state. The mountains have little timber, being mostly covered with stunted trees and bushes. Mines of gold and silver are worked in several places. The north-western parts are said to be rich in gold and other metals. The principal towns are *Los Alamos*, on the south, population 6000, a well-built place, having, as the centre of a silver mining district, a considerable trade; *Santa Cruz*, near the mouth of the Rio Mayo, population 10,000, the chief town of the Mayo Indians; *Guaymas*, population 3000, the best port of Mexico, lies on the Pacific, and has a considerable trade; *Pitic*, on the Rio Pitic, population 8000, carries on a good trade; *Arispe*, population 3000, is the most northern town of any importance, and an important military station: the hilly country which lies to the west of Arispe, called Pimeria Alta, contains valuable gold- and copper-mines.

19. Chihuahua comprehends that portion of the northern plain which lies between the northern part of the Sierra Madre and the middle course of the Rio del Norte, together with the mountain region of the Bolson de Mapimi, and a tract of country south of it. The soil is in general very dry, and unfit for agricultural purposes; cultivation is limited to the river bottoms and a narrow strip of country along the declivity of the Sierra Madre; but the province has many herds of cattle, horses, and sheep. The mines are numerous. Near the base of the Sierra Madre, and not far from the Sonora boundary-line, are ruins of great extent, called Casas Grandes, considered to be one of the stations of the Aztecs in their emigrations. The capital, *Chihuahua*, population 12,000, is a well-built town, with regular streets and many large houses. Its cathedral is an extensive building; and the town is well watered by means of an aqueduct. *San Bartolomeo*, situated towards the boundary of Durango, population 20,000, is badly built, and the streets are narrow, but it carries on a considerable commerce with the agricultural produce of the fertile district in which it is situated. Not far from it to the west is El Parral, which contained 50,000 inhabitants when the mines were productive, but now only 7000. *El Paso del Norte*, at the north-eastern angle of Mexico, has about 4000 inhabitants.

20. Coahuila, or Cohahuila, extends over the north-eastern portion of the northern plain, over that which lies between the Bolson de Mapimi on the west, and the lower course of the Rio del Norte on the east. The most sterile portion of the northern plain is included in this province, and lies along the boundary of Zacatecas. Farther north, between 27° and 29° N. lat., are several watercourses with fertile bottoms, and considerable tracts of cultivable ground. Cattle, and particularly mules and horses, constitute the commercial wealth of this province. The capital *Saltillo*, population 12,000, being on the only road by which the steep declivity with which the table-lands of Mexico terminate towards the east can be passed by heavily laden carriages, carries on considerable commerce. In this town a fair is held, which is much frequented by merchants from the adjacent provinces. *Montelopez*, or *Cohahuila*, farther north, population 3000; *Santa Rosa*, N.W. of Montelopez, population 4000; and *El Presidio del Rio Grande*, population 2500, at the head of the boat navigation of the Rio del Norte; and *Monclova*, farther down, are places with some trade.

21. Nuevo Leon lies between Cohahuila and Tamaulipas. That part of it which lies south of the Rio del Tigre is undulating, but north of the river are mountains probably more than 10,000 feet above the sea, and in which some rich mines are found near Pesqueria and Salinas. The lower parts of the country are very fertile, but only cultivated in isolated places. Though the climate is hot, it is healthy. *Monterey*, the capital, contains 15,000 inhabitants, and its commerce is considerable on account of the rich mines in the vicinity. *Linares* has 4000 inhabitants, and the neighbourhood abounds in cattle.

22. Tamaulipas extends along the Gulf of Mexico from the mouth of the river Panuco to that of the Rio del Norte. It is a low unhealthy country, in which only a few hills occur. Though very fertile, except along the sandy sea-shore, it is badly cultivated and thinly inhabited. Its commercial wealth consists in its forests, in which fustic and logwood are cut to a great extent. The capital is *Pueblo Nuevo de Tamaulipas*, situated at the southern extremity of the province, on the left bank of the Panuco, about six miles from its mouth. The harbour is good and safe, and the bar at its entrance has generally 12 feet of water, but the navigable channel is narrow.

Its commerce is considerable, as most of the European goods which are consumed on the northern plain are landed here. Sotto la Marina is a small harbour, not much frequented, near the mouth of a little river, the Rio de Santandero, on the banks of which is the small town of Santandero, formerly the capital. *Matamoros*, on the Rio del Norte, about 60 miles from its mouth, population 3000; vessels not drawing more than 8 or 9 feet of water may ascend the river to this place.

23. Lower California. [CALIFORNIA.]

History, &c.—Though Columbus in his last voyage approached the peninsula of Yucatan, he did not come in sight of it. Thirteen years later (1517) the peninsula was discovered by Francisco Hernandez Cordova, who sailed along the coast from Cape Catoche to Campeachy Bay. The following year, Juan de Grijalva continued the discoveries along the same coast northward to the mouth of the Rio Panuco; he visited the islands of Sacrificios and San Juan de Ulua, opposite the present town of Vera Cruz, and gave them the names which they still preserve. His account of the wealth of the country excited the desire of conquest. In 1519 Hernan Cortes landed at the place where Vera Cruz now stands, but the town which he founded and called Villarica was some miles farther to the north, near a small harbour named Chihauitsia. With his little army he soon ascended the table-land, numerous inhabitants of which he found united under a powerful sovereign, the King of the Aztecs, Montezuma, or Mootezuma. Within the limits of this empire there were some small republics, of which that of Tlascala united with Cortes. Cholula was also a republic, and the name of a third is preserved, that of Huajocingo; all three were situated within the territories of the present state of Puebla. The empire of the Aztecs did not extend over all the table-lands; the table-land of Michoacan constituted a separate and independent kingdom. The very remarkable architectural and other antiquities of this period of Mexican history are noticed under AMERICA, vol. i, cols. 307-9, and AZTECS.

After two years of continuous and laborious warfare, Cortes succeeded in overturning the empire of the Aztecs, and the smaller states were subjected to the Spaniards almost without a struggle; and from that time until 1820 Mexico remained a Spanish colony. As the number of the conquistadores, or companions of Cortes, was very small, in comparison with the native population, they were anxious to bring over more of their countrymen. A considerable number of Spaniards accordingly annually emigrated to Mexico, and there acquired great wealth, as officers of government, merchants, and adventurers in mining. Their descendants the Creoles settled in Mexico, and their numbers were continually increasing; but the Spanish government forming an incorrect idea of their condition among the natives, thought that the government of the colony could only be intrusted to persons who considered Spain as their native country; it therefore excluded the Creoles from all offices of government, and even from commissions in the army. Such exclusion excited in them a considerable degree of ill-will against Spain and the Spaniards, which would probably have manifested itself in resistance and rebellion, if they had not feared that the native population, with the illegitimate descendants of the Spaniards and native women, a numerous race called Metis, or Mestizos, would take advantage of such a circumstance to effect their own destruction. The opposite interests of these different races served to maintain a state of internal quiet in Mexico down to the commencement of the present century, notwithstanding the United States of North America had obtained their independence, and the Mexicans were well acquainted with the advantages which their neighbours had obtained. It is even possible that the political condition of Mexico would not have undergone any change for a long time, but for the events in Europe and in Spain in 1808. By the intrigues of Bonaparte the royal family were compelled to abdicate the throne of Spain, and he conferred the whole Spanish monarchy on his brother Joseph, then king of Naples. The Spaniards in Mexico and the Creoles were unanimous in declaring their resistance to the government established by the French. The viceroy could no longer receive orders from Spain, and it was necessary to organise a government which should act independently under a certain sanction, and with authority. But as to this point they disagreed. The Creoles wished to establish a national representation; the Spaniards opposed and prevented the measure. The Creoles submitted: but the public mind had been agitated by the discussions which had taken place, and soon afterwards, in 1810, the natives and the Mestizos, headed by Don Miguel Hidalgo y Castilla, the cura or parish priest of Dolores, rose against the government. The Creoles sided with the Spanish government. Hidalgo, who had soon an immense force with him, took Guanaxuato by storm, and occupied Valladolid, whence he advanced over the table-land of Toluca to that of Tenochtitlan; but some time after he was defeated, taken prisoner, and shot. In the meantime the whole country had risen in insurrection, and many leaders began to act separately. The most remarkable among them was Don Jose Maria Morelos, cura of Nocupetaro, who maintained the southern provinces in rebellion against the governor, and formed in 1811 a 'junta,' or central government. Morelos succeeded, amid varying fortunes, in keeping together an army for some years. The junta, increased by new members, assumed the title of the National Assembly and declared the independence of Mexico, on the 13th of November,

1813. But after that event Morelos had less success in his daring enterprises; and in November, 1815, he was taken prisoner, conducted to Mexico, and shot. Other chiefs sprung up, but the viceroy Venegas, supported by the gallantry and skill of Calleja, destroyed successively their armies, so that when Don Xavier Mina, the famous Spanish guerilla chief, landed in Mexico in 1817, the fortune of the insurgents was at so low an ebb, that he was unable to restore their cause, and he perished in the attempt.

The country now gradually became more tranquil; but the events which occurred in Spain in the beginning of 1820 suddenly changed the aspect of affairs, and deprived Spain of the most valuable of her possessions in America, which it had regained at the cost of much blood and money. The Spaniards and the Creoles, who had formerly made common cause, were now divided into two parties, royalists and constitutionalists, and Don Augustin de Iturbide, commander of a force of 800 men, issued a proclamation (February 24th, 1821), since known as the Plan of Iguala, which, professedly in order to conciliate all parties, and at the same time to establish the independence of Mexico and yet preserve its union with Spain, proposed to offer the crown of Mexico to the King of Spain, and in case of his refusal to one of his brothers, provided they would consent to reside in the country. The Spaniards of the capital opposed the plan, but Iturbide succeeded in gaining for it the support of the country generally, and even in inducing the new Spanish Viceroy O'Donoju to accept it conditionally on its approval by the Spanish Government. Iturbide was thus enabled to obtain possession of the capital, where a junta was formed, which declared the convention with the viceroy to be illegal. A congress was convened, and Iturbide soon after (May 18th, 1822) procured himself to be proclaimed Emperor of Mexico under the title of Augustine I. His sovereignty was however of short duration. He first quarrelled with the congress, but this he dissolved, and formed a new legislative assembly. When however the army declared against him, he lost heart, and in March, 1823, abdicated, and retired to Europe. In 1824 he ventured to return to Mexico, but upon landing at Padilla in Tamaulipas, he was arrested and shot. On the abdication of Iturbide, Mexico was declared to be a federal republic, and a constitution modelled on that of the United States of North America was adopted. The new state of affairs had been brought about mainly by the army, and, as was to be expected, the jealousies and ambition of different generals soon led to new insurrections and disturbances. It is neither possible nor desirable to give an account of these in the present work. It must suffice to say that down to the present time Mexico has witnessed a succession of insurrections and revolutions, and at the present moment (December, 1854) one is raging the issue of which is far from certain. During nearly the whole of this period moreover, and at the present time, the Indians and whites have been in a state of hostility. Among the leaders of the various revolutionary movements the present ruler of Mexico, Santa Anna, has acquired the pre-eminence. From 1832 among many changes, at one moment the supreme chief, the next an exile, he has continued to be the leading character in Mexican affairs. By the last grand movement commenced in September, 1852, he was recalled and placed at the head of the state; by a general vote (February 7th, 1853) the nation adopted his scheme of government; and in the following December he was elected president for life, with the title of most serene highness, and full dictatorial powers. In the place of the chambers elected by popular vote, there is now to be a council of state composed of 21 members, but the authority of the president is practically unlimited.

The most important event in the external history of the republic is the war with the United States. In 1835, Texas, the most north-eastern of the Mexican states, which had long been in a very disturbed condition, broke out into open revolt against the central government. The government troops were unable to put down the insurgents; and in 1836 the American settlers, who were very numerous in Texas, succeeded in inducing the state to declare itself independent. On this Santa Anna marched into Texas, but was defeated, wounded, and taken prisoner. In order to obtain his liberty he consented to acknowledge the independence of Texas. His agreement was not ratified by the Mexican legislature, but no effort was made to reconquer Texas, and the "independent republic," having applied for admission into the North American Union, was, in 1845, formally recognised by the Congress as one of the United States. This step was understood by both republics to be equivalent to a declaration of war. Mexico was however in a thoroughly disorganised condition, and the arms of the United States were everywhere successful. Peace was ratified in February, 1848. The result of the war was the loss to Mexico of the whole of the northern provinces, comprising the vast and most valuable tract of country now forming the North American States of Texas and California, and the territories of Utah and New Mexico, an area of upwards of 900,000 square miles.

The revenue of the republic in 1849 was under 2,000,000*l.*, the expenditure was 3,300,000*l.* The foreign debt amounted in 1850 to 10,241,750*l.*; the internal debt to above 6,000,000*l.*; but the finances of the republic are altogether in the utmost disorder. The army is fixed at 26,553 men; the civic guard at 64,946 men. [See SUPP.]

MEXICO, or MEJICO, the capital of the republic of Mexico, is situated in 19° 25' N. lat., 99° 5' W. long., 7468 feet above the level

of the sea. The population is said to amount to 150,000. It stands nearly in the centre of an extensive oblong plain, which, from being surrounded by high hills or mountains, is commonly called the Vale of Tenochtitlan, which was the name given to the town before the year 1530. The circuit of this vale, measured along the crest of the ranges which inclose it, is nearly 205 miles, and its area is 1710 square miles; but about one-tenth of its surface, or 164 square miles, is occupied by four lakes. The largest of these lakes, that of Tezcuco, which covers a surface of 77 square miles, occupies the centre of the vale, and is only about three feet and a half lower than the great square of the city, which stands on its western shores, on a swampy ground. The surface of the other lakes is above the level of the city; and as during the rainy season the water, descending abundantly from the ranges which inclose the vale, is poured into these lakes, which have no outlet, it frequently happened that in very wet seasons the water which accumulated in the lakes inundated the lower portion of the vale, and rose several feet in the streets of Mexico. To prevent such an occurrence the Spanish government caused a canal to be made through the mountains of Nochistongo, which lie north-west of the lake of Zumpango, by which the superabundant water from the lake is carried off. This stupendous work, known by the name of the Desague of Hueshuetoca, is above 12 miles long, and for more than 1000 yards is cut through rocks from 60 to 75 feet high. It is justly considered one of the most remarkable hydraulic works in existence.

Mexico is one of the finest cities in the world. In the dry season it is at some distance from the lake of Tezcuco, whose waters in the rainy season are sometimes driven by easterly winds to the eastern border of the city, which is protected against inundations by dykes. The streets are very wide, intersect each other at right angles, and are well paved. The private houses, though spacious, are rather low, seldom exceeding one story; but being constructed either of amygdaloid or porphyry, they have an air of solidity and even of magnificence. The moderate height of the public as well as private buildings is owing partly to the difficulty of laying a good foundation, as water is uniformly found at a very few feet from the surface, and partly to the frequency of earthquakes. In consequence of the water all the larger buildings are raised upon piles. The houses are all squares, inclosing open courts, which are surrounded by corridors, and have flat roofs; and all the windows are ornamented with balconies.

The squares are spacious and generally surrounded by buildings of hewn stone in a good style of architecture. The principal square is the Plaza Mayor, which on two sides is surrounded by the cathedral and the palace, and on the two other sides by shops and dwelling-houses, with the exception of the Casa del Estado, or the Palace of Cortes. In the centre of the square was formerly a bronze equestrian statue of Charles IV. of Spain, which has been removed since the revolution to the court-yard of the university. This square is the market for vegetables and fruits. Manufactured goods are sold in the Portales, or covered colonnades, of which there are several on a large scale. The Parian, or bazaar, is a square building, divided into uniform compartments by two principal cross streets, and others subdividing it. The palace, in which the viceroy formerly was lodged, and which now serves as the residence of the president, and also contains the senate-house, mint, and all the principal public offices, is a building of great extent, including a number of squares and inner courts with separate staircases and suites of apartments. One of these courts contains the botanic garden, which however has long been much neglected. The Minería, or School of Mines, is a large modern edifice, already in a very dilapidated condition: it contains a rich collection of minerals. The Acoardada, or great prison, is a substantial and large building, which will contain above 1200 prisoners. The hospital, now converted into artillery barracks, occupies a large site, and is well built. The university building contains a collection of Mexican antiquities, among which is the celebrated stone of sacrifice. The academy of arts, which is a fine building, but in a very neglected state, contains a great collection of models and casts, and a school for drawing.

The numerous churches and convents, with their cupolas and steeples, give the town a magnificent appearance. The cathedral stands on the ruins of the great teocalli, or temple, of the god Mixitli. The interior is lofty and imposing. In the outer wall of this church is fixed the 'kellenda,' a circular stone, covered with hieroglyphic figures, by which the Aztecs used to designate the months of the year. [AZTECS.] Among the numerous convents that of San Francisco is distinguished by its extent, architectural beauty, and wealth. The Alameda, or public walk, laid out like a park, is at the western extremity of the town. There is a large Plaza de Toros, or theatre for bull-fights. As the ground on which the city stands is low, all the roads leading to it are raised six or eight feet above its level; they are broad, paved in the middle, and planted on both sides with double rows of trees. These roads, called pascos, afford delightful rides.

The city is supplied with drinkable water by two aqueducts, which bring it down from sources situated in the mountains west of the vale. The larger aqueduct, leading from Santa Fé to the Alameda, and thence to the lake, is 11,155 yards long, and in one-third of its course is supported by arches of stone and brick. Its water, which is very pure, is distributed through the city. The other aqueduct, that of Chapultepec, which supplies the southern suburbs, is 3608 yards long. The city is partly supplied with provisions and vegetables by small

boats, which bring them over the lake of Tezcuco; but it depends, especially for vegetables, of which vast quantities are consumed, on the supply by the canal of Iztapalapan, which leads from the lake of Xochimilco to the town. This canal is narrow, but always covered with small canoes loaded with fruits and vegetables: it passes through the 'chinampas,' or floating gardens, which in their present state are long narrow strips of well-cultivated ground, redeemed from the surrounding swamp, and intersected by small canals. It is stated that they originally consisted of wooden rafts, covered with earth, and floated about in the lake when it was full of water, whence their name is derived. At present they are all stationary, but there are still some floating gardens in the lake of Xochimilco.

The manufactures are not important, except those of plate and tobacco, which latter is carried on for the benefit of the government, as in every part of the republic. Gold lace is also made. There are also a few manufactories of soap, cotton and woollen cloths, coaches, and hats; but by far the greater part of the manufactured goods for the consumption of the inhabitants is imported from Europe; silk stuffs, and especially stockings, are brought from China. The commerce of Mexico is limited to the importation of these foreign goods, and to the exportation of the produce of the mines. The city owes its present importance to the circumstance of being the seat of government, and the residence of the president of Mexico and of a great number of very wealthy individuals.

The most remarkable object in the environs of Mexico is the palace of Chapultepec, which is built on a rock, to the foot of which the water of the lake of Tezcuco extended at the time of the conquest by Cortes (1521). The palace, which was built by one of the viceroys of Mexico, is properly a fortress; but it is now in a very dilapidated state.

MEXICO, GULF OF, is a mediterranean sea, united by numerous straits with the Atlantic, from which it is separated by a row of islands and widely extended banks. The long chain of the Antilles forms its eastern boundary between 10° and 20° N. lat., and several small banks, with the Great and Little Bahama Bank, extend along it from 20° to 26° N. lat. It is divided from the Pacific Ocean by the Mexican isthmus, which unites the two Americas. The length of the whole sea, from east-south-east to west-north-west, is not much short of 3000 miles. It is divided into two portions by the island of Cuba, which lies across the sea from east to west. Of these portions the southern in modern times has obtained the name of the Caribbean Sea, whilst that of the Gulf of Mexico has been limited to the northern portion.

The Caribbean Sea, which extends from east to west nearly 2000 miles, or the distance from the British Islands across the Atlantic to Newfoundland, with an average breadth of less than 500 miles, is free from rocks and dangers to navigation between the Lesser Antilles and 80° W. long, except along the coast of Venezuela, where there are numerous steep rocks and islands which extend westward to 70° West of 80°, and indeed from the innermost recess of the Gulf of Darien, the coast is lined by numerous reefs and low wooded islands, called 'keys,' which in the Mosquito Gulf and the Bay of Honduras increase in number, and render navigation more intricate and dangerous.

The Gulf of Mexico, or the northern portion of the mediterranean, is united to the Caribbean Sea by a strait about 120 miles wide, which is formed by Cape San Antonio, the most western extremity of the island of Cuba, and Cape Catoche, the most northern point of the peninsula of Yucatan. The length of the Gulf, from Cape Sable in Florida to the eastern coast of Mexico, is more than 1000 miles, and its breadth towards the west more than 700 miles; but between Yucatan and Cuba, on the south, and the shores of Louisiana and Alabama, on the north, it does not exceed 550 miles. Shoals and small islands are rare within the body of the sea, and occur only along the northern coast of the island of Cuba and along the peninsula of Yucatan. Along the coast of Mexico the soundings are very regular, beginning at a distance of about 30 miles with 100 fathoms, and decreasing gradually as we approach the shores. At the eastern extremity, where the gulf terminates in the old Bahama Channel and Florida Strait, the navigation is rendered very intricate by the Florida Reef, the Key Sal Bank, the Great Bahama Bank, and the numerous keys, shoals, and islets which surround the northern coast of Cuba.

The eastern trade-winds prevail in this sea during the summer from May to November, and on its eastern border along the islands all the year round. But along the coast of Venezuela and the shores of the Mexican isthmus the winds are subject to a regular change from November to April. In the Caribbean Sea calms and light winds succeed the trade-winds in November until the month of December, when the wind settles in the north-west, and varies only to the north up to the month of April. This wind blows in violent gusts and is attended with rain, but does not appear to extend beyond 12° 30' N. lat., to the north of which parallel the trade-wind always blows. Calms and light airs in April indicate the change of the wind, which soon settles in north-east and east. In the Gulf of Mexico the *Nortes*, or northern gales, are much dreaded by navigators. They begin in September or October, and become prevalent in November: they blow with the greatest force in March, and sometimes last to the month of April.

The currents in this sea are mostly independent of this change of winds. A strong current sets into the Caribbean Sea from the Atlantic; and one still stronger is met with along the coasts of Venezuela and New Granada: it runs westward the whole year round as far as the Gulf of Venezuela, but west of that bay only from May to November. When the easterly wind ceases in November the currents begin to run to the westward some days before the north-west winds come on, and continue to flow in that direction to the month of April. But in the Gulf of Darien, the most southern corner of the Caribbean Sea, the order of the currents is inverted; they run westward from December to April, and eastward from May to November. These currents extend only about 24 or 30 miles from the shores, and in the body of the sea they are always westerly, and commonly weak, except in January and February, when they run with great force. Along the shores of Mexico, and at a considerable distance from them, no current is met with, except when the northerly blow, when a strong southerly current runs along the shores; and to this circumstance is ascribed the formation of the numerous long-extended islands which line these shores, as also the bars which lie before the embouchures of the rivers. Near the mouth of the Mississippi River the northern current turns eastward, and afterwards to the south-east. At the western extremity of Florida Reef the current divides: the greater portion of the water, turning eastward, forms the Gulf Stream; while the remainder, running westward along the reefs called the Colorados, winds about Cape San Antonio and Cape Corrientes, and returns to the Caribbean Sea. The Gulf Stream carries the water back to the Atlantic. [ATLANTIC OCEAN.]

The Mexican Gulf may be entered by vessels through all the straits which divide the Lesser Antilles from one another; but navigators prefer the straits between Trinidad and Grenada, and between San Vincent and Santa Lucia, when they sail to the northern coast of South America.

The Gulf of Mexico is remarkable for the high temperature of its waters. It raises the thermometer to 86°, while in the Atlantic, between the same parallels, the water does not exceed 77° or 78°. In the centre of this sea, between the northern coast of Yucatan and the shores of Louisiana, great quantities of *Fucus natans*, or gulf-weed, are met with, extending in parallel lines from south-south-east to north-north-west.

MEXIMIEUX. [AIN.]

MEYMAC. [CORRÈZE.]

MEYSSAC. [CORRÈZE.]

MEZEL. [ALPES, BASSES.]

MEZIERES. [ARDENNES; INDRÉ.]

MGLIN. [CZERNIGOF.]

MHEYSIR. [HINDUSTAN.]

MIAMI. [FLORIDA; OHIO.]

MICHAEL'S, ST. [AZORES; MARAZION.]

MICHIGAN, one of the most northern of the United States of North America, extends between 41° 50' and 48° N. lat.; 82° 25' and 90° 34' W. long. It is bounded E., N.E., and N. by Canada, from which it is separated by lakes Erie, Huron, and Superior, with their connecting channels; N.W. by the territory of Minnesota, from which it is divided by the Montreal and Mononomie rivers; W. by the state of Wisconsin; S.W. by that of Illinois, from which it is separated by Lake Michigan; and S. by the states of Indiana and Ohio. The area is 56,243 square miles, or about 2000 square miles less than that of England and Wales. The population in 1850 was 397,654 (of whom 2583 were free-coloured persons), or 7.07 to the square mile. The inhabitants being all free the federal representative population is the same as the entire population in 1850; this, according to the present ratio of representation, entitles the state to send four representatives to Congress. To the Senate, like each of the other states, Michigan sends two members.

Surface, Hydrography, &c.—The surface of the state consists of two peninsulas—a southern and larger one—forming Michigan proper, which lies between lakes Michigan, Huron, and a small portion of Erie; and a northern one, lying between lakes Michigan and Superior, and forming what is generally known as Northern Michigan. The lake coast-line is said to be upwards of 1400 miles in length.

The southern peninsula, or Michigan proper, has not a very diversified surface. The eastern side is level. The western coast exhibits some bold cliffs. The interior forms a plain generally level, but in some districts undulating or intersected with low hills. This tract is probably about 200 feet above the lakes, and the surface of the lakes is nearly 600 feet above the sea-level. The highest land traverses the peninsula towards its southern extremity in a south-west and north-east direction, and terminates on the east of Saginaw Bay with the smaller peninsula of Sanilac. The surface of this part is more undulating than other parts, and intersected by a great number of small lakes. The slope of this high land towards the lakes Erie and St. Clair, and the straits of Detroit and St. Clair, is long and hardly perceptible. This is probably the most fertile district of the country; it contains little prairie land, except on the alluvial tracts near the mouths of the rivers and along the lakes, which are in some parts marshy but fertile. Nearly the whole of the remainder of the country is covered with trees of a heavy growth; but the peninsula of Salinae has a poor soil and is mostly sandy. The northern part of the penin-

sula, between Lake Huron and Lake Michigan, slopes from the higher central tract with a very gradual descent to the west, but more rapidly towards Lake Huron. On the coast of Lake Michigan the cliffs, or bluffs, are frequently 100 and occasionally 200 to 250 feet high. A great portion of the northern part of this peninsula is prairie-land. The shores of both the great lakes are poor and sandy, and along the shore of Lake Michigan there are sandy eminences, formed near the mouths of the numerous small rivers which join the lake by the action of their current against the swell of the lake.

The northern peninsula is more varied in aspect and grander in its picturesque features. On the eastern side it rises in low hills from the lakes to a more elevated table-land. Westward the country is broken by high hills with intervening plains, and is in part occupied by a portion of the Porcupine Mountains, which form the dividing range of the waters which fall into lakes Superior and Michigan. The highest summits of this range are said to attain an elevation of nearly 2000 feet. Along the northern coast, from the Pictured Rocks westward, there are bare bold rocks and sandy plains; and the country for some distance inland being wild and dreary, it has been called the Siberia of Michigan. By far the larger remaining part of the peninsula consists of vast forests of white and yellow pines, birch, oak, aspen, hemlock, and spruce trees, with ash and elm along the rivers, and the sugar-maple in the southern parts. There are however also wide and bare sandy plains.

As the rivers of both peninsulas descend from the table-land to the great lakes, they have but a short course. The principal rivers of the southern peninsula are the Detroit, St. Clair, Grand, and Saginaw, which flow into Lake Huron; and the St. Joseph's, Grand Maskegon, and Kalamazoo, which flow into Lake Michigan. On the table-land they run slowly, but on the declivity their course is accelerated and interrupted by rapids. The most important are St. Joseph's River and Saginaw. St. Joseph's falls into Lake Michigan, not far from its southern extremity, after a winding course of about 250 miles. It has a sand-bar at its mouth; but is navigable for keel-boats to Lockport, 150 miles. The Saginaw is formed by a great number of branches, which descend from the table-land to the depression in which it flows, and which may be considered as a prolongation of Saginaw Bay. Some of these branches flow 50 miles before they unite. After their union the river takes the name of Saginaw, and is navigable for boats to its mouth, a distance of 80 miles. The rivers St. Clair and Detroit, as well as the lakes of Superior, Michigan, Huron, St. Clair, and Erie, are noticed under CANADA. The chief rivers of the northern peninsula are the Montreal, Great Iron, Ontonagon, Huron, and St. John's, which fall into Lake Superior; and the Manistee and Monomomie, which flow into Lake Michigan; but there are also numerous smaller rapid streams, which are of great value for agricultural and mechanical purposes. Besides the great lakes, which almost surround the state, the whole interior of both peninsulas contains a very large number of small lakes, varying in size up to 1000 acres, generally of considerable depth, and abounding in fish, while their shores and surface are the resort of numerous water-fowl.

There is no canal in the state, but one or two of considerable importance have been for some time projected.

In 1854 the total length of completed railways in Michigan exceeded 500 miles. The main lines are two very important transverse roads—one, called the Central, extending from Detroit, by New Buffalo, to Chicago, in Illinois; the other, called the Southern Michigan, extending from Monroe to Chicago: both belong to the southern portion of the southern peninsula. These lines have an immense traffic, as they form the readiest communication between the Northern Atlantic states and the Mississippi, and are in connection by means of branch-lines and lake-steamers with the neighbouring states and Canada. There are several short lines in operation in the state, and others are commenced or projected.

Geology, Mineralogy, &c.—The rocks of Michigan belong principally to the primitive and palaeozoic formations. Of the northern peninsula, the middle and south-western portions are occupied almost entirely by eruptive and metamorphic rocks, and they occur through the centre of the eastern district. Granite rocks occur widely; and in proximity with them are hornblend, felspars, talcoes and chloritic schists, and other metamorphic rocks. Granite boulders, often of immense size, are met with in many parts of the state. South of the granite and trappean beds is a series of Lower Silurian rocks, consisting of Potsdam sandstone, what is termed by American geologists the lower sandstone, and blue limestones, well marked by the characteristic fossils. The Lower Silurian is skirted southward by a narrow belt of Upper Silurian strata, consisting of the gray or cliff limestone and sandstone. The northern part of this peninsula, bordering Lake Superior, is occupied by rocks of the New Red-Sandstone formation, or, as some geologists assert, of Potsdam, or Old Red-Sandstone. The strata consist of beds of red-coloured sandstone, with their intervening beds of clays, resting on thick beds of conglomerates, occasionally capped with masses of basaltic trap; and everywhere in conjunction with or intersected by rich veins and dykes of copper-trap, silver, fibrous gypsum, &c. The oldest rocks noticed in the southern peninsula are of the Devonian formation, which occupies a wide area in the extreme north, and small spaces in the south, south-east, and south-west. It is composed of "one group of strata, containing very fossiliferous limestone beds of a

light-gray colour, often whitish." The remainder, forming the main portion of this peninsula, consists of Carboniferous strata; the Lower Carboniferous, or mountain limestone rocks, occupying, except where they bear upon the Devonian, the outer area; and the Upper Carboniferous, or coal-measures, the entire centre of the peninsula.

Michigan is extremely rich in minerals, though in this respect her resources have scarcely begun to be developed. According to the United States Geologists, who were especially deputed by the federal government to examine these districts, the beds of iron in the northern peninsula "are on a scale of such magnitude, and the ore is of such purity . . . and there are such immense forests covering the surface suitable for charcoal . . . that this iron region may be pronounced the most valuable and extensive in the world, for the manufacturing of the finer varieties of wrought-iron and steel . . . The iron-ore occurs in a metamorphic formation bounded by two granite beds, one on the north and the other on the south, and it is prolonged westerly beyond the Michigan River. This formation consists of hornblend, talcoes and chlorite slates, with associated beds of hornblend and felspar rocks, evidently trappean in their origin. The ore consists mainly of the specular or peroxide of iron, with an admixture of the fine-grained magnetic. In some instances the whole ridge, or knob, appears to consist of one mass of pure ore. . . . In others the ore is mixed with seams of quartz or jasper, which renders it less valuable." Copper-ore is also found in extraordinary extent and richness. Point Kewenaw is the centre of the copper region, which is said to extend for 135 miles with a width of from 1 to 6 miles. Both iron- and copper-mines are being worked, but, owing to the thinness of the population and the want of shipping on Lake Superior, only very imperfectly. Veins of silver occur on Point Kewenaw. Indications of both bituminous and anthracitic coal are found in the carboniferous region of the southern peninsula. Barytes, strontium, and gypsum occur in the great mineral region of the northern peninsula. There are in various parts both saline and sulphureous springs. Granite and various kinds of limestones and sandstones, affording excellent building stones, abound; and numerous quarries are in full work. Limestone and marl for burning abound, as do also beds of marly clay suitable for the manufacture of pottery, and fine sands for the manufacture of glass and porcelain.

Climate, Soil, Productions.—The climate of this country is severe in both peninsulas, though most so in the northern. The winter generally begins in the middle of November, and lasts to the middle of March. The ice on the rivers and borders of the lakes is strong enough to admit travelling on sledges. The summers are never hot, but subject to considerable changes. In the hottest days the thermometer rises to 70°, but in the evening and morning it is as low as 46°. The climate is rather dry, and the quantity of snow which falls not considerable.

A very large portion of the northern peninsula appears to be ill adapted for agricultural operations. Besides the extensive sandy plains, there are immense forests, covering by far the larger part of the peninsula. Millions of acres are at present covered with pines. The southern side of this peninsula is however more genial in climate, and better fitted for the farmer. Much of it appears to be available for the growth of wheat, oats, the grasses, and esculent plants; though not for maize. Vast tracts in this part are covered with the sugar-maple, and more thinly with white and red oak, beech, and spruce. The soil of the southern peninsula is considerably varied, but much more fitted for agricultural purposes, and appropriate manures are readily obtainable. It is pretty extensively and carefully cultivated. Both maize and wheat flourish here; and the other grains, especially oats, fruit, potatoes, and other vegetables, are also largely grown and succeed well. The country along the Strait of Detroit is famous for its orchards, which the French settlers planted, and which are extensive and well managed. A great quantity of cider is made, and much of it is exported. Some flax, hops, and tobacco are grown. Maple sugar is very largely prepared. Around the lakes of the table-land, and near the mouths of some rivers, large tracts are covered with wild rice (*Zizania aquatica*), on which immense flocks of water-fowl, of various species, feed. We have already spoken of the almost unbounded resources which the forests afford for the development of the lumber trade.

Domestic animals are rapidly increasing in numbers in the state. Horses, cattle, sheep, and swine are numerous, and wool is becoming an important article of trade. The lakes and rivers abound in fish, and the lake fisheries promise to become a very considerable branch of the industry of the state.

Michigan has as yet scarcely any manufactures. Of 108,978 males above the age of 16 in the state in 1850, there were 65,815 returned as employed in agriculture, and 22,375 in commerce, trade manufactures, mechanic arts, and mining. The principal manufacturing establishments are iron-works; there are also woollen-factories, tanneries, and numerous flour and saw-mills. The copper-mines in 1850 employed 706 hands.

The state has little direct foreign commerce, and that is with the adjoining British provinces, but the lake commerce is very large and constantly increasing; in 1850 the commerce on Lake Michigan amounted to nearly twenty-five million dollars.

Divisions, Towns, &c.—Michigan is divided into 43 counties, but

there are besides "21 unorganised counties." Lansing is the capital, but DETROIT is the centre of commercial operations, and by far the largest town in the state. Lansing and the other more important towns we notice here: the population is that of 1850:—

Lansing, the capital, stands on the right bank of the Grand River, at the confluence of the Cedar River, 42° 43' N. lat., 84° 29' W. long., 483 miles N.W. from Washington: population, 1229. Lansing is regularly built, having been laid out as the capital of the state on a site reclaimed from the wilderness in 1847. The state house is large and handsome, and other public buildings are neat structures.

Adrian, at the junction of Beaver Creek with Raisin River, 86 miles S.E. from Lansing, population 3006, is a busy village, having some mills and factories. *Ann Arbor*, the capital of Washtenaw county, on the Huron River, 51 miles E.S.E. from Lansing, is the centre of an important internal trade, and the seat of the university of Michigan. *Grand Rapids*, by the rapids so called, at the head of the steam navigation of Grand River, 60 miles W.S.W. from Lansing, population 2636, is becoming one of the leading commercial depôts of the state. In the town are numerous public buildings, warehouses, and mills; in the vicinity are quarries of excellent building stones. On the opposite side of the river is an extensive ancient Indian burying place. *Jackson*, on the upper branch of Grand River, 32 miles S. by E. from Lansing, population 2363, stands in the centre of a good grass and grain district; possesses great water-power for manufacturing purposes; and building stone and coal are obtained in abundance in the vicinity. The manufactures are of iron-ware, machinery, and leather; there are several flour-mills; and a large trade is carried on with the interior. *Kalamazoo*, on the river of the same name, 51 miles W.S.W. from Lansing, population 2507, is a thriving manufacturing and trading town, and is the centre of a rich agricultural district. *Monroe City*, on the right bank of Raisin River, 2½ miles from its outlet in Lake Erie: population, 2813. Monroe as the terminus of the Michigan Southern railway, and the depôt of the commerce of Lake Erie, is a place of considerable and growing commercial importance, and has some manufactures. It contains several handsome public buildings. *Ypsilanti*, on the Huron River, and the Michigan Central railway, 60 miles S.E. from Lansing, population 3051, contains five churches, a branch of the state university, and a state normal school; and has numerous mills and manufactories.

Government, &c.—The present form of constitution was framed and adopted in 1850: every sixteenth year the question of the revision of the constitution is to be submitted to the popular vote. The right of voting in all state elections is vested in every white male citizen, and every civilised male Indian not a member of a tribe. The legislative body, elected biennially, consists of a Senate of 32 members, and a House of Representatives of not less than 64, nor more than 100 (at present 66) members. The acknowledged debt of the state, November 1852 was 2,307,850 dollars, but Michigan is one of the repudiating states, and omits all reference to the repudiated debt.

Early in the 17th century the French penetrated into this country from Quebec. In 1670 they founded Detroit. In 1783 Michigan was included in the limits of the United States, but not actually given up by the British until 1796. In 1805 it was formed into a territory; and in 1837 it was admitted into the Union as an independent state.

MIDDELBURG. [ZEELAND.]

MIDDLEFAHRT. [FÜNEN.]

MIDDLEHAM. [YORKSHIRE.]

MIDDLESEX, the metropolitan county of England, is bounded N. by Hertfordshire; E. by Essex, from which it is separated by the river Lea; S.E. by Kent; S. by Surrey, from both of which it is separated by the river Thames; and W. by Buckinghamshire, from which it is separated by the river Colne. Its greatest length is, from north-east to south-west, from the Lea near Waltham Abbey to the Thames opposite Chertsey, 28 miles; its greatest breadth, at right angles to the length, is, from near South Mimms on the great north road to Limehouse, 17 miles. Its area is estimated at 282 square miles. The population in 1841 was 1,576,636; in 1851 it was 1,886,576. It is the smallest of the English counties, except Rutland.

Surface; Geological Character.—The surface of the county consists for the most part of gentle undulations, affording a sufficient slope for the purposes of drainage. A range of hills extends along the Hertfordshire border by Barnet, Elstree, Stanmore, and Pinner, averaging 400 feet in height above the level of the Thames. Another range of hills skirts the northern side of the metropolis by Hornsey, Highgate, and Hampstead; Harrow occupies an insulated eminence between these two ranges. That portion of the county which lies south-west of a line drawn from Brentford to Uxbridge is an almost unbroken flat, scarcely rising more than 20 feet above the level of the Thames.

The county is chiefly occupied by the London clay. Enfield Chase, the most northern portion, and a strip along the western boundary by Harefield and Uxbridge, are occupied by the plastic clay, which here crops out. The high ground about Hampstead, Highgate, and Hornsey consists of Bagshot sand. The thickness of the London clay varies from 45 to 240 feet. The thickness of the plastic clay appears to be from 100 to 120 feet.

The county belongs entirely to the basin of the THAMES, which forms its southern boundary. The Thames first touches the border just above Staines, at the junction of one of the arms of the Colne.

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The river is navigable throughout its course along Middlesex for laden barges; but locks are required in the upper part to keep up the water. The lowest of these locks is at Teddington, between Kingston and Richmond bridges. Up to London Bridge the Thames is navigable for sea-borne vessels, and the space between that bridge and the junction of the Lea forms the port of London. The banks of the Thames are for the most part low and flat, and in some places marshy.

The Lea forms the eastern boundary of the county, which it touches below Waltham Abbey. Its waters are, at the point of junction, divided between two or three channels, which re-unite very soon after. Its course is southward through a belt of low marsh-land, 8 miles to the foot of Stamford Hill, and thence south-east 6 miles by Lea Bridge, Old Ford, Bow, and Bromley, into the Thames. Between Lea Bridge and Old Ford, the navigation is carried on by an artificial channel. A navigable cut opens a communication between the Lea at Bromley and the Thames at Limehouse. On the channels of the Lea which are not used for navigation are several mills.

The Colne forms the western boundary of the county. It first touches the border below Rickmansworth, and its waters, like those of the Lea, frequently flow in several channels, which inclose a number of islands. It flows southward past Uxbridge, and Colnbrook (Bucks), to its junction with the Thames above Staines. Its whole length on the border of this county is about 18 miles; it is not navigable, but is useful in turning a number of mills.

The Brent rises just within the northern border of the county, and, after crossing a corner of Hertfordshire north of Totteridge, flows by Finchley, Hanwell, and Brentford, into the Thames. Its course, which is very circuitous, is about 18 or 20 miles; in its lower course it forms part of the line of the Grand Junction Canal. The Cran rises between Harrow and Pinner, and after a circuitous course of 20 miles past or near Ickenham, Cranford, and the powder-mills at Hounslow, joins the Thames at Isleworth.

The principal canal is the Grand Junction, which enters the county near Harefield, in the north-west corner, and runs southward along the valley of the Colne by Uxbridge to West Drayton; from this place it runs eastward across the Cran to the Brent near Hanwell; it then follows the valley of the Brent, and for the most part coincides with the channel of that river, till it joins the Thames near Brentford. About 18 miles of its course are in this county. A branch from this canal near Cranford runs north-east to Northolt, and from thence east-south-east by Twyford to Paddington, a distance of 12 or 14 miles. The Regent's Canal commences in the Paddington branch of the Grand Junction Canal, and passes along the north and east sides of the metropolis by the Regent's Park, Islington, Hackney, Mile End, and the Commercial Road, into the Thames near Limehouse, 8½ miles. It has one or two short branch cuts or basins in its course. The New River, an artificial cut designed to supply the metropolis with water, enters the county on the north side between Enfield and Cheshunt, and is conveyed in a very winding channel to a reservoir at Pertonville, on the north side of London.

The south-western road (to Salisbury, Exeter, &c.) leaves London by Hyde-park Corner, and runs by Brentford and Hounslow to Staines, where it crosses the Thames into Surrey. The Portsmouth road, branching from this near Hyde-park corner, crosses the Thames at Putney Bridge; and the western (Bath and Bristol) road, branching from it at Hounslow, crosses the Colne at Colnbrook. The Oxford and Birmingham road leaves Oxford-street at Hyde-park Corner, and passes through Acton and Uxbridge, beyond which it crosses the Colne into Buckinghamshire. The Great North road leaves London by Islington, and passes through Highgate and Barnet to South Mimms. Of the Norfolk and Suffolk roads, one leaves London by Shoreditch church, passing through Hackney and crossing the Lea at Lea Bridge into Essex; another leaves by Whitechapel church, and crosses by Bow Bridge into Essex. Edgware Road leads from Hyde-park Corner by Paddington and Edgware into Hertfordshire, joining the north road at St. Alban's; another road passes by Harrow to Rickmansworth; a third, called 'the Green Lanes,' leads by Stoke Newington and Winchmore Hill to Enfield.

The North-Western railway has its London terminus at Euston-square, on the north side of the metropolis, and runs past Harrow, beyond which it leaves the county. The Great Western railway has its London terminus at Paddington, and runs by Ealing and Southall to West Drayton. The Great Northern railway has its terminus at King's Cross, and runs by Hornsey to Barnet. The Eastern Counties railway commences at Shoreditch, and runs by Bow, across the Lea into Essex. The Cambridge branch, however, re-enters the county near Tottenham, and continues just within its boundary to Waltham. A short branch is carried from it near Edmonton to Enfield. The Blackwall railway runs from Fenchurch-street by Limehouse and the West India Docks, to Blackwall. A branch from it quits the main line at Stepney, and runs by Bow, Hackney, &c. to the North-Western line at Camden station, whence it is carried by a short junction-line to unite with the Windsor branch of the South-Western railway. There are other short connecting lines and extensions belonging to the North-Western and the Blackwall companies, chiefly for the transmission of goods into the centre of London.

Soil and Agriculture.—The soil of this county is of three distinct

qualities: poor sand and gravel on the tops of some of the hills and in various spots in the plain; a heavy poor clay in the north and north-west portion, which is chiefly covered with permanent grass, enriched by repeated application of manure; and a good fertile loam over a bed of gravel, and sometimes of peat, along the plain in which the Thames flows. To these must be added some rich deposits from the Thames, of a lighter and more muddy nature, which are admirably adapted for garden ground, and have been almost entirely converted into a rich black vegetable mould, by an abundant application of dung, from time immemorial.

The surface, with the exception of a few hills on the northern side of London, none of which rise more than 400 feet above the Thames, may be described as a plain, almost perfectly level as it approaches the Thames, but with a sufficient fall for the waters to prevent it being marshy. The Thames has been long kept within its present channel by artificial embankments, wherever these were necessary. Nearly the whole of the county lies over the blue clay, which is known by the name of the London clay: and the hills which rise above it are formed of a basis of clay covered by a poor ferruginous sand and gravel. The stiff clay is altogether unfit for arable cultivation until its nature is altered and corrected by the addition of chalk, lime, and ashes; most of it therefore remains undisturbed by the plough. Most of the commons have been inclosed, and yield grass in sufficient abundance to make hay, of which two good crops are generally produced every year. The value of hay so near the metropolis, and the abundant supply of labourers, enable the occupiers of grass-land to take advantage of a few days of fine weather to secure their hay. Some inclosures of pasture-land are made profitable by taking in horses to graze when they require rest and green food after having been overworked.

The arable portion of the county lies chiefly towards Buckinghamshire, and between the Great Western railway and the Thames. Some extremely good loams of considerable depth on a bed of flinty gravel, well adapted to every kind of agricultural produce, occur in several places. The lighter portions are mostly laid out in orchards, market-gardens, and nursery-grounds. Almost the whole of the land in the parishes of Chelsea, Hammersmith, Chiswick, Isleworth, and Brentford is taken up by such gardens. Here the spade is the principal instrument of cultivation. Beyond Hounslow, including what was formerly Hounslow Heath, the land is cultivated more extensively, by farmers properly so called; and some of these occupy from 200 to 1500 acres. Here every improvement in the management of the soil is readily adopted, and the best implements are in use. The system of cultivation is greatly modified by the short distance from an inexhaustible source of manure.

Every breed of animal is to be met with in Middlesex. Horses and milch cows are the most common, as the most useful. The cart-horses are generally fine and strong. Some large horses, a little too heavy for a carriage and too slow for stage-coaches, but which make excellent cart-horses, are brought to London by dealers, who collect them in the northern and midland counties. The dairy cows are chiefly of the large Holderness breed or the short-horn.

Divisions, Towns, &c.—Middlesex is divided into six hundreds, as follows:—Edmonton, north-east; Gore, north; Elthorne, north-west; Isleworth, south-west; Spelthorne, south-west; Osulston, south-east, including the Finsbury, Holborn, Kensington, Tower, and Westminster divisions; and the City of London. The suburbs of London form the parliamentary boroughs of Marylebone, Finsbury, and the Tower Hamlets. LONDON, the capital of the county, and the metropolis of the British empire, is described in a separate article. Middlesex possesses three market-towns—BRENTFORD, STAINES, and UXBRIDGE; besides Edgware, Enfield, and HOUNSLOW, the markets of which have been discontinued. The places printed in small capitals, as well as Chelsea, Edmonton, Fulham, Hackney, Hampstead, Hendon, and Kensington are noticed under their respective titles. The other small towns and more important villages we notice here; the populations are those of the respective parishes in 1851:—

Acton, 8 miles W. from the General Post-Office, population 2582, is a station on the Great Western railway. The church, a handsome edifice, has been repaired at an expense of about 3000*l.* Independents and Roman Catholics have places of worship, and there are National and Infant schools. *Bayswater*, in Paddington parish, about 4 miles W. from the Post-Office, is a suburb of the metropolis. Within the last few years it has much increased; a handsome church, an elegant Independent chapel, and many streets and squares of good houses have been built. There are National and Infant schools, and a Female Orphan school. *Bow*, nearly 4 miles E. from the Post-Office, population 6989, is situated on the right bank of the river Lea, which is crossed at Stratford-le-Bow by a handsome stone bridge, erected in 1830. The church, which stands in the middle of the public road, is chiefly of early English date. The Independents have a neat chapel. Coborn's Free school for 30 boys and 20 girls, the Merchant Seamen's Orphan Asylum, the Sailmakers' almshouses, and the Hamlet almshouses, are among the benevolent institutions. There is an extensive brewery at Bow. A county court is held. *Bromley St. Leonard's*, about 4 miles E. from the Post-Office: population, 11,789. Distilling, malting, brewing, and the manufacture of starch are carried on. Many of the inhabitants are employed in the East and West

India Docks, and in the ship-building yards in Poplar and Limehouse. There are numerous market-gardens. The church is a neat brick edifice, erected in 1843. The Wesleyan Methodists have a chapel, and there are National and Infant schools. A new Union workhouse for the city of London accommodates about 800 persons. *Brompton*, about 3 miles W. by S. from the Post-Office, population 14,870, adjoins CHELSEA. There are here a chapel of ease, Holy Trinity church, St. Mary's church, a chapel for Independents, National, British, and Infant schools, and the recently founded Hospital for Consumption. *Camden Town*, about 3 miles N.W. from the Post-Office, is a rapidly increasing and well-built suburb of the metropolis. There are here a district church, chapels for Independents and Wesleyan Methodists, National and British schools, and a Veterinary college. *Chiswick*, about 9 miles W. by S. from the Post-Office, population 6303, on the left bank of the Thames, has a parish church with an ancient tower; a chapel of ease, a chapel for Independents, and National, British, and Infant schools. Brewing is carried on. At Chiswick are the gardens of the Horticultural Society. *Chiswick House*, a seat of the Duke of Devonshire, is surrounded by extensive and finely-planned grounds. *Turnham Green*, a hamlet of Chiswick, has a fine gothic church, erected in 1843, and many good private residences. *Clapton* [HACKNEY]. *Colney Hatch*, population 974, is in the parish of Friern Barnet, on the east side of Finchley Common. Here is the Middlesex County Lunatic Asylum, completed in 1852 at a cost of about 300,000*l.* It is of vast extent, affording ample accommodation for 1300 patients. The extreme length of the building is 1883 feet. The architect was Mr. S. W. Dawkes. *Dalston*, [HACKNEY]. *Ealing*, 9 miles W. from the Post-Office, population exclusive of Old Brentford chapelry, 3771. In the neighbourhood are many fine seats, especially Ealing Park, and Gunnersbury, the seat of Baron Rothschild. Besides the parish church, there are a district church, a chapel for Independents, a National school, an Infant school, and Lady Byron's School of Industry. *Edgware*, about 12 miles N.W. from the Post-Office, on the road to Watford and Aylesbury, population 765, consists chiefly of a long straggling street. The church, which is of brick, was rebuilt in 1760; the tower is ancient. Near this place is Canons, a neat villa, erected on the site and from the materials of a stately mansion built by the Duke of Chandos. The church of Stanmore Parva, close to the park of Canons, was decorated by the duke. The Independents have a place of worship, and there are National schools. *Enfield*, about 11 miles N. from the Post-Office: population, 9453. Enfield manor-house was the residence of Elizabeth (afterwards queen) for a short time, during the reign of her brother Edward VI. One room on the ground-floor remains as in her time. Many of the houses in the town are well-built. The town is lighted with gas. In the market-place is a cross erected by subscription in 1826. The church is an ancient structure. There are a chapel of ease, two district churches, chapels for Wesleyan Methodists, Independents, and the Countess of Huntingdon's connexion; a Free Grammar school, National and British schools, a girls' school, establishments for the children from Shoreditch workhouse, and for the children from Edmonton Union, a literary and scientific institution, and a savings bank. There are two yearly fairs. Petty sessions and a Court of Requests are held. *Finchley*, 8 miles N.W. from the Post-Office, population 4120, situated near the left bank of the river Brent, has a parish church, erected in the 15th century, and chapels for Wesleyan Methodists and Independents, with National, Infant, and Free schools. *Hammersmith*, 6 miles W. by S. from the Post-Office, population 17,760, has many fine residences. In the parish are extensive market-gardens and nurseries. Coach-making and hat-making are carried on. There are the parish church, a spacious brick building erected in 1631, a new district church, chapels for Wesleyan Methodists, Baptists, Quakers, and Roman Catholics, National, British, Infant, Industrial, Ragged, and Roman Catholic schools, a savings bank, almshouses, and two Roman Catholic convents. With the convent of the Good Shepherd is connected an asylum for penitent women. An elegant suspension-bridge crosses the Thames at Hammersmith. *Hampton*, on the left bank of the Thames, about 12 miles S.W. from London: population, 4802. The chief object of interest is the royal palace of Hampton Court, the site of which was once the possession of the Knights Hospitallers. Cardinal Wolsey took a lease of the manor from the prior of St. John's before the dissolution, which lease he surrendered to Henry VIII, who formed a royal park or chace. This chace was in the succeeding reign broken up on the remonstrance of the parishes affected by it, but the crown has since retained paramount authority over all game within its limits. While Wolsey held the lease of the manor he pulled down a mansion which stood here, and erected in its place a sumptuous palace, which Henry VIII. subsequently enlarged. Here was born Edward VI., and here his mother queen Jane Seymour died. Charles I. resided here during part of his confinement, and Cromwell, Charles II., and James II. made it their occasional residence. William III. rebuilt a considerable part of the palace, and laid out the gardens and park in their present form. It is now usually occupied by persons of rank, reduced in circumstances, who have obtained grants of residence from the Lord Chamberlain. The palace consists of three principal quadrangles, with some smaller courts. The interior of the great hall, and the exterior of the older parts of the building generally, have been restored within the last 15

years. The great eastern and southern fronts were erected by Sir Christopher Wren. The palace contains a number of historical portraits, the Beauties of the Court of Charles II., painted by Lely, and many pictures by the old masters, but the Cartoons of Raffaele constitute its chief treasure. The gardens are laid out in the formal taste of the reign of William III. Bushey Park and lodge form an appendage of Hampton Court Palace. Hampton races are held on Moulsey Hurst, on the opposite side of the Thames. In the village of Hampton are the parish church and a chapel for Independents. The Free Grammar school, which has an endowment of 367*l.* a year, consists of an upper and lower school at Hampton, and a branch school at Hampton Wick. At Hampton are a Charity school, a school of Industry, and an Infant school; and at Hampton Wick is a Free school for girls. *Hanwell*, about 12 miles W. from the Post-Office, population 1547, is pleasantly situated on the left bank of the river Brent. The parish church, erected in 1841, is in the early English style. The Independents have a chapel, and there is a National school. The County Lunatic Asylum, opened in 1841, affords accommodation for about 1000 patients. The cost of erection was upwards of 180,000*l.* *Harefield*, on the border of the county, and on the left bank of the river Colne, 5 miles N. from Uxbridge: population, 1498. Besides the parish church there is a National school. The extensive works of the Mines Royal Copper Company are in the vicinity. By the Grand Junction Canal there is water communication with Uxbridge and West Drayton. At Harefield was the residence of the Lord Keeper Egerton, where Shakspeare's Othello was played for the first time before Queen Elizabeth, and where about thirty years later Milton's Arcades formed the poetic part of an entertainment presented before the Countess Dowager of Derby, the then proprietor of Harefield. The mansion was burnt down in 1660. *Harrow-on-the-Hill*, about 12 miles N.W. from the Post-Office, population 4951, derives its celebrity and chief support from its Grammar school, which was founded, under letters patent of Queen Elizabeth, by John Lyon, a wealthy yeoman of this parish, in 1571. The school-buildings are situated near the parish church. Harrow school is free to all boys of the parish of Harrow, but the scholars are chiefly the sons of the nobility and gentry. Among persons who have been educated at Harrow may be named Sir William Jones, Richard Brinsley Sheridan, Lord Byron, and the late Sir Robert Peel. The number of scholars in 1853 was about 390. There are several exhibitions for Oxford and Cambridge. The village is irregularly laid out. The parish church is a spacious structure on the summit of the hill; at the west end is a lofty tower, with a spire. The church was thoroughly repaired a few years back. The Baptists have a place of worship. There are a savings bank and a literary institute. A fair is held annually on the first Monday of August. *Highgate* is situated on an eminence on the great north road, 5½ miles N.N.W. from the Post-Office: population of the ecclesiastical district, 4502. The village comprises many good houses. The church, recently built in the gothic style, is a handsome edifice, with a fine spire. The Baptists and Independents have places of worship. The Endowed Grammar school, founded by Chief Justice Cholmeley in the reign of Elizabeth, has an income from endowment of 777*l.* a year. It is free to 40 boys, nominated by the governors from the neighbourhood. The number of scholars in 1853 was 112. There are National and Infant schools, a literary and scientific institution, a dispensary, and a savings bank. Park House, on the north road, is occupied as the Asylum for Idiots, established in 1847. A road crosses the north road at Highgate over an archway of brick and stone. The North London Cemetery is on the slope of the hill just below Highgate church. *Hornsey*, about 7 miles N. by W. from the Post-Office: population of the parish 7135, of whom 3260 are in the chapelry of Highgate. The church, which is of stone, has been rebuilt all but the tower, which is ancient. There are National and Infant schools at Hornsey. The bishops of London had formerly a palace here. *Isleworth* is on the bank of the Thames, 11 miles W.S.W. from the Post-Office, population 7007, of whom 1864 are in the chapelry of Hounslow. At Sion, or Syon, in this parish, was formerly a monastery of Bridgettine priests and nuns, founded in 1414 by Henry V., and originally settled at Twickenham. The site was granted by Edward VI. to the Protector Somerset, who commenced the present mansion of Sion House, which has received great additions and alterations from the dukes of Northumberland, the subsequent proprietors. The village of Isleworth contains several substantial villas and residences. The church, on the bank of the Thames, is of brick, and was rebuilt in 1706; the tower, more ancient, is of stone. The Wesleyan Methodists, Independents, Quakers, and Roman Catholics, have places of worship. There are Blue Coat, Green Coat, British, and Infant schools, and three ranges of almshouses. The chief occupation is gardening; great quantities of raspberries and strawberries are grown for the London market. There are extensive flour-mills and a brewery. *Islington*, about 2 miles N. from the Post-Office, population 55,690 in 1841 and 95,329 in 1851, forms part of the metropolis. The principal street, under the designation of High-street, Upper-street, and Holloway, runs for some miles along the north road to the foot of Highgate Hill. The Regent's Canal is carried by a tunnel under the New River and under the High-street, which is on an eminence. Many of the inhabitants are cow-keepers, who supply the metropolis with milk. There are some nursery-grounds, and a few manufactories,

together with lime and coal wharfs, adjacent to the Regent's Canal. The parish church (St. Mary's, Islington), situated between Upper and Lower streets, is of brick, with a tower of the same material, surmounted by a stone spire of good design. There is a chapel of ease at Lower Holloway, a plain and rather heavy brick building erected in 1814; and there are numerous district churches in the parish. Wesleyan Methodists, Independents, English Presbyterians, Baptists, Irvingites, Roman Catholics, and others have chapels. There are also National, British, and Infant schools; two literary institutions; a savings bank; and a proprietary school, established in 1830, in connection with King's College, which had 113 scholars in 1853. At Islington is a college founded in 1827, by the Church Missionary Society, for the education of young men designed for foreign missions, which had 31 students in 1853; and at Highbury Park is the Church of England Metropolitan Institution, for training masters for National, Parochial, and other juvenile schools; it had 43 students in July, 1852. The Caledonian Asylum, a handsome building in the Caledonian Road, is for the education and clothing of children of Scotch parentage. The Model Prison, Pentonville, is in Caledonian Road. The new City Prison, at Holloway, is a castellated structure of great extent. At Upper Holloway are the Small-Pox Hospital, and Whittington College, an asylum for 28 females, supported by the Mercers' Company. The Metropolitan Benefit Societies' Asylum at Ball's Pond, built in 1836, accommodates 50 inmates. Canonbury Tower, a heavy square brick building, is a relic of Canonbury House, the former mansion of the priors of St. Bartholomew's Monastery in Smithfield. *Kentish Town*, a suburban village in the north-west of London, contains two district churches, two chapels for Independents, chapels for Wesleyan Methodists, Baptists, Roman Catholics, and Unitarians; National, British, and Infant schools; and the Asylum for Decayed Governesses. *Kilburn*, anciently *Cuneburn*, on the Edgware Road, about 6 miles N.W. from the Post-Office. There is here a chapel of ease to Willesden parish. Kensal Green Cemetery is a short distance east of Kilburn. *South Mimms* is pleasantly situated about 4 miles N. by W. from Barnet: population, 2825. Besides the parish church there are National schools. The population is agricultural. *Southall*, population of the chapelry 325, about 13 miles W. from the Post-Office, has a large cattle-market, held weekly on Wednesday, for which facilities are afforded by the Great Western railway. There are a chapel of ease and a National school, both built by Mr. Henry Dobba. *Southgate*, about 10 miles N. from the Post-Office, has a district church, a chapel for Independents, and National and Infant schools. The vicinity is attractive in its scenery. *Great Stanmore*, 14 miles N.W. from the Post-Office, population 1180, situated on rising ground, consists chiefly of one long street. There are a new church, opened in 1850, and National and Infant schools. The old church was erected in 1632. Bentley Priory, the seat of the Marquis of Abercorn, occupies the site of a priory formerly existing here. *Teddington*, about 14 miles S.W. from the Post-Office, population 1146, is on the left bank of the Thames; the first lock on the river is at this place. The church is of brick, with a low square tower, and contains several interesting tablets and monuments. In this church John Walter, Esq., the late chief proprietor of the 'Times' newspaper was interred. There are at Teddington a Free school and an Infant school. *Tottenham*, 6 miles N. by E. from the Post-Office, population 9120, is a favourite place of residence for London merchants and persons of independent means. The main street is formed of good houses irregularly ranged along the road. In this street is a cross, erected in 1600 in place of a former wooden one. The church is an ancient building, with a square embattled tower covered with ivy. There are also a district church; chapels for Wesleyan Methodists, Baptists, Quakers, Plymouth Brethren, and Roman Catholics; a Free Grammar school, which had 80 scholars in 1853; a Blue-Coat school for girls; National, British, and Infant schools, and a school of Industry for girls; a Proprietary school; a literary and scientific institution; and a savings bank. The Fishmongers' and Poulterers' Company have an asylum, and there are Printers' Almshouses. The Roman Catholics have a convent. Bruce Castle, now occupied as a school, is a brick mansion, rebuilt in the latter part of the 17th century. The edifice takes its name from a castellated mansion the residence of Robert Bruce the elder, father of the king of Scotland of that name, which formerly occupied the site. *Twickenham*, on the left bank of the Thames, about 12 miles S.W. from the Post-Office, population 6254, has derived celebrity from its being the residence of Alexander Pope, and several other eminent persons. The village is irregularly laid out, but contains a number of genteel residences. The church is near the river, and is a plain brick structure, built in the early part of the last century, with an ancient embattled tower. It contains monuments erected by Pope to the memory of his parents, and by Bishop Warburton to Pope himself. Besides the parish church there are Trinity church and schools, chapels for Wesleyan Methodists and Independents, Archdeacon Cambridge's National school, and Lady Shaw's Infant school. Among the private residences are Strawberry Hill, and a strange-looking modern house termed 'Pope's' Villa, because it occupies the site of the poet's residence. Strawberry Hill was in great part erected by Horace Walpole, and is a medley of castellated and ecclesiastical gothic architecture. There are a powder- and oil-mills in the parish. Twickenham Ait is a small island in the

Thames, comprising a few acres, chiefly laid out in pleasure grounds. Near the village of Whitton, in Twickenham parish, is Kneller Hall, a government institution for the education of masters for schools of Parochial Unions, or other schools connected with the civil government. It is under the care of a Principal, a Vice-Principal, a mathematical master, and an English master; accommodation is provided for 90 students; the number resident in July 1852 was 33. Whitton Place, a mansion with extensive grounds attached, built by the third duke of Argyll, and afterwards in the possession of Sir William Chambers, contains an extensive collection of pictures, marbles, &c.

Divisions for Ecclesiastical and Legal Purposes.—This county is included in the diocese of London, and is divided between the archdeacons of London and Middlesex. By the Poor-Law Commissioners Middlesex is divided into 32 Poor-Law Unions:—Bethnal Green; Brentford; Chelsea; St. James, Clerkenwell; Edmonton; Fulham; St. George, Hanover Square; St. George in the East; St. Giles in the Fields, and St. George, Bloomsbury; Hackney; Hampstead; Hendon; Holborn; St. Mary, Islington; St. James, Westminster; Kensington; City of London; East London; West London; St. Luke, Middlesex; St. Margaret and St. John, Westminster; St. Martin in the Fields; St. Marylebone; Paddington; St. Pancras; Poplar; St. Leonard, Shoreditch; Staines; Stepney; The Strand; Uxbridge; and Whitechapel. These Unions contained in 1851 a population of 1,875,608.

The county is, in civil suits, within the immediate jurisdiction of the superior courts sitting in the metropolis. In criminal cases of the more important class it is within the jurisdiction of the Central Criminal Court, held twelve times a year, in the Old Bailey in London. Sessions, at which lighter criminal offences are tried, are held at the Sessions-House, Clerkenwell, twenty-four times in the year, and by adjournment at the Broad Sanctuary, Westminster. Sessions are also held at Guildhall, for the City of London, four times in the year; and at the Sessions-House, Wellesole Square, for the Tower Liberty, eight times a year. County courts are held at Bloomsbury, Bow, Brentford, Brompton, Clerkenwell, Edmonton, Marylebone, Shoreditch, Uxbridge, Westminster, and Whitechapel. The City is under the police jurisdiction of its own aldermen; and other parts immediately round London have police-offices with stipendiary magistrates. The parts more distant from London are under the county magistrates. The shrievalty of Middlesex is united with that of London. Two sheriffs are annually chosen by the Livery of London in common hall. London has a body of police of its own; the suburbs are watched by the metropolitan police, a numerous body of men under the direction of two commissioners.

Fourteen members of Parliament are returned from Middlesex—2 for the county, 4 for the city of London, 2 for the city of Westminster, and 2 each for Marylebone, Finsbury, and the Tower Hamlets.

History and Antiquities.—In the earliest period of authentic history, this part of our island was comprehended in the domains of the Trinobantes, who occupied Essex. It was traversed by Cæsar in his second expedition into Britain (B.C. 54) after his successful attempt to cross the Thames. [BRITANNIA.] It fell under the Roman dominion in the time of Claudius, but was overrun by the Britons in the general revolt under Boadicea. Londinium (London) was already a place of considerable trade, and the residence of many Romans. In the Roman division of the island the county was included in the province of Flavia Cæsariensis, and contained the stations of Londinium, Pontes (according to some), and Sulloniaca. Pontes has been variously fixed, at Colnbrook in Bucks, at Old Windsor in Berks, and at Longford and Staines in Middlesex. Sulloniaca was at Brockley Hill, between Edgware and Elstree. Roman camps have been traced at Stanmore, in the fields near Islington, and at Shepperton, near the place where Cæsar crossed the Thames. The Roman Watling-street from Londinium ran through Sulloniaca to Verulamium (near St. Alban's). Ermine-street ran from Londinium northward by Stoke Newington to Enfield, and other roads led from Londinium by Pontes and across the Thames to the south-west parts of England, and across the Lea into Essex. Roman antiquities have been found at Hampstead, Shepperton, Turnham Green, and other parts of the county. At Bentley, near Stanmore, 50 gold coins and several of silver and copper were found, with two gold rings, and a gold bracelet.

In the Saxon division of the island this county is generally considered to have been a part of the kingdom of the East Saxons; but we think this may be questioned. [ENGLAND.] It may have been governed occasionally by the kings of Essex—it is known that these at least possessed many extensive rights in the city of London; but Essex was itself little more than a dependency of Kent, and probably never enjoyed political independence. In the division of England under Alfred, while the county of Essex and part of Hertfordshire were included in the Danelagh, or Danish territory, London and the rest of Middlesex were, according to the best authorities, placed under the alderman of Mercia. (Sir F. Palgrave, 'Life and Progress of the English Commonwealth.')

In the wars which the West Saxon princes sustained with the Danes, London was repeatedly taken by that people. In the great struggle between Alfred and the Danish chieftain Hasting, the citizens bore a distinguished part. In the reign of Athelstan, London became the occasional residence of the king. In the reign of Edmund II., Ironside, London was twice besieged by the Danish king Canute, without

success. The death of Edmund however brought the whole island under the sway of Canute. London became under the later Saxon princes or under the Norman dynasty, the seat of government, and has continued to be so ever since. The city, consequently, and the metropolitan county, have been the scene of many important events, which properly belong to the general history of the country.

Religious Worship and Education.—According to the Returns of the Census of 1851, it appears that in March of that year, there were in the county, 962 places of worship, of which 419 belonged to the Church of England, 155 to Independents, 119 to six sections of Methodists, 102 to five sections of Baptists, 32 to Roman Catholics, 19 to Presbyterians, 16 to Mormons, 10 to Quakers, 8 to Lady Huntingdon's Connexion, 9 to Jews, 7 to Unitarians, 6 to Lutherans, 6 to Irvingites, 5 to Plymouth Brethren, 2 to Moravians, and 2 to the Greek Church. The total number of sittings provided was 572,338. There were 589 Sunday schools, of which 227 belonged to the Church of England, 132 to Independents, 96 to Methodists, 65 to Baptists, 11 to Presbyterians, and 5 to Roman Catholics. Of Day schools there were 3427, of which 772 were Public schools, with 138,108 scholars, and 2655 were Private schools, with 62,149 scholars. Of Evening schools for adults there were 76, with 1733 scholars. Of literary and scientific institutes there were 77, with 34,766 members, and libraries containing about 333,500 volumes.

Savings Banks.—In 1853 there were 37 savings banks in the county, at Bath-place, Bishopsgate, Bloomsbury, Brentford, Camden Town, Chelsea, Covent Garden, Edmonton, Enfield, Farringdon-street, Finsbury, Fulham, Hackney, Haggerstone, Hammersmith, Hampstead, Harrow, Highgate, Hornsey, Hoxton, Islington, Kensington, Kingsland Road, Limehouse, Marylebone, Paddington, Poplar, St. Martin's-place, St. Clement Danes, St. Giles (Cripplegate), Stoke Newington, Staines, Stepney, Tottenham, Tufton-street, Uxbridge, and Whitechapel. The amount due to depositors on November 20th 1853 was 5,349,188*l.* 2*s.* 4*d.*

MIDDLETON, Lancashire, a town in the parish of Middleton, is situated on the right bank of the river Irk, a feeder of the Irwell, in 53° 34' N. lat., 2° 12' W. long., distant 6 miles N. by E. from Manchester, 192 miles N.W. by N. from London by road, and 193½ miles by the North-Western and Lancashire and Yorkshire railways. The population of the town in 1851 was 5740. The living is a rectory in the archdeaconry and diocese of Manchester.

Middleton is dependent on the cotton and silk manufactures. A market formerly held in the town has been discontinued. Messrs. Peto and Betts, the eminent contractors, have within the last few years purchased the property of the town from Lord Suffield. The town is lighted with gas, and is well supplied with water. The parish church was erected at the beginning of the 16th century: of an older church some Norman portions remain. There are chapels for Methodists, Independents, and Swedenborgians; National and Infant schools, a Grammar school, founded in 1570, which had 130 scholars in 1851, a mechanics institute and reading-room, and a branch of the Manchester savings bank. Mills for spinning cotton-thread and for manufacturing cotton-cloth, dye-works, print-works, and silk-weaving establishments supply the chief occupations of the inhabitants. Many of the brocaded fabrics which are sold in London as Spitalfields goods are produced in Middleton.

MIDDLETON. [DERBYSHIRE; DURHAM.]

MIDDLETOWN. [CONNECTICUT.]

MIDDLEWICH, Cheshire, a market-town in the parish of Middlewich, is situated near the confluence of the rivers Dane and Croke, in 53° 12' N. lat., 2° 25' W. long., distant about 20 miles E. from Chester, and 167 miles N.W. from London. The population of the township of Middlewich in 1851 was 1235. The living is a vicarage in the archdeaconry and diocese of Chester.

The town of Middlewich contains many good houses, a commodious parish church, places of worship for Wesleyan and Association Methodists and Quakers, a Free Grammar school, National, British, and Infant schools, and a town library and news-room. Salt is made to a very great extent; and there are breweries, brick-fields, boat-building yards, a silk factory, and some lime-works. The Grand Trunk Canal, in its course to the Mersey, passes through Middlewich.

MIDHURST, Sussex, a market-town, parliamentary borough, and the seat of a Poor-Law Union, is pleasantly situated on a gentle eminence on the right bank of the Rother, in 50° 49' N. lat., 0° 44' W. long., distant 12 miles N. from Chichester, and 50 miles S.W. by S. from London. The population of the parliamentary borough in 1851 was 7021. The borough returns one member to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry and diocese of Chichester. Midhurst Poor-Law Union contains 26 parishes and townships, with an area of 64,068 acres, and a population in 1851 of 13,373.

On a mound near the Rother are the ruins of a castle long occupied by the Bohuns, lords of Midhurst. The parish church has lately been much enlarged. The Independents and Baptists have places of worship. The Free Grammar school, founded in 1672, had 7 free scholars and 15 boarders in 1852. There are a National school, a literary and scientific institution, and a savings bank. A county court is held in the town. There is a neat town-hall. A corn-market

is held every Thursday. Fairs are held on April 6th, Whit-Tuesday, and October 29th. Midhurst is a borough by prescription, and previous to 1832 returned two members to Parliament. About a quarter of a mile east of Midhurst, stood Cowdry House, the princely seat of the Montagues, built in the reign of Henry VIII, and, except the gate-house, destroyed by fire in 1793.

MIDDLETON, county of Cork, Ireland, a post- and market-town, and the seat of a Poor-Law Union, is situated near the head of the north-eastern branch of Cork Harbour, in 51° 55' N. lat., 8° 10' W. long., 13½ miles E. from Cork by road, and 17¾ miles S.W. by S. from Dublin. The population in 1851 was 3676, besides 2334 inmates of the workhouse. Middleton Poor-Law Union comprises 19 electoral divisions, with an area of 109,286 acres, and a population in 1851 of 44,059.

Middleton consists mainly of a spacious and well-built street between the Avonachora and Roxborough rivers, terminating at each end in a bridge. In the town are a neat parish church, a Roman Catholic chapel and nunnery, a Free school, or college, founded in 1696, which had 30 scholars in 1852, two National schools, a court-house, a market-house, a bridewell, a fever hospital, and a district dispensary. There are also distilleries, breweries, corn-stores, and flour-mills. Vessels of 300 tons ascend to Baillick, within half a mile of Middleton; and at the port of Ballincurra, about a mile below the town, large shipments are made of corn and other provisions. Quarter and petty sessions are held in Middleton. Fairs are held on May 14th, July 5th, October 10th, and November 22nd. The town and neighbourhood are the property of Viscount Middleton.

MIHIEL, ST. [MUSEE.]

MILAN, a province of Austrian Italy, is bounded N. by the province of Como, E. by that of Bergamo (from which it is divided by the Adda), S. by the provinces of Lodi and Pavia, and W. by the Ticino, which separates it from the Sardinian territory. The province of Milan is entirely in the great plain of Lombardy, and is watered by the Lambro, the Olona, and other affluents of the Po. Numerous canals, some for irrigation and others for navigation, communicate with these various rivers. The soil is in most parts fertile, and the country is well cultivated, full of large villages, farm-houses, and country-houses; and the appearance of prosperity is general. The chief products are corn, rice, fruit, pasture, and silk. The area of the province is 746 square miles; the population according to the official return of 1850-1 was 604,512. The province is divided into 15 districts. The only town, besides Milan, is Monza, 10 miles N.E. from Milan, on the Lambro, with about 16,000 inhabitants, and a fine old cathedral founded by the Longobard queen Theodelinda: it contains several good paintings, and the portraits of all the sovereigns who have worn the iron crown of Lombardy, from Agilulphus, the husband of Theodelinda, to Charles V. The iron crown, so called because it contains an iron rim which is said to be made of one of the nails from our Saviour's cross, is kept in the cathedral of Monza. The archives contain many valuable old documents, and some fine manuscripts of the time of Pope Gregory the Great. Monza has also a handsome royal palace, with a vast park and gardens: it was the capital of the Lombard kingdom. The neighbourhood of Milan contains many fine country residences belonging to the Milanese nobility and landed gentry. One of them, Montebello, is memorable from having been the head-quarters of Bonaparte after the campaign of 1797, and during the negotiations which preceded the peace of Campoformio. It was at Montebello that he decreed the destruction of the republic of Venice. The roads in the province of Milan are numerous, wide, and kept in excellent repair. The province is traversed by railroads from Milan to Venice, and from Milan to Como; the latter line passes through Monza.

MILAN, the capital of the Austrian crownland of Lombardy, and of the province of Milan, is situated in 45° 28' 2" N. lat., 9° 11' 39" E. long., 160 miles by railway W. from Venice, 80 miles E. by N. in a straight line from Turin, and had 161,962 inhabitants in 1851. The city is built in the midst of a vast plain, between the rivers Olona and Lambro, with which it communicates by a canal called Naviglio Grande, which flows all round the original old town. This canal, and the Martesana and Pavia canals, put Milan in communication with the Lago Maggiore and the Lake of Como on one side, and with the Po on the other. The suburbs, which have been gradually built outside of this boundary, and which occupy more space than the original city, are inclosed and surrounded by a line of ramparts, which is planted with trees, and serves as a promenade. This external circuit of the town is nearly 10 miles. Much of the space however between the Naviglio and the ramparts is not built upon, and is occupied by gardens and fields. The widest and finest streets of Milan are in the external part of the town, or suburbs: those which lead to the principal gates are called Corso, and serve as fashionable promenades. The Corso di Porta Orientale, which leads to the Bergamo road, is the most frequented. The streets of the old town are mostly narrow and irregular. The duomo, or cathedral, stands nearly in the centre of the town, and its lofty spire, which is seen from almost every part of it, serves as a directing point to strangers. This magnificent building, all of white stone, and dedicated to the Virgin Mary, was begun by Giovanni Galeazzo Visconti, duke of Milan, in March, 1386. The exterior, with its 100 spires and its

3000 statues of various sizes, looks like a forest of marble. The style of architecture is a kind of florid gothic; the front is of a mixed style. The interior is vast and imposing, and not loaded with ornaments. There are 520 steps to ascend, in order to reach a gallery which runs round the principal spire, from which there is a most splendid view of the whole Lombard plain, and of the chain of the Alps which borders it in the form of a crescent on the north side. The churches of Milan abound with fine paintings: the famous Last Supper, by Leonardo da Vinci, in the refectory of the former convent of Santa Maria delle Grazie, though sadly injured, is not yet quite obliterated.

Milan is a gay, thriving, modern city: its markets are abundantly supplied with every luxury, and the citizens are generally fond of good living. Numerous coffee-houses, splendid hotels, abundance of handsome carriages, elegantly dressed pedestrians, several theatres well supplied with actors and singers,—all attest the habits of a luxurious capital. Milan has been styled "the little Paris;" and the appellation is appropriate, for it resembles that capital rather than the other Italian cities. But Milan is also a centre of learning: it is the place of residence of several of the best Italian writers, and more books are published yearly at Milan than in all the rest of Italy. The fine arts are successfully cultivated at Milan, as the annual exhibition of the works of living artists prove. The museum of Brera contains several excellent paintings of the great masters; among others the Agar of Guercino, the Marriage of the Virgin by Raphael, and St. Peter and St. Paul by Guido. The Ambrosian library is well known for its numerous and valuable manuscripts, and especially for its palimpsests, derived from the monastery of Bobbio, and among which Mai discovered the treatise 'De Republica' of Cicero, fragments of several of his lost orations, the letters of Marcus Aurelius and Fronto, and other valuable remains of ancient literature. The library of Brera contains 100,000 volumes, and is open to the public. Among the private libraries, that of the marquis Trivulzio contains 30,000 printed volumes and 2000 manuscripts.

Milan abounds with charitable institutions. The great hospital, one of the finest and largest in the world, has been richly endowed by numerous benefactors, whose portraits are preserved within it. Four houses of refuge for poor children are supported by public contributions. There are two large workhouses for the unemployed poor, and a house of correction for criminals, who are employed in useful labour. Milan has a savings bank, an insurance company, a military college, a veterinary school, a conservatorio or school of music, and a school of the fine arts. For general education, there are two Lyceæ, three gymnasia, a clerical seminary, and three colleges for higher female education. The elementary schools are numerous. [LOMBARDO-VENETIAN KINGDOM.] The Society of Arts and Sciences bestows annual prizes for inventions relating to agriculture and manufactures. The manufactures of Milan are of some importance: they consist chiefly of silks, printed cottons, plate-glass, jewellery, artificial flowers, braid, soap, and leather.

Milan is an archbishop's see. It has a court of appeal, tribunals of first instance, and of commerce. The fortifications were greatly strengthened, and 14 detached forts erected round the town in 1850.

The public gardens, the ramparts, the great parade, which occupies the site of the old citadel, and the several avenues planted with trees which lead from the gates in various directions, afford pleasant walks and rides. The climate of Milan is hot in summer, but occasionally cold and foggy in winter: it is however considered healthy.

The Circo, or modern amphitheatre, built in the time of the French dominion, for the exhibition of chariot and horse races, bull-fights, and other games, is of an oval form. The arena, which is about 800 feet in length, can be filled with water and transformed into a naumachia for boat-races.

Amongst the palaces, some of which are of striking elegance and grandeur, may be named—the Palazzo Arcivescovile ('archiepiscopal palace'), with its façade of simple grandeur; the Palazzo Visconti, remarkable for the series of large busts on the pediments of the principal floor windows; the Palazzo Annona, by Fiancesco Richini, in a rather peculiar yet majestic style; the Palazzo Marini, or Di Finanza, the work of Galeazzo Alessio, which, although impure in taste and too much crowded, is an exceedingly rich and picturesque as well as extensive pile of buildings, whose principal façade exhibits three orders, a Doric, an Ionic (in pilasters), and one consisting of fluted termini, surmounted by masks or busts for their capitals. Among the more recent structures of this class is the Palazzo Belgioioso, by Giuseppe Piermarini, the architect of the Della Scala theatre, the Monte, or public bank, and various other edifices; the Villa Belgioioso, by the architect Leopoldo Pollak; and the Palazzo Belloni, the work of the celebrated Cagnola, who likewise erected the magnificent marble triumphal arch called the Arco della Pace. Somewhat akin to this last-mentioned structure are several of the arches, or gateways, forming the entrances into the city. Among these the most remarkable in point of design is the Porta Ticinense, or Di Marengo, a classical propylæum of the Ionic order, presenting a double distyle in antis, that is, one in each front, connected by lateral walls, each pierced by a single plain arch. This also was designed by Cagnola. The Porta Nuova, by the architect Zanoia, is a very tasteful design, and one that shows considerable originality. The Porta Orientale again, with

the adjoining buildings, by Vantini, makes a rich architectural display.

The Arco della Pace, the principal work of its architect, the Marchese Luigi Cagnola, was commenced in 1807, and carried on until his death, August 10, 1833, after which it was continued by Carlo Londinio, and finally completed in 1837. It stands on the north-west side of the city, where it forms the entrance from the road of the Simplon into the spacious Piazza d'Armi, and is not only completely insulated, but so situated as to be seen to the utmost advantage from every point of view, particularly as regards its two principal fronts, one of which faces the noble avenue above mentioned, and the other, or that towards the city, is viewed between two elegant Doric marble buildings (serving as guard- and toll-houses), which are placed a little in advance of it, and are about three times the breadth of its front apart from each other. The arch, which is entirely faced with marble, and highly enriched in every part with reliefs and sculptures, besides statues both upon and in front of the attic, forms an architectural mass whose general dimensions are—72½ feet English by 42½ feet in depth, and 74 feet in height, or, including the sestiga and statue on its summit, the extreme height is 98 feet. Each of the principal fronts exhibits four fluted Corinthian columns, with half-columns behind them; and between them a centre arch (24 feet wide and 48 feet high) and a smaller one (10 feet 9 inches wide and 28 feet high) on each side of it. The entablature (the frieze of which is enriched throughout with figures of genii holding festoons) forms only a single projecting break on each side of the centre, whereby the inconvenience is avoided of such a mass of stone being suspended over the wider centre intercolumn. A single recumbent figure is placed on these projecting entablatures. Those on the side towards the city represent the rivers Ticino and Po, on the other the Adige and Tagliamento; the two former of which were executed by Cacciatori, and the latter by Pompeo Marchesi.

There is no transverse passage through the Arco della Pace from end to end, but merely an opening through the piers separating the larger arch from the one on each side of it, owing to which the external sides or ends of the structure have the expression of greater solidity. At each angle of the attic is a bronze equestrian statue of Victory, about 13 feet high; and on the side towards the city the centre is crowned by a colossal figure of Peace (modelled by Sangiorgio, and cast in bronze by Luigi and Antonio Manfredini) in a car with six horses. Of the various other sculptures and reliefs that adorn this magnificent work, no enumeration can be here given.

Milan, under the name of Mediolanum, was a town of the Cisalpine Gauls. (Livy, v. 34; Polybius, b. xi.) It was taken by the consuls M. Marcellus and C. Cornelius Scipio, B.C. 221. Little is said in history of Milan afterwards until the end of the 3rd century of the Christian era, when Maximianus, the colleague of Diocletian, fixed his residence at Milan, and surrounded it with walls, which were two miles in circumference, and which continued to inclose the area of the town till the time of Frederick I., in the 12th century. Valentinian II., Theodosius I., Honorius, and other emperors of the 4th and 5th centuries, resided occasionally at Milan. At the fall of the Western empire, Milan was twice devastated, once by Attila, and afterwards by the Goths under Vitiges, A.D. 539, and it did not recover from their ravages for several centuries after. In the latter part of the 9th century the archbishop Anspertus restored the walls built by Maximianus, and thus gave security to the inhabitants. From that time Milan recovered, and grew in population and wealth, and became gradually the principal city of Lombardy. [LOMBARDO-VEGETIAN KINGDOM.] The present city of Milan has no claims to classical antiquity, the only remains of Roman construction being 16 handsome fluted pillars near the church of San Lorenzo.

An insurrection against the Austrians broke out in Milan in March, 1848, in consequence of which Field-Marshal Radetzky, at the head of the Austrian garrison, retreated eastward, gathering all the garrisons in his march to the line of the Mincio. Charles Albert, king of Sardinia, advanced to Lombardy at the head of his army to support the insurgents, and accompanied rather than aided by a rabble of Italian republicans, pursued the Austrians. Engagements on the whole favourable to the Italian cause, as it was called, took place at Goito and Sonna Compagna, and Peschiera capitulated to the Sardinians (May 30th), but they failed in their attack upon Verona. Meanwhile the question of a prompt union of Lombardy with Sardinia was put to the vote in all the communes of Lombardy by the provisional government of Milan, and carried by 561,002 votes, only 681 voting for delay. Charles Albert, at his head-quarters in Garda, on the lake of that name, signed the act of union, which was ratified by the Sardinian parliament by 127 voices against 7. On the 23rd of July, the Field-Marshal having put down the insurrection in the Venetian provinces, and gathered his reinforcements, advanced from the Adige to Vallegio, and the heights of Custozza on the Mincio, where a decisive battle fought next day resulted in the defeat of the Piedmontese army, and their retreat to Goito on the right bank of the Mincio. In vain the provisional government at the instigation of Mazzini, appointed a committee of defence to organise a 'levy-en-masse' against the Austrians; the latter advanced, receiving the submission of Cremona, Pizzighetton, and other towns on their march. Pursuers and pursued reached the neighbourhood of Milan together, where, after a short

engagement, the Sardinians took refuge in the town, and next day, August 5th, capitulated to Field-Marshal Radetzky. [See SUPP.]

MILBORNE. [SOMERSETSHIRE.]

MILDENHALL, Suffolk, a market-town, and the seat of a Poor-Law Union, in the parish of Mildenhall, is situated in 52° 20' N. lat., 0° 31' W. long., 12 miles N.W. by W. from Bury St. Edmunds, and 70 miles N. by E. from London. The population of the parish in 1851 was 4374. The living is a vicarage in the archdeaconry of Sudbury and diocese of Ely. Mildenhall Poor-Law Union contains 13 parishes and townships, with an area of 63,629 acres, and a population in 1851 of 10,351.

Mildenhall stands on the border of the fen country, a little to the left of the road from London to Norwich. It is irregularly laid out; the streets are lighted with gas; the houses are for the most part well built. The church, a large handsome edifice, in the perpendicular style, with a tower 120 feet high, has lately undergone extensive alterations and repairs. The roof is of wood, handsomely carved. There are chapels for Baptists and Calvinistic and Wesleyan Methodists, a National school, and a mechanics institute. The market is on Friday, and there is a considerable fair in the beginning of October. The river Lark, which passes the town, facilitates the export of corn and agricultural produce.

MILFORD. [DERBYSHIRE; HAMPSHIRE.]

MILFORD, Pembrokeshire, a market-town, borough, and sea-port, partly in the parish of Steynton, and partly in that of Hubberston, is situated on the north shore of Milford Haven, in 51° 41' N. lat., 5° 1' W. long., 12 miles W.N.W. from Pembroke, and 253 miles W. by N. from London. The population of the borough of Milford in 1851 was 2837.

Milford rose into importance about the commencement of the present century, when it was made a station for the mail packets communicating with the south of Ireland, and docks and quays were erected at the port. A royal dockyard, and slips for building ships of war were constructed, and an arsenal was established. In 1814 the dockyards at Pater or Pembroke on the opposite side of the Haven were erected, and the naval establishments were removed from Milford. Some years later the station of the mail steamers for Waterford was removed to Hobb's Point at Pater. After these events the prosperity of Milford declined. The construction of new docks is expected to benefit the town. From the salubrity of the climate, and its convenience for sea-bathing, Milford is much resorted to by invalids. There are in Milford a handsome church, erected in 1806, places of worship for Wesleyan Methodists, Independents, Baptists, and Quakers; an Endowed National school, a British school, a mechanics institute, and a reading-room. There is a neat market-house, and markets are held on Tuesday and Saturday.

The number of vessels registered as belonging to the port of Milford, on the 31st December, 1853, was:—Under 50 tons 73, tonnage 1979; above 50 tons 70, tonnage 8494; with one steam-vessel of 48 tons. During 1853 there entered the port 739 sailing-vessels, of 33,002 tons, and 161 steam-vessels of 38,539 tons; and there cleared 1307 sailing-vessels of 44,899 tons, and 49 steam-vessels of 12,485 tons. Milford Haven is spacious, safe, and easily accessible in all weathers; large numbers of vessels are frequently protected in the Haven. On St. Ann's Point, at the western extremity of the Haven, are two light-houses, erected in 1800. Some small forts called blockhouses still remain, which were erected by Henry VIII.

MILFORD, county of Donegal, Ireland, a small post-town, and the seat of a Poor-Law Union, is situated about half a mile S. from Mulroy Bay, in 55° 5' N. lat., 7° 42' W. long., 27 miles N.N.W. from Lifford, and 156 miles N.N.W. from Dublin by road. The population in 1851 was 437. Milford Poor-Law Union comprises 12 electoral divisions, with an area of 111,336 acres, and a population in 1851 of 31,552. The town contains a few shops, some good houses, and the Union workhouse. Petty sessions are held on the second Thursday of every month. A market or fair is held on the 23rd of every month.

MILHAU. [AVEYRON.]

MILITARY FRONTIER. This is the name given to a tract of country which extends from the Adriatic Sea to the Bukovina, between the frontiers of Illyria, Croatia, Slavonia, Hungary, Transylvania, and those of Turkey. Its length is about 1000 miles, from the Adriatic, near 16° 48' E. long., to the defile of Ostocz, in 26° 25' E. long., and it lies between 44° 7' and 47° 36' N. lat.; its breadth varies in different parts. The area is about 13,000 square miles. The whole of this tract comprises—1, the western or Croatian Military Frontier; 2, the Slavonian Military Frontier; 3, the Hungarian or Banat Military Frontier; 4, the Transylvanian Military Frontier. The Military Frontier now forms one of the crownlands of the Austrian empire, and is divided into two military commanderies, the area and military population of which, according to the official returns of 1850-1, are as follows:—

Commanderies.	Area in Square Miles.	Population in 1851.
Croatia and Slavonia . . .	7,500	670,655
Banat and Servia . . .	5,398	338,454
Total . . .	12,898	1,009,109

This tract is distinguished from the rest of the Austrian monarchy by having its own purely military government. All the peasants are soldiers, of whom, in time of peace, 45,000 men are constantly under arms; but in 1815, before the peace, there were 62,000. This force was originally intended as a barrier against the inroads of the Turks. By this tenure the peasants hold from the state the hereditary usufruct of their lands. This singular institution secures to the state the services of a great military force (there being above 100,000 men capable of bearing arms), which in time of peace costs the state nothing. These well-trained and disciplined soldiers defend their own frontier both against hostile attacks and the plague without pay, and in time of war serve the state in the same manner as the rest of the army, and receive the usual pay. They are divided into eighteen regiments, the whole numbering 46,842 in time of peace, and 84,720 in time of war. There is besides a battalion of *csalkists*, or boatmen, numbering 1297 in peace, and 2049 in time of war, who cruise on the Danube, the Save, and the Theiss, in small galleys carrying howitzers. Each regiment consists (in time of peace) of two battalions or twelve companies, which serve in turn, has its own staff, and is commanded by a colonel, who exercises both the civil and military authority. Two regiments make a brigade. The military authority is divided among what are called two general commanderies, the seats of which are at Agram for the Croatian and Slavonian frontier, and at Temesvar for the Banat and Servian frontier. The whole is under the supreme direction of the Aulic Council of War at Vienna. According to the military constitution, the generals superintend the civil affairs and the administration of justice. Under the general are the regimental commanders, who are in the place of district authorities; in short, all civil officers hold military rank.

A great part of the country is mountainous, the western part being traversed by the Julian Alps, and the eastern by branches of the Carpathians. Many fine valleys, some of them rich in picturesque beauty, lie between the branches of the mountains; the remainder of the country is pretty flat. The western part of the Banat is a sandy plain covered with sand-hills from 60 to 180 feet high. On the banks of the Danube, the Theiss, and the Temes, there are extensive marshes. In the mountainous parts the temperature is that of more northern countries; whereas the lower central parts enjoy a climate resembling that of Italy. The soil is on the whole very fruitful, especially in the plains, and in several valleys of the Banat. For the natural productions see CROATIA, and HUNGARY.

There are no manufactures of any importance. The women, as well as the men, show great skill and ingenuity in manufacturing almost every article for their own consumption. There is a very great export trade in the productions of the country. The extensive forests supply great quantities of excellent timber.

The population above given comprises only the military colonists of these frontiers; in the towns, and at various points along this territory, are besides numbers of people engaged in trade and commerce, who swell the total population to 1,226,408. Of this number 514,545 are Catholics, 62,743 United Greeks or Greek Catholics, 598,603 Non-United Greeks, 14,536 Protestants of the Augsburg Confession, 31,053 Calvinists, 4341 Unitarians, and 537 Jews. The population is of many different races, two-thirds however being of Slavonian origin, namely, Croats, in the Croatian Military Frontier, and the Slavonians and Servians in Slavonia and the Banat. The three other less numerous nations are the Wallachians in the Transylvanian and Banat Military Frontier, and the Hungarians and Szeklers in Transylvania. Besides these there are Magyars, Germans, Greeks, Jews, and Gipsies. The Clementines are of Albanian origin, so called from their leader Clement. They are not above 2000; they inhabit two villages in the district of Peterwardein, and have retained their manners and language.

The great variety of costume appears surprising to a stranger; each nation and tribe has its own costume. The people are described as possessed of great natural talents, acute, docile, very patriotic, devotedly attached to the Imperial house, hospitable, fond of music and poetry, and possessing a great degree of national pride. All the branches of a family (called a house communion) live together, and several generations are found at the same time in one house. The head of the family, called the *Gospodar* (House-father), exercises a kind of patriarchal authority, which all the members are bound to respect and obey. The mother, who is called *Gospodarizza*, presides over the internal affairs, and superintends the female members of the family. The property of the family is in common, and no one is exempt from the duty of working. Each person who works has an equal share in the produce, but the *Gospodar* and his wife have each a double portion. No member is allowed to have land or cattle of his own; but he may possess money and furniture. He who leaves the house without the consent of the elders and the regiment is reputed a deserter. Daughters who marry into another house have a smaller portion. Such a family often consists of 30, 40, and even 80 members.

The territory, now called the Military Frontier, has been subjected to its peculiar organisation only since the 16th century. Before that period long wars, pestilence, and famine had rendered this vast sweep of country almost a desert waste. Even in time of peace the Turks used to dash across the frontier in savage quest after Christian heads and ears, for which they received a fixed sum from their pashas. The

emperor Ferdinand I. in order to check this inhuman barbarity, partitioned out a part of Croatia among military colonists, who were to cultivate the hitherto neglected soil, and to repel the inroads of the Turks. The system has been since gradually perfected and extended all along the Turkish border of Austria; and a chain of watch-posts stretches all along the frontier. The system of outposts has not only served to protect the empire from Turkish invasion and from the inroads of the plague (for it was a highly efficient sanitary cordon), but it is equally useful as a preventive service to check smuggling. Guard-houses constructed of wood or stone, sometimes merely of boughs, at intervals of about two miles, stretch away over mountains, through valleys, and along the swampy banks of the rivers. In each are 6 or 8 men, one of whom is constantly on the look-out in each by day, and at night constant communication is kept up by patrols. By means of beacon-fires, shots, and bells, the whole force of the military frontier can be alarmed and assembled at the head-quarters of the regiments in 12 hours.

Of these frontier colonists (*Grünzer*) every male from 18 to 60 years of age is at his own disposal. Every border family according to its numbers has its *fief* (about 50 acres), half-*fief*, or quarter-*fief*, which is cultivated in the intervals of duty, the emperor (who, in consequence of the destruction of the original landowners by the Turks, is proprietor of nearly the whole frontiers), receiving so many days of military service instead of rent. Each *fief* is bound to maintain a certain number of soldiers. To every company in a regiment an agricultural officer is attached, in order to promote the cultivation of the land; nevertheless so much of the men's time is occupied with military duty that agriculture is in a very backward state. Education is much more widely diffused among them than in the neighbouring parts of Hungary; two-thirds at least of all the children are taught in the public schools. (*Oester-reichische National Encyclopedie.*)

MILLBROOK. [BEDFORDSHIRE; CORNWALL; DERBYSHIRE; DURHAM; HAMPSHIRE.]

MILLEDGEVILLE. [GEORGIA, U. S.]

MILLOM. [CUMBERLAND.]

MILLEORT. [CUMBRAE.]

MILLSTREET, county of Cork, Ireland, a post- and market-town and the seat of a Poor-Law Union, is picturesquely situated in a valley on the Finow, a tributary of the Blackwater, and on the road from Dublin by Mallow to Killarney, in 52° 3' N. lat., 9° 4' W. long., distant 37½ miles W.N.W. from Cork, and 190¾ miles S.W. from Dublin. The population in 1851 was 1504, besides 2191 in the workhouse. Millstreet Poor-Law Union comprises 12 electoral divisions, with an area of 74,905 acres, and a population in 1851 of 17,261. The town contains a church, a Roman Catholic chapel, National schools, a brickwell, a district dispensary, and infantry barracks. Petty sessions are held monthly, and fairs on the 1st of March, June, September, and December. In the neighbourhood is Drishane Castle, erected in 1436.

MILLTOWN. [CLARE; KERRY.]

MILNTHORP. [WESTMORELAND.]

MILO, MELOS, one of the larger Cyclades in the Ægean Sea, about 70 miles N. of the coast of Crete, and 65 miles E. of the coast of the Peloponnesus. It is 14 miles long from east to west, and its breadth is about 8 miles. Its northern coast is indented by a deep bay, which forms a natural harbour, one of the best and safest in the Levant. The surface of the island is mountainous, and of volcanic formation; it has hot mineral springs, and mines of sulphur, vitriol, and alum. The soil is fertile, and produces abundance of fruit, wine, oil, and pasture for cattle. The population, which was above 20,000 in the time of Tournefort, is now stated to be only about 4000.

The chief town, also called Milo, is in the east part of the island, near the port, where are extensive remains of the ancient capital of the island. The lower grounds near the sea are marshy, and are said to render the air unwholesome in summer.

Melos is said to have been colonised first by the Phœnicians, and afterwards by the Lacedæmonians. During the Peloponnesian war the Athenians sent an armament to reduce it, but the attempt failed. Some years later the Athenians, after a siege of several months, took the town of Melos, and put to death all the adult males, and carried away the women and children as slaves, after which a colony of Athenians was sent to occupy the place. (Thucyd., iii. 91; v. 84, &c.) Melos, like the other Greek islands, became subject successively to Rome, the Byzantine emperors, the Venetians, and the Turks. It now forms part of the new kingdom of Greece, and is included in the nome of the Cyclades, of which Syra is the capital.

North of Milo is the rocky island of *Cimolus*, now called *Cimoli* by the Greeks, and by the Italians ARGENTIERA, from a silver-mine which was formerly worked on the island. The channel between Milo and Argentiera is only half a mile wide, and very dangerous in stormy weather. Off the entrance of the strait to the east, and about five miles from the eastern coast of Milo, is the little desert island of *Anti-Milo*, the highest point of which is in 36° 47' 42" N. lat., 24° 14' 41" E. long.

MILTON, sometimes distinguished as Milton-next-Sittingbourne, Kent, a small market-town, and the seat of a Poor-Law Union, in the parish of Milton, is situated on the side of a hill sloping down to a creek or arm of the river Swale, in 51° 21' N. lat., 0° 43' E. long., 11

miles N.E. from Maidstone, and 39½ miles E.S.E. from London. The population of the parish in 1851 was 2407. The living is a vicarage in the archdeaconry of Maidstone and diocese of Canterbury. Milton Poor-Law Union contains 18 parishes and townships, with an area of 32,598 acres, and a population in 1851 of 11,992.

Milton was a place of some importance in the time of the Saxons. It contains many good houses and cottages of recent construction, a large and handsome church, chapels for Baptists and Independents, and National schools. There is a good oyster-fishery; and the port forms the point of communication with London for the district in which Milton is situated. Saturday is the market-day; a fair is held yearly. Paper-making, brick-making, tanning, and other occupations are carried on. In the centre of the town is an ancient court-house, with the town-jail in the lower part of the building.

MILTON ABBAS. [DORSETSHIRE.]

MILVERTON. [SOMERSETSHIRE.]

MINAS GERAES. [BRAZIL.]

MINCHINHAMPTON, Gloucestershire, a market-town in the parish of Minchinhampton, is situated in 51° 42' N. lat., 2° 11' W. long., distant 14 miles S. by E. from Gloucester, and 98 miles W. by N. from London. The population of the parish in 1851 was 4469. The living is a rectory in the archdeaconry of Gloucester and diocese of Gloucester and Bristol.

Minchinhampton is an irregularly-built market-town, pleasantly situated on a gentle declivity. It is in the clothing district of which Stroud may be considered the centre. There are three market-houses, two of which were erected in 1700 by Mr. P. Sheppard, with the design of establishing a wool-market, but the attempt was unsuccessful. The cloth manufacture is carried on along the banks of the numerous brooks and rivulets in the vicinity. The church, which is cruciform, was founded about the reign of Henry III. by the nuns of Caen: it was rebuilt in 1842. There are chapels for Wesleyan Methodists, Association Methodists, and Baptists, a Free school, a National school, and a dispensary. The market-day is Tuesday: fairs are held on Trinity Monday and October 27th. Amberley, a tract of common land on the west side of the town, is the site of a remarkable encampment, supposed to have been made by the Danes during their occupation of Cirencester in 879. The encampment extends about three miles.

MINCIO. [AUSTRIA; PO.]

MINDANAO. [PHILIPPINE ISLANDS.]

MINDEN, the most eastern of the three governments into which the Prussian province of Westphalia is divided, has an area of 2024 square miles; the population in 1847 was 459,833. The soil is of unequal quality. There are some barren spots, but the greater part is fertile in corn; hemp and flax also are generally cultivated, linen and thread being the chief industrial products. The pastures are good, and cattle abound. Iron, lead, and salt are the most important mineral products. The Weser is the principal river, and the trade on its banks is very considerable. The Lippe drains the southern part of the government. [WESTPHALIA.]

Minden, the capital of the government and a strongly fortified town, is situated 37 miles by railway W. from Hanover, 230 miles from Berlin, and 161 from Cologne, in 52° 18' N. lat., 8° 53' E. long., on the left bank of the Weser, here crossed by an old bridge 600 feet long. It is one of the oldest towns in Germany. The streets are narrow and irregular; the old-fashioned houses are in general built of stone or brick. The Domplatz, or cathedral-close, is a handsome square, planted with trees. Among the public buildings, the largest and handsomest is the Roman Catholic cathedral, which was completed in 1072; it is built in the lower part of the town, on a foundation made with piles. Besides the gymnasium (which had 15 teachers and 243 pupils in 1850) and a seminary for schoolmasters, there are several public schools, the Westphalian museum, and other useful institutions. The manufactures are woollen stuffs, linen, leather, tobacco, sugar, vinegar, beer, and brandy. In the vicinity there are oil- and saw-mills. The population of the town exceeds 9000. The French were defeated near Minden on the 1st of August, 1759, by an Anglo-Hanoverian force under Prince Ferdinand.

Paderborn, the capital of the old principality of Paderborn, now included in this government, is an ancient gloomy town with about 9000 inhabitants, situated about 40 miles S. from Minden, on the Westphalian railroad from Hamm to Warburg, which joins the Cologne-Minden line to the Thuringian railway through Cassel, Gotha, and Leipzig to Dresden. The town, which is built at the source of the Pader, a feeder of the Lippe, is surrounded by a wall pierced with five gates. The cathedral is the principal building; the former university is now a Roman Catholic theological college. Paderborn gives title to a Roman Catholic bishop; the see was founded in the time of Charlemagne. The town was a member of the Hanseatic League. The Catholic gymnasium of Paderborn had 22 teachers and 506 pupils in 1850.

Herford, 15 miles S.W. by railway from Minden, on the Werra, a feeder of the Weser, is a walled town, and has 6000 inhabitants, who manufacture cotton-twist, calico, linen, tobacco, and leather. It has a large prison, an arsenal, a gymnasium, a museum, and six churches.

Bielefeld is described in a separate article. [BIELEFELD.]

MINDORO. [PHILIPPINE ISLANDS.]

MINEHEAD. [SOMERSETSHIRE.]

MINERVINO. [BARI, TERRA DL.]

MINGRELIA. [GEORGIA.]

MINHO, RIVER. [PORTUGAL.]

MINNESOTA, a territory of the United States of North America, lies between 43° 30' and 49° 22' N. lat., 90° 0' and 102° 30' W. long. It is bounded E. by the state of Wisconsin, N.E. by Lake Superior, N. by British North America, W. by the territory of Nebraska, and S. by the state of Iowa. The area is estimated at 141,839 square miles; the population in 1850 was 6077, or 0.04 to the square mile: but this does not include the native Indians living in tribes.

The surface of this territory has generally the character of an immense high 'rolling prairie land,' but there are considerable exceptions. Towards the eastern side it runs into a ridge of lofty hills, which traverses a large portion of it in a north-east and south-west direction. From a short distance above the Falls of St. Anthony, on the Mississippi, there extends southward a vast forest region for 120 miles, with a breadth ranging from 15 to 40 miles. The northern and north-eastern portion of the territory is sometimes termed the 'region of lakes,' from the great number of lakes of various sizes which here lie along the upper course of the Mississippi and its tributaries; and for some distance below this region the Mississippi traverses a swampy country.

The territory is in every part abundantly watered. The Mississippi rises within its boundaries, in Lake Itasca; and belongs wholly to it down to the confluence of the St.-Croix, after which to the southern boundary of the territory, it belongs equally to Minnesota and Wisconsin. This part of its course is described under MISSISSIPPI RIVER. The principal tributaries which join it in this territory are the St.-Croix, which separates Minnesota from Wisconsin, and the Minnesota, a large and broad stream, which rises near the centre of the territory, flows through Big Stone Lake, and after a course including its windings of some 500 miles, first south-east, then south, and finally north-east, falls into the Mississippi at Fort Snelling. The Mississippi is navigable in Minnesota by steam-boats during seven months of the year: the other five months it is, with its tributaries, closed by ice. The Missouri, with its tributary the White Earth River, forms the western boundary of Minnesota: it is navigable by steam-boats throughout Minnesota. It is joined by several small feeders, but by none of any consequence in this territory. The Red River, which flows northward to Winnipeg Lake in British America, has its source in, and belongs for a very considerable distance to Minnesota, and has numerous tributaries in this part of its course. The Big Sioux and several other rivers have also their upper courses in this territory. The Mississippi, Missouri, Minnesota, and St.-Croix rivers, with Lake Superior, afford great commercial facilities: while the numerous smaller streams and lakes afford like facilities for agricultural and manufacturing operations. The principal lakes are the Itasca, Cass, Red, Leech, Devil, Ottortail, Big Stone, and Pepin lakes, which range from about 5 to 20 miles long.

As regards its geological character, the larger half of the country, including the centre and north-eastern portions, appears to belong to the igneous and metamorphic formations. In the northern and south-eastern districts are extensive tracts of Lower Silurian rocks. Extending from the centre eastward to Lake Superior is a narrow band of New Red-Sandstone, with dykes of copper trap. The Missouri through its whole course in Minnesota appears to flow through cretaceous rocks, which are bordered on the east by tertiary formations. Copper- and lead-ores are said to have been found.

The climate, though severe, is not subject to rapid or extreme variations. The winters are long, but owing to the stillness of the air during winter, the coldest weather is endurable. A great quantity of snow falls in the winter, but generally there is not much moisture. The soil over a country so vast in extent, and having such different lithological features, is of course greatly varied; but in the settled parts it is found to be remarkably fertile, and the mould is of unusual depth. Most of the cereals appear to flourish: maize, oats, and wheat are the crops most cultivated, but rye, barley, and buckwheat are also grown. Potatoes, peas, and beans are raised to some extent. The broad prairies appear well adapted for raising stock. There are at present no manufactures in the territory. The chief occupation is the cutting and preparing of pine lumber, much of which is retained for home consumption, but the larger portion is sent to St. Louis.

At the census of 1850 Minnesota was divided into 9 counties. The political capital is St. Paul, the only place which can as yet fairly take rank as a town; but Pembina, on the right bank of the Red River, at the northern boundary of the territory—Fort Snelling, at the confluence of the Minnesota with the Mississippi—and Stillwater, on the west side of St. Croix Lake, are places of growing local importance.

St. Paul, the capital, occupies a commanding position on the left bank of the Mississippi, 15 miles below the Falls of St. Anthony, in 44° 52' N. lat., 93° 4' W. long. The first trading house was built here in 1842, it having previously been merely the station of a Roman Catholic mission. It now contains a state-house 139 feet long, a court-house, jail, nine churches, schools, numerous hotels, stores, an iron-foundry, agricultural implement factories, flour-mills, &c. The streets are traversed by coaches and omnibuses; and, whilst the river is free

from ice, steam-vessels arrive and sail daily, although the vicinity of the town is still a wilderness. In 1850 St. Paul had 1135 inhabitants; in the spring of 1853 it is said to have had above 2500.

Minnesota has a legislature, consisting of a Council and House of Representatives. By the constitution, as framed by the territorial legislature, citizenship is not limited to whites, but extended to "all persons of a mixture of white and Indian blood who shall have adopted the habits and customs of civilised men." Minnesota was erected into a territory by Act of Congress in March 1849; that portion of it west of the Mississippi having previously formed a part of the territory of Iowa, and that part east of the Mississippi having belonged to the territory of Wisconsin.

(*Statistical Gazetteer of the United States; Seventh Census of the United States; American Almanac, 1854; Owen, Report of a Geological Survey of Wisconsin, Iowa, and Minnesota; Marcou, &c.*)

MINNHIVE. [DUMFRIESSHIRE.]

MINORCA. [MENORCA.]

MINSK, a government of European Russia, in the division called West Russia (formerly Lithuania), lies between 51° 12' and 55° 50' N. lat., 25° 18' and 30° 50' E. long. It is bounded N. by Witepsk, E. by Mohilev, S.E. by Tschernigov, S. by Kiev and Volhynia, and W. by Grodno and Wilna. Its area is 34,830 square miles, and the population in 1846 amounted to 1,046,400. The face of the country is one vast plain, broken only here and there by a hill or by the high banks of the rivers. In the north and east there are large forests, and on the south and south-west extensive marshes. There is a great diversity of soil. In the north it is dry, and in some parts extremely fertile, but traversed by heaths and barren sandy tracts: in the south it is generally wet and marshy, yet it contains large tracts which are very fertile; the marshes also are rendered productive with little labour, and even the heaths yield to the efforts of cultivation.

The principal rivers are the DÜNA and the DNIEPER, both of which however only touch the frontier; the former flows for a short space between this province and Wilna, and the latter on the south-east divides it from Tschernigov. Among the rivers that flow into the Düna are—the Desna, which comes from Wilna, and joins it at the town of the same name; and the Ulla, which feeds the Beresina Canal, which unites the Beresina, the Düna, and the Dnieper. The NERMEN, and its feeder the Vilia, both rise in the government of Minsk. The Dnieper receives from this province two of its most important tributaries—the Pripetz, which comes from Grodno, and the Beresina, which rises in the circle of Desna, and having received several minor streams falls into the Dnieper on the frontier of this province. There are many other rivers of less note. The province has no great lakes.

The climate in winter is so severe that the rivers are every year frozen over for some time; in spring there are frequently hard frosts at night; the summer is hot, and drier in the north than in the south; in autumn the weather is agreeable and not variable, but the night-frosts return in September, and winter begins at the end of October. The disease called 'Plica Polonica' is common.

Agriculture is the chief occupation of the inhabitants, but it is in a most backward state. The grain generally cultivated is rye, of which there is a considerable surplus for exportation. The peasants grow also some barley and oats, and the nobles and great landowners grow wheat. Buckwheat is grown on the heaths. Flax and hemp of excellent quality are important products. There are extensive forests of fine trees, especially fir, which supply good timber for building, planks, and masts, and yield likewise much resin, pitch, and potash. All kinds of game abound in the forests, which contain deer, wolves, bears, lynxes, foxes, beavers, otters, gluttons, ermines, martens, and wild boars. The horses are of the Polish breed, and are very spirited and hardy, but neither handsome nor large. The aurochs, or wild bull, is sometimes met with in the deepest recesses of the forests. Cattle and sheep are bred in great numbers; in general the sheep are of inferior breed, and yield coarse wool. Goats, swine, and bees are kept everywhere. Though the rivers abound in fish, they do not yield enough for the consumption, and great quantities of fish are brought from the interior of Russia and from the Baltic. Polish cochineal is collected, especially in the south, in great quantities, and manna is found in all the fields and meadows. The minerals are lime, marl, and stone for building, but there is no metal except bog-iron.

The domestic industry of the country-people consists in spinning and weaving flax, hemp, and wool, of which they make linen; sail-cloth, and coarse woollen-cloth for the peasantry, but their dwellings are so small that they have scarcely room for a loom. They distil brandy enough for their own consumption. The manufactories are very few in number, and inconsiderable. The chief articles of exportation are square timber for ship-building, masts, spars, planks, pipe-staves, and potash; besides flax, hemp, tow, linseed, corn, honey, wax, cochineal, and cattle. The greater part of the inhabitants are of the Greek Church; but the Catholics are very numerous; and there are also some Protestants. The Tartars have their mosques, and the Jews synagogues. This is one of the most miserable of the former Polish provinces; the towns and villages are in general wretched, chiefly occupied by Jews, who are almost exclusively the shopkeepers, publicans, distillers, and even butchers. The petty nobility are scarcely above the peasants, of whom only the Tartars are reckoned

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free, while the Russniaks, Lithuanians, and gipsies are in the most degraded state of vassalage, which is greatly aggravated by the non-residence of the great landowners.

Minsk, the chief town, in 53° 40' N. lat., 27° 40' E. long., is situated on the river Switocz, one of the tributaries of the Beresina. Like all old Polish towns it is irregularly built, with narrow crooked streets. It has a fine cathedral, a handsome theatre, a gymnasium, and an abbey of the Greek Church. Minsk is the seat of a Greek archbishop and of a Roman Catholic bishop, as well as of the government of the province. There is some trade, manufactures of cloth and leather, and a much frequented fair. The inhabitants number about 24,000.

The other towns are:—*Bobrouisk*, a fortress on the Beresina, with 4700 inhabitants; *Sluzk*, with 5000 inhabitants; *Dawidow*, on the Horyn, with 3500 inhabitants; *Pinsk*, which is surrounded with extensive marshes, and has considerable manufactories of Russian leather, with 4500 inhabitants; and *Borissow*, on the Beresina: population, 3000.

MINSTER. [KENT.]

MINYEH. [EGYPT.]

MIOSEN, LAKE. [CHRISTIANIA; NORWAY.]

MIRAMICHI. [NEW BRUNSWICK.]

MIRANDA. [CASTILLA LA VIEJA; TRAS OS MONTES.]

MIRANDE. [GERS.]

MIRANDOLA. [MODENA.]

MIRECOURT. [VOSGES.]

MIREPOIX. [ARIEGE.]

MIRZAPUR. [HINDUSTAN.]

MISENUM. [NAPLES.]

MISKOLCZ. [HUNGARY.]

MISSIONES. [CORRIENTES.]

MISSISSIPPI (or the "Great Water," as the term signifies in the native language), one of the largest rivers on the globe, which drains, with its numerous branches, a surface of about 1,300,000 square miles, and probably not less than one-fifth of the North American continent.

Its basin extends from 29° to 50° N. lat., and from 77° to 112° W. long. It is widest on the west, averaging from north to south, and west of 90° W. long., about 1200 miles, whilst its average width east of 90° W. long. does not exceed 560 miles. The greatest length of the basin from east to west is near 42° N. lat., where it measures nearly 1500 miles. Its basin comprehends, besides the immense tract of country along its western and north-western border, still in possession of the aboriginal tribes, the territory of Minnesota, which contains its source and head streams; and that of Nebraska; the states of Iowa, Missouri, Arkansas, and Louisiana, on the west; and those of Wisconsin, Illinois, Indiana, Ohio, Kentucky, and Tennessee, on the east of the river. It also contains the larger portion of the state of Mississippi, and parts of Alabama, Georgia, North Carolina, Virginia, Pennsylvania, and New York. The country comprising this basin is described under these several states and territories: in the following article we notice more particularly the valley of the river. The remarkable fortifications and other antiquities found in the valley of the Mississippi are noticed under AMERICA, and will not be further alluded to here: for a full account of them see the large and elaborate work 'Ancient Monuments of the Mississippi Valley,' by E. G. Squier.

The source of this river is a small lake, situated in 47° 10' N. lat., and 94° 54' W. long., called Lake Itasca, about 8 miles long, and about 1500 feet above the level of the sea. From it a stream 10 feet wide and from 12 to 18 inches deep issues in a northern direction, which unites after a circuitous course of 50 or 60 miles with a similar stream from Lake Usawa, some distance west of Lake Itasca. The united stream falls into Lake Travers, which is about 12 miles long from north to south, and 6 miles broad, and is the most northern point attained by the river. Issuing from the eastern side of this lake, the river flows south-eastward to Lake Cass. Lake Cass is 16 miles long, 3000 miles from the Gulf of Mexico, 1330 feet above the sea, and 182 miles from Lake Itasca. From Lake Cass it still runs in an eastern direction to Little Winnipeg Lake, issuing from which it takes a south-eastern course, which it maintains for a considerable distance. Down to the Falls of St. Anthony its course lies through a country studded with lakes, and united with each other by channels full of rapids and small cataracts. The surrounding country consists of an alternation of small eminences and swampy ground. The elevations or ridges are composed of diluvial sand, on which large granite boulders are scattered, and are overgrown with pine-trees. In the swampy ground other trees grow, especially hemlock, elm, and ash, which are covered with moss. In some parts small prairies occur. In other places the river is skirted by narrow strips of alluvial soil, subject to inundation, and in others its bed is already wide enough to form islands, especially above the Big Falls, where twenty islands called the Beaver Islands occur in the space of four miles. Nine miles above the place where the Mississippi is joined by its first great affluent, the Minnesota, or St. Peter's River, which falls into it from the west, occur the largest cataracts in the river, called St. Anthony's Falls. The Mississippi, though considerably narrowed by the rocks, is about 640 yards wide at this point. In the middle is an island about 100 yards wide, and covered with trees. The fall on the eastern side is 230 yards and that on the western 310 yards

wide; and the perpendicular height is 25 feet. Below the falls the river is narrowed to about 200 yards. There is a considerable rapid both above and below the falls, making a total descent of more than 40 feet in three-fourths of a mile. There is a portage around the falls. Boats of 40 tons burden ascend to these falls, more than 2000 miles from the mouth of the river. The Falls of St. Antony may be considered as the point where the Mississippi terminates its upper course.

From the falls to Lake Pepin the river winds through a country of prairies, whose surface is rather undulating than hilly, the elevations being of moderate height, and seldom attaining 200 feet above the level of the water. The river itself is intersected with several small islands; its channel is also impeded by sand-bars, and the current is rapid. At Lake Pepin commence the bluffs, or wall-like high grounds, which generally run parallel to the course of the river, and at some distance from it. Lake Pepin, in most parts, nearly fills up the whole space between the bluffs, which rise about 450 feet above its level. The lake is about 24 miles long, and from 2 to 4 miles wide. The country at the back of the bluffs is rather undulating, and assumes the character of a prairie land, being only wooded in isolated spots. Below Lake Pepin the vale of the Mississippi varies from 3 to 10 or 12 miles in width, except at Rock Island and Des Moines Rapids, where it is only wide enough to receive the volume of the river. At both of these rapids the bed of the Mississippi is contracted to 800 or 1000 yards; while in many places the river occupies half the vale, spreading out to the width of 5 or 6 miles, and appearing to lose itself among numberless islands, between which it runs in narrow channels. Between Lake Pepin and the mouth of the Missouri not less than 640 islands of considerable size have been enumerated, which are formed of the alluvium brought down by the stream, and are chiefly sandy; many of them are covered with a vigorous vegetation. The vale of the river is bounded by bluffs, from 100 to 800 feet high, which are generally abrupt, and often precipitous. These bluffs are intersected by numerous deep ravines and watercourses, which give the country a hilly and broken aspect. On the western side of the river, above the mouth of the Wisconsin, forests cover the high grounds to the distance of 6 or 8 miles from the river: behind them is a prairie region of great extent. The vale itself has a level surface; but in some places, and especially in the vicinity of Lake Pepin, isolated knobs and hills of considerable magnitude frequently occur. The level is covered with an alternation of prairies and forests. The prairies are generally elevated a little above the floods, and richly carpeted with herbage and flowers: the woodlands are subject to inundation, and sustain a dense and heavy growth of trees. Between the Falls of St. Antony and the mouth of the Missouri River the principal affluents of the Mississippi from the west, are the Minnesota, Chippeway, Wapispinicon, Iowa, and Des Moines rivers; from the east it is joined by the St. Croix, Wisconsin, Rock, and Illinois rivers. At the mouth of the Missouri the middle course of the Mississippi terminates.

Below the mouth of the Missouri, the river and the vale through which it flows present different features. The river, though less in width, has a more imposing aspect, flowing with a comparatively gentle course, in one sheet of water, rarely interrupted by islands. The only serious obstruction to navigation occurs about 30 miles above the mouth of the Ohio, where two bars of limestone, called the Big and the Little Chain, which in the low state of the river have little water on them, extend across the bed of the river. The vale widens more and more as it proceeds southward. It consists of an alternation of high lands with an undulating surface, and of low bottoms partly covered with swamps. Both are of great extent, and are generally opposite to each other, so that when the high ground approaches the banks of the river on one side, extensive bottoms skirt them on the other side.

The most northern of these bottoms, called the American Bottom, begins 4 miles above the mouth of the Missouri; it is noticed under ILLINOIS. Opposite to it, on the west side of the Mississippi, the high lands approach the river, presenting abrupt declivities, prominent points, and in many places perpendicular precipices from 100 to 200 feet high. The country at the back is partly wooded and partly prairie. These high lands continue along the right bank of the Mississippi somewhat farther than Cape Girardeau, north of which place they attain their greatest elevation, which is 350 feet. Between the mouth of the Kaakaakia River and that of the Ohio are also high lands of inferior elevation; but about 30 miles above the mouth of the Ohio the banks begin to be low, and continue so to its very mouth. The soil consists of recent alluvium, and is covered with dense forests: the width is about 10 miles.

This low alluvial tract continues south of the mouth of the Ohio for about 17 miles, where the river runs at the base of the Iron Banks, which rise nearly perpendicularly about 180 feet above the level of the river, and are annually wearing away by the action of the water, which sets strongly against them. From the Iron Banks southward, bluffs less than 200 feet high skirt the banks of the river as far south as 35° N. lat., with the exception of a swampy bottom-ground about 30 miles long and from 3 to 4 miles wide; it is covered with high trees, and hence called Wood Swamp. South of it some bluffs attain an elevation of 200 or 300 feet, especially the four hills called the Chickasaw Bluffs. The country opposite to this high bank, on the

west side of the river is low. It begins on the north, about 13 miles below Cape Girardeau, with the Tywapatia Bottom, a fine tract of wooded country, and extends to the mouth of the St. Francis River, a distance of more than 160 miles in a straight line. Its width is more than 50 miles, and its western side is skirted by bluffs of moderate elevation, which, for a considerable distance, run along the western banks of the Black and White rivers, nearly parallel to the Mississippi. This extensive tract is traversed in all its length by the St. Francis River, which is joined not far from its source by an offset of the Mississippi, by which, during the time of the freshets, a great volume of water is poured towards the middle of the plain, so that the greatest part of it is inundated, and a considerable extent is a swamp all the year round. This swampy tract, extending on both sides of the St. Francis River, is called the Great Swamp. The country is unhealthy, and covered with a continuous forest.

On the south, this low region borders on another, which is not much more elevated, but is less subject to inundations. The whole tract extending from the mouth of the St. Francis River to 33° N. lat., is quite level, without any elevations, and does not form bluffs along the banks of the Mississippi. It is covered with recent alluvium, and mostly wooded. Its width is above 30 miles; and on the west it borders on a more elevated hilly region covered with pine-forests. Opposite to this region, on the left bank of the Mississippi, is an immense swamp, known as the Mississippi or Yazoo Swamp, which extends from opposite the mouth of the St. Francis River to that of the Yazoo River, a distance of nearly 170 miles, with a width of about 50 miles in the middle, where it is widest, and an average breadth of about 30 miles. This low region is generally swampy and impassable, and it is only along the watercourses which flow through it that the banks are dry for several months in the year. During the floods it is described as assuming the appearance of a 'marine forest.' On the east it is bordered by a much more elevated tract, which is generally wooded on its margin, but farther inland extends in wide and open prairies.

South of the mouth of the Yazoo River, the bluffs on the eastern bank of the Mississippi re-appear, and extend south of Baton Rouge (about 30° 30' N. lat.). In some places very narrow tracts of low inundated ground separate the bluffs from the bed of the river, but their base is generally washed by its waters. As in the other bluff region, the surface of this tract is intersected by numerous watercourses, which give to it the aspect of a hilly country; but at the distance of about 10 miles from the river it extends in an undulating plain. The bluffs themselves rise rather steeply from 100 to 200 feet above the bed of the river. Opposite to this bluff region is another low and generally swampy tract, which is traversed by the Texas River, another outlet for the superabundant waters of the Mississippi during the floods. It is from 20 to 30 miles wide, beginning north of 33° N. lat., and extending southward to the mouth of the Red River and the efflux of the Atchafalaya branch of the Mississippi, where it is connected with the extensive low regions of the delta. This region, as well as the delta itself, which constitutes the most southern portion of the vale of the Mississippi, is more particularly described under LOUISIANA. The low and swamp lands of the lower course of the Mississippi are estimated to cover an area of 40,000 square miles. About 16,000,000 acres of land are now annually overflowed, which, if the overflows could be prevented, might be converted into excellent cotton and sugar plantations. By an Act of Congress, the swamp-lands along the Mississippi have been ceded to the respective legislatures of the states within which they lie, in order to make grants to parties willing and able to reclaim them; and the state legislatures have passed acts, varying in their provisions, but all having this object in view.

The Mississippi falls into the Gulf of Mexico by six mouths, after a course of about 3200 miles; but if we consider the Missouri as the principal river, the whole course is 4349 miles. Through the delta the Mississippi varies in width from 2200 to 5900 feet; the average width is about 3200 feet. The depth varies from 66 to 135 feet. There is no tide in the Mississippi. During high floods the surface of the river is, according to Mr. Ellet, from 18 to 20 feet higher than a great part of the actual delta.

Under LOUISIANA we have noticed the steady though gradual extension of the delta of the Mississippi from the enormous quantity of solid matter brought down and held in deposit in its waters. From this cause the channels by which it enters the Gulf of Mexico are continually shifting their position, and the bars at their mouths are also constantly changing. In the report of Mr. Ellet, who was directed by the central government to survey the delta of the Mississippi, it is stated that the South Pass, which had 10 feet over its bar in 1772, has at the present time its entrance almost closed up by a spit of sand. The North-East Pass, which in 1772 had a depth of 14 feet of water, has now only 8 feet, while the bar itself has advanced about 6 miles. On the other hand the Pass à l'Outre, a subdivision of the North-East Pass, which in 1838 had a depth varying from 6 to 8 feet on the bar, has since been increasing in depth, and has now a minimum of 10 feet on its bar. "This Pass has accordingly taken the place of the ancient favourite entrance to the Mississippi for all inward and outward bound vessels of less than 18 feet draught, when the wind favours that route, and steam can be obtained to help them through." The main entrance

to the Mississippi however, Mr. Ellet says, is now the South-West Pass, which has an actual depth of 15 feet on its bar, and is the channel used by all the ships of heavy draught which ascend to New Orleans. Occasionally vessels drawing 18 feet of water, and in rare instances 19 feet, pass to and from the sea by this channel. This pass has also much increased in depth, and the channel has shifted considerably, within the last few years.

Rivers draining the Basin of the Mississippi.—The rivers which fall into the Mississippi from the east drain a country which is cultivable to a great extent. The most northern on this side is the St. Croix River, which joins the Mississippi between the mouth of the Minnesota and Lake Pepin. It rises in Upper St. Croix Lake, near the head-waters of Bois-Brulé River, which falls into Lake Superior, and there is a portage of two miles between the streams. It flows in a general southern direction, receives numerous tributaries, and about 40 miles from its source enters the Lower Lake St. Croix, which is 30 miles long, and from one to three miles wide. The river is navigable for steam-boats about 80 miles, and for row-boats nearly 200 miles.

The Wisconsin or Ouisconsin River rises in Vieux Desert Lake, near the north-eastern boundary of the state of Wisconsin, and flows thence through the mountain region called the Wisconsin Hills, in a general south direction for about 250 miles to Portage, where it turns to the south-west and afterwards west, and falls into the Mississippi near the Prairie du Chien, after a further course of 110 miles. Its banks present much very striking scenery; and when the projected improvements in its navigation are carried out, it appears likely to form an important channel of communication.

The Rock, Illinois, and Kaskasia, the next in succession of the more important tributaries which join the Mississippi from the east, are noticed under ILLINOIS.

The Ohio, the largest and most important of the eastern affluents of the Mississippi, is formed by the confluence of two rivers, the Alleghany and Monongahela. The Alleghany rises in several branches on the west side of the Alleghany Mountains, south of the eastern extremity of Lake Erie, at an average elevation of 1300 feet above the sea, and 700 feet above the lake. The general direction of its course is first south-west and then south, and after a course of about 300 miles (for 250 miles of which it is navigable by boats of 100 tons), it unites with the Monongahela, the sources of which river are nearly 300 miles south of those of the Alleghany. The Monongahela rises in Virginia, in the Laurel ridge of the Appalachian Mountains, and runs northward: its course is about 280 miles; and it is navigable at full water by large boats for 100 miles. These two rivers, uniting at Pittsburg, form the Ohio, whose course from this place to its junction with the Mississippi, in a direct line, is 600 miles, but measured along its windings 959 miles. At Pittsburg its mean level is 700 feet above the tides of the Atlantic Ocean, and at its junction with the Mississippi about 275 feet. Except in high floods the current of the Ohio is gentle and nearly uniform. About 300 miles from its mouth, near the town of Louisville in Kentucky, are some rapids, where the river falls 22 feet in two miles. During high water boats pass over these rapids; but a canal is carried round them which admits the passage of the largest steam-boats. About 15 miles from the mouth of the Ohio a limestone bar extends across the river, called the Grand Chain. This place is impassable for boats of considerable burden in the lowest state of the water. With the exception of these two places, the Ohio has sufficient water during a part of the year to float vessels of 300 tons burden as far as Cincinnati, and boats may ascend it to Pittsburg, and also both of its upper branches for a considerable distance above their confluence. The Ohio runs in a valley, inclosed on both sides by ranges of hills, called River Mountains, which vary considerably in height, but are generally between 300 and 500 feet; their ascent is sometimes rocky and abrupt, but often sufficiently gradual to admit cultivation to the summit. The hills diminish in altitude as they approach the rapids of Louisville, where they rise again to a height nearly equal to what they attain at the head of the river; and from thence they gradually lower, until they disappear a little above the confluence of the Ohio and Green rivers. At this point a low country commences, which extends to the mouth of the Ohio, a distance of more than 150 miles: the river also increases in width and diminishes in velocity. The low country on its banks is thickly wooded, and its soil is a deep alluvium. The low hills which bound the alluvial district are at some distance from the stream. As the country is higher along the banks of the river than at the base of these hills, the inundations to which this district is subject leave extensive pools of stagnant water, which during the summer send forth noxious exhalations. The whole vale of the Ohio is well wooded.

The rivers which fall into the Ohio from the north, as the Big Beaver, the Muskingum, Sciota, Miami, and Wabash are navigable in the greatest part of their course. The Muskingum and the Sciota have acquired great importance, owing to the Erie and Ohio Canal, which runs chiefly along their courses, beginning on the Ohio at Portsmouth and terminating on the southern shores of Lake Erie at Cleveland. The largest of these affluents is the Wabash, which has a course of above 500 miles, and is navigable for more than 400 miles, though it is obstructed by some rapids about 70 miles from its junction with

the White River. It also connects the Ohio with Lake Erie by means of the Wabash and Erie Canal.

The rivers which join the Ohio from the south, especially the Kenhawa, Big Sandy, Licking, Kentucky, Green, Cumberland, and Tennessee are mostly navigable for steam-boats, to a great distance from their mouth from February to June. During the remainder of the year it is only the lower parts of these rivers that are navigable for boats of moderate burden. Of these rivers the Tennessee is noticed under TENNESSEE, and all the others under KENTUCKY.

South of the mouth of the Ohio no considerable river joins the Mississippi from the east, except the Yazoo, which falls into it five degrees of latitude farther south. Its course is about 160 miles, and it is navigable for boats in the spring season for 50 miles from its mouth.

The rivers which join the Mississippi from the west have a much longer course, as most of them rise on the declivity or near the base of the Rocky Mountains, but the country through which they flow is very thinly inhabited. The most northern is the Minnesota, or St. Peter's River, which rises on the northern border of the basin of the Mississippi, in Big Stone Lake, and runs in a very winding course about 300 miles south-east and 200 miles north-east, though its whole course in a straight line does not exceed 275 miles. During the vernal floods it is navigable for boats to Big Stone Lake, there being but two obstructions that are impassable on such occasions, namely, at Patterson's Fall, nearly 300 miles, and at Great Portage, about 400 miles from its mouth; at both of which places there are portages. The Iowa and the Des Moines are noticed under Iowa.

The largest of the affluents of the Mississippi is the Missouri; and as the sources of the Ohio drain the most north-eastern corner of the basin of the Mississippi, so those of the Missouri drain its most north-western angle. It rises in three branches, called the Jefferson, Gallatin, and Madison, in which all the waters descending from the eastern declivity of the Rocky Mountains between 42° and 49° N. lat. unite. From their junction in 45° 10' N. lat. 100° W. long., the stream is known as the Missouri. Its course is first north and then east, and after a course of 400 miles it meets the Yellow Stone River, which rises between 43° and 44° N. lat.; but its southern affluents rise as far south as 42° N. lat. The course of the Yellow Stone is first north-north-east and then east, approaching gradually to the Missouri, which it joins after a course of 300 miles. The Yellow Stone joins the Missouri about 1200 miles from the source of the latter river, and 1880 miles from its mouth: steam-boats ascend to the confluence of these rivers. These two rivers at their junction may each be compared with the Rhine in length and volume of water: the Yellow Stone River is 300 yards wide near the junction. But though the numerous affluents which the Missouri receives in its upper course bring down a large body of water from the Rocky Mountains (portions of which are covered with snow, if not all the year round, at least for the greater part of it), the Missouri loses much of this water during its long course through a sandy desert; and though it is joined in the lower part of its course by some large rivers, it is stated that the volume of water which it pours into the Mississippi is not greater than what it contains immediately after its junction with the Yellow Stone. From their junction the Missouri continues its eastern course, declining however a little to the south, until it reaches the Mandan villages, where it is deflected by the Coteau des Prairies to a southern course for above 400 miles, until it unites with the White River. In this course it is joined by several affluents from the west; but though some of them flow from 200 to 300 miles, none of them increases the volume of its water to any amount, as their course lies through the sandy desert. From its junction with the White River the Missouri again flows eastward for 200 miles, and then to the east-south-east for 300 miles, to the mouth of the Kansas River, which is its largest tributary, with the exception of the Platte, or Nebraska, River, which joins it about 180 miles farther up. [KANSAS.] After the junction with the Kansas River it runs still 250 miles, turning a little to the south of east, and joins the Mississippi near Belle Fontaine, after a course of about 3098 miles. The Missouri is a very rapid river in the whole of its course, but it contains no falls except about 520 miles from its source, in the vicinity of the Rocky Mountains, where it flows over several ledges of rocks for above 16 miles, in the course of which distance it descends 357 feet. The falls, known as the Grand Falls, are said to be next in grandeur of appearance among American cataracts to those of Niagara. The lowest and principal fall has a perpendicular descent of 87 feet. In the lower part of the course the vale of the Missouri is wide and very fertile, and it is generally covered with a deep and heavy growth of timber and underwood for about 350 miles from its mouth. There are however prairies of considerable extent, even in this part of its course. Higher up the prairies within its vale become more numerous and extensive, till at length all woodlands disappear, except the small tracts at the points formed by the windings of the river.

The tributaries of the Missouri generally have their mouths blocked up with mud, which arises from the floods of these rivers taking place earlier in the season than those of the principal river, whose course is much farther north. The flood of the tributaries carries off the mud which is deposited at their mouth; but on the rising of the Missouri, which is caused by the melting of the snow, its floods back

up the waters of the tributaries, which are loaded with mud, to considerable distances up these rivers, and in this stagnant state of the waters the mud at their mouth is deposited. It is only in spring-time and before the time of flood in the principal river that these tributaries have any considerable depth of water at their mouths.

Below the mouth of the Missouri the Mississippi is joined by no considerable river from the west for about 400 miles, until south of 35° N. lat. it receives the St. Francis River. The White River follows next, but after a considerable interval. Both of these rivers are noticed under ARKANSAS STATE. The Arkansas River joins the Mississippi a little farther south: the vale traversed by it, and its great tributary the Canadian River, are noticed under ARKANSAS RIVER. The last considerable river which falls into the Mississippi from the west is the Red River, which is noticed under LOUISIANA.

The Mississippi is at its lowest level in autumn and winter, from October to January. It begins to swell in February, when the freshets come down the Red River. These freshets last for two or three months; but in March and April they are increased by the floods of the Arkansas, and nearly at the same time by those of the Ohio. Before they subside, in May, the great floods of the Missouri and Upper Mississippi commence, and continue to maintain the high level of the water to the middle of July, or even to the end of that month. From the middle of August to October the river is low. In the month of October its level is somewhat increased by the autumnal freshet of the Ohio, but it soon subsides again.

The inundations extend only over the wide bottoms adjacent to the banks of the Mississippi, and differ in all of them, both as to time and duration. The American Bottom, and the somewhat elevated country between the mouth of St. Francis River and 33° N. lat. are inundated only for a few weeks in April and May, and the water rises only a few feet. These tracts are accordingly cultivable. But a large proportion of the other bottoms is inundated for several weeks, and the low country of the delta even for six months, and exactly at the season which alone is favourable to cultivation, from March to August. These extensive tracts are therefore swampy. The water rises on them from 8 to 20 feet. As noticed above, the central and state legislatures hold out great inducements to private individuals to attempt their reclamation. The banks, or levées, which are constructed along the Mississippi for the purpose of restraining the overflow of the river, are said by Mr. Ellet to extend at the present time along both sides of the river from below New Orleans to the mouth of the Arkansas, a distance of nearly 700 miles.

We have already spoken of the depth of water over the bars at the mouths of the Mississippi, and along the delta. As far as the town of Natchez, in Mississippi, few obstructions to navigation occur, the river being so deep that sunken trees and sand-bars are too far below its level to cause any danger to the vessels. From Natchez upwards the depth of water lessens considerably to the confluence of the Missouri, and the impediments become more numerous and difficult. Still the main channel, though intricate in many places, has always a sufficient depth of water for boats of 5 or 6 feet draught to ascend to the mouth of the Ohio. Between the mouth of the Ohio and that of the Missouri, during the low state of the water, the navigation is obstructed by shoals and the two ledges of rocks called the Big and Little Chain, and only vessels drawing about three feet of water can be used. Between New Orleans and the mouth of the Missouri the average velocity of the current is only 4 miles per hour, in a moderate state of the water; but when the river is high its velocity is considerably increased. Above the mouth of the Missouri the Mississippi is generally much less rapid, and does not exceed 2 or 2½ miles per hour; but its navigation is more intricate and difficult on account of the numerous islands and shoals. This upper part of the river is also generally blocked up with ice during the winter season. The navigation of the Missouri is much more difficult and intricate, on account of its numerous sand-bars and islands, and more dangerous on account of the frequency of sunken trees and rafts, locally known as 'snags and sawyers.' During the high floods (from March to July) there is a sufficient depth to admit boats of almost any burden; but during the remainder of the year it can hardly be called navigable, except for boats drawing no more than two or three feet. The average velocity of its current, in a middling state of water, may be estimated at 4½ miles per hour, which in time of freshets is accelerated to 5 or 5½ miles per hour. The river is usually blocked up with ice during the winter.

The Ohio has a much more gentle current. Its average velocity, in a moderate state of the water, may be estimated at 2½ miles per hour, and in a high state at 3 miles per hour. The obstructions to its navigation are sand-bars, some few sunken trees, and rapids, to which we must add the intricacy of its channel in several places. During a middle and high state of water these obstructions entirely disappear, and an accelerated current is the only difficulty to be encountered. There are large masses of floating ice during part of the winter. The season in which the navigation of this river can be depended upon commences between the middle of February and the 1st of March, and continues to the latter end of June. An autumnal freshet usually takes place in October or November, and the river is again navigable for a few weeks. During the remainder of the year only boats from 50 to 75 tons burden can be used, and they meet with numerous obstructions in their progress from the lowness of the water.

The city of New Orleans carries on an extremely active trade with the countries which skirt the lower course of the Mississippi, and particularly with those on both sides of its great tributary, the Ohio, and its numerous affluents, as well as a very extensive foreign commerce. As the goods are exclusively conveyed by water, the number of steam and other vessels which navigate the Lower Mississippi and Ohio is very considerable. For ascending the river steam-boats have nearly superseded all other vessels: but for descending it large flat-bottomed boats termed 'arks,' which are not intended to return, are extensively used. There are said to be at the present time considerably over 300 steam-vessels, many of them of heavy burden. The Mississippi is navigable by steam-boats for 2000 miles from its mouth; the Missouri 1500 miles; the Ohio 1000 miles; the Arkansas 600 miles; the White River 500 miles; and the other larger tributaries for distances varying from 60 to 300 miles from their confluence with the Mississippi.

(Lewis and Clarke, *Travels to the Source of the Missouri*; Pike, *Exploratory Travels through the Western Territories of North America*; James, *Account of Major Long's Expedition from Pittsburg to the Rocky Mountains*; Keating, *Narrative of Major Long's Expedition to the Sources of St. Peter's River*; Schoolcraft, *Narrative of an Expedition through the Upper Mississippi to Itasca Lake*; *Statistical Gazetteer of the United States*; Ellet, *The Mississippi and Ohio Rivers*.)

MISSISSIPPI, one of the United States of North America, lies between 30° 13' and 35° N. lat., 88° 10' and 91° 36' W. long. It is bounded E. by the state of Alabama, N. by that of Tennessee, N.W. by Arkansas, from which it is divided by the Mississippi River, S.W. by Louisiana, and S. by Louisiana and the Gulf of Mexico. The area is 47,151 square miles. The population in 1850 was 606,526, of whom 930 were free-coloured persons, and 309,878 slaves: being 12'86 inhabitants to the square mile. The federal representative population according to the Census of 1850 was 482,574, in which number three-fifths of the slaves are included. This, according to the present ratio of representation, entitles the state to send five representatives to Congress. To the Senate, like each of the other United States, Mississippi sends two members.

Surface, &c.—The surface of this state is for the most part low, with a general slope towards the south and south-west. The coast, which extends for 60 miles along the Gulf of Mexico, has no harbours which admit vessels of large size: the only harbours of any consequence are those of Mississippi City and Shieldsborough. About 6 or 8 miles from the shore is a chain of low sandy islands, which form the Bay of St. Louis on the west and Pascagoula Sound on the east. These islands produce nothing but pines and coarse grass, and are of little value: one or two of them are however said to be eligible stations for ocean steamers.

The shores near the mouths of the Pascagoula and Pearl rivers are low and sandy, and in many places interrupted by swamps; these tracts are therefore unhealthy. In the space between the two rivers there is a higher and more healthy tract of land, extending for a distance of nearly 24 miles, which is resorted to by the inhabitants of New Orleans and Lower Louisiana generally during the sickly season. The country which stretches northward from this coast to 31° N. lat. is low, but undulating, and the soil is uniformly sandy and covered with extensive pine-forests, which on the Pearl River contain many large trees. The country between 31° and 32° N. lat. includes by far the best portion of the state. The tract contiguous to the Mississippi River consists of numerous hills, very irregularly scattered over the surface, and rising from 50 to 150 feet above the narrow low tract which in some places lines the course of the river. The hills, the base of which is washed by the Mississippi, are called Bluffs, and this region is generally called by that name. It extends from 10 to 25 miles inland, and is of great fertility, being covered with forests of oak, sweet gum, poplar, tulip-tree, ash, maple, and hickory, with a few pine-trees. Farther east the country rises imperceptibly higher, and extends in wide plains. The numerous watercourses which occur on these plains have furrowed their outer edges along the Mississippi, and imparted to them a hilly aspect, together with a great degree of fertility. The surface of the plains themselves generally consists of an unproductive sand, and is covered with the long-leaved pine; but the continuity of the level ground is interrupted by the bottoms, which extend along the numerous affluents of the Mississippi, Pearl, and Pascagoula rivers, are several feet lower than the surface of the plains, and from half a mile to three miles wide. These bottoms have a rich and productive soil, covered with a fine growth of trees, such as gum, laurel, oak, and cotton-tree, intermixed in the more elevated parts with lofty canes; the lower parts are mostly cypress swamps. The Bluff region continues northward to the mouth of the Yazoo River. The plains which are covered with pine-forests and furrowed by streams, extend somewhat farther north, where they begin to be intersected by rolling prairies, which increase in number and extent as we proceed farther north, and occupy the greatest portion of the country lying north of 33° N. lat. These prairies are covered with grass during the greatest part of the year, though the country is dry, and suffers from want of water. East of this prairie region extends a level but very fertile tract on the upper course of the Tombigbee, which resembles the bottoms in fertility, but is more extensive. In the northern districts is a range of hills of moderate elevation, well

wooded, but devoid of undergrowth, terminating on the Mississippi River with what is called the Fourth Chickasaw Bluff, which extends 10 miles along the river, is from 60 to 100 feet above its bank, and is stated to be fertile to a considerable distance from the river. Between these hills and the Walnut Hills, with which the southern bluffs terminate in about 32° 20' N. lat., a distance of more than 170 miles, the country is occupied by an immense swamp, produced and fed by the inundations of the Mississippi. Some parts of this low region become dry towards the end of the year, but the others are a perpetual swamp. This tract extends to the banks of the Yazoo River, and is in the widest part (near 84° N. lat.) above 50 miles wide. Much of this swampy tract has been within the last 16 years taken into cultivation with remarkable success.

Hydrography and Communications.—Nearly every part of Mississippi is amply provided with running streams. The Mississippi forms its western boundary for 530 miles, following the windings of the river. [MISSISSIPPI RIVER.] For more than three-fourths of this distance, from the northern boundary of the state to Vicksburg, the configuration of its banks admits of no port along this river, and below that the only one of much value is Natchez.

Several of the secondary and smaller affluents of the Mississippi rise and terminate in this state. The most important are the Homochitto, the Big Black, and the Yazoo rivers. The *Homochitto* runs about 70 miles, and is navigable to some distance from its mouth for small craft. The *Big Black River* rises near the north-eastern end of the state, flows about 200 miles, mostly in a south-western direction, and is navigable by steam-boats for 50 miles from its mouth. The *Yazoo River* rises in three branches in the range of hills which traverses the northern part of the state, flows mostly with a south-south-western course for more than 200 miles, of which 50 miles are navigable by large steam-boats, and falls into the Mississippi 12 miles above Vicksburg. Not far from its mouth it unites with *Falser River*, that branch of the Mississippi which leaves the great river south of the Fourth Chickasaw Bluff, and traverses the swampy region. The *Bayou Pierre* is another of the affluents of the Mississippi which belong to this state. The *Pearl River* rises near the centre of the state, and runs first south-west, and afterwards south-south-east for about 250 miles. It falls by several branches into the Rigolets, or straits which unite Lake Pontchartrain with Lake Borgne. It is navigable for boats for nearly 150 miles, but its entrance does not admit vessels which draw more than 5 feet: below 31° N. lat., the Pearl River divides this state from Louisiana. The *Pascagoula*, which waters the south-eastern part of the state, is formed by the junction of the Chickasaw and the Leaf rivers, and flows south by east for 60 miles into Pascagoula Sound, opposite Cuerno or Horn Island. Near its outlet it is joined by a considerable tributary, the Dog River, which runs parallel to it. The *Pascagoula* is navigable by vessels drawing 6 feet of water to a distance of 50 miles from its mouth, but the estuary into which it falls only admits vessels drawing 4 feet of water. In the north-eastern districts are a part of the Tombigbee [ALABAMA] and the Tennessee rivers. [TENNESSEE.]

Mississippi is tolerably well provided with carriage roads; but is behind most of the states in respect to railways. At the present time the completed lines in the state do not amount to 100 miles in length. The chief completed line is one from Vicksburg past the capital to Brandon, 60 miles, with a short branch to Raymond. There are other lines projected and in progress, which will ultimately traverse the state north, south, east, and west, and place it in connection with the railways and ports of the neighbouring states; but the only portion in actual operation is the West Feliciana, which unites the south-western angle of Mississippi with Louisiana.

Geology, &c.—With the exception of a small space in its north-eastern corner, the state belongs entirely to the Cretaceous and Tertiary systems. The banks of the Mississippi are throughout formed of the more recent tertiary deposits, consisting of sandy and clayey strata, containing enormous quantities of various fresh-water shells, and rising at times into cliffs, or bluffs, 100 and 200 feet high. These strata are celebrated also for the numerous bones of the mastodon, megatherium, elephant, and other gigantic fossil animals, which are found in them. On the east these later deposits are throughout the state bounded by a band of earlier tertiary strata, chiefly greensands and marls of the eocene period, which enlarges as it proceeds southward, the southern portion of the state being wholly occupied by it. This again is bounded on the north-east by the greensands and chalky marls of the Cretaceous system, which occupy almost the whole of the remainder of the state, except, as above-mentioned, on the north-eastern boundary, where occur small portions of the Devonian and Carboniferous basins of Tennessee.

Climate, Soil, Productions.—Along the southern coast the winters are mild, frost being of rare occurrence, and owing to the prevalence of the sea breeze from the Gulf of Mexico, the heat of the summer is less oppressive than in many of the states farther north. The Bluff region along the Mississippi River differs considerably in climate. The summer is in general very hot and the heat oppressive, whilst the winters are colder than might be expected. Every year the thermometer sinks to about 25°, and occasionally so low as 18°; and rises to 94° Fabr., and occasionally much higher. North of 31° N. lat. the climate is less mild, and the sugar-cane is no longer cultivable.

As will be readily understood from our notice of the surface and geology of the state, there is an extensive prevalence of sandy and dry marly soil in the upper parts of the state. The valleys or bottoms however, even in these parts, have generally a deep rich soil, though they suffer from the vast quantities of sand brought down from the uplands during floods. The banks of the Mississippi and the southern bottoms are very rich, and the extensive swamps are remarkably fertile. Cotton is the staple product; the quantity annually raised being about equal to that of Georgia, and only exceeded by that of Alabama. Maize is also grown in very large quantities: oats, rye, and wheat are cultivated, but to a much less extent, especially the two last. Rice is cultivated somewhat largely in some of the swampy districts. Tobacco is grown, but now only to a comparatively small extent. The culture of the sugar-cane has been revived within the last ten or twelve years, and sugar again figures among the more important products of the state. The principal vegetable is the sweet-potato; but the common potato, peas, and beans, and most of the vegetables of Europe are also grown. The fruit of both the south and north of Europe ripen here. Plums, peaches, and figs are abundant; oranges ripen only in the southern districts.

The prairies, especially in the Tombigbee district, form an excellent pastoral country. Cattle are very numerous, though generally of a small size. The horses are also of a small breed. Sheep are much more numerous than formerly, and wool is becoming an important article of commerce. Swine are raised in great numbers. Wild animals, such as pumas, wolves, bears, and wild cats still abound. Alligators occur in the Mississippi as far north as the mouth of the Arkansas River, and in some of the smaller rivers. Most of the rivers abound in edible fish. Parroquets are seen as far north as Natchez; wild turkeys and pigeons abound.

Mississippi is essentially an agricultural state, and the manufactures are confined to the requirements of an agricultural state. Grist- and saw-mills, tanneries, &c., are numerous. The state has no direct foreign commerce. Its products are carried by river to New Orleans and Mobile for exportation to foreign countries, and its imports are received through the same channels. The shipping employed in this river-trade mostly belongs to Alabama and Louisiana, the entire tonnage belonging to Mississippi not exceeding 2000 tons.

Divisions, Towns, &c.—Mississippi is divided into 59 counties—36 in Southern and 23 in Northern Mississippi. Jackson is the capital, but Natchez is much the largest and most populous town in the state; indeed all the others are comparatively small places.

Jackson, the capital, on the right bank of the Pearl River, 32° 23' N. lat., 90° 8' W. long., 1035 miles S.W. from Washington: population, 1881. The town is regularly laid out, contains a handsome state-house, governor's house, and other state buildings, churches, &c.; but is a place of little trade.

Natchez, on the Mississippi, 87 miles S.W. from Jackson, population 5239, is the chief port and trading depôt in the state. The commercial part of the city is built on the margin of the river, but the remaining and larger portion occupies the summits of the bluffs, about half a mile from its bank. The upper part of the city has broad streets, and some well-built houses. It contains a court-house, jail, churches, &c. The manufacture of oil from cotton seeds is carried on. Cotton is forwarded from this port in very large quantities.

Vicksburg, on the Mississippi, 41 miles W. by N. from Jackson, population 3678, is the next most important port in the state. Like Natchez the commercial part of the city is built close to the river, and the other part on the bluffs above it. There is an excellent harbour for steam-boats with a good pier; and the Vicksburg, Jackson, and Brandon railway affords considerable facilities for the transit of goods from the interior. Very large quantities of cotton are sent from Vicksburg to New Orleans. *Grand Gulf*, 55 miles W.S.W. from Jackson, population 613, is the only other port-town on the Mississippi belonging to this state.

The only other places which call for mention are—*Columbus*, on the left bank and at the head of steam-boat navigation on the Tombigbee, population 2611, the largest town in Northern Mississippi, and the centre of a good cotton district; *Port Gibson*, population 1037, a place of some trade on the Bayou Pierre, 62 miles W.S.W. from Jackson; and *Woodville*, the capital of Wilkinson county, 105 miles S.W. by S. from Jackson: population, about 900.

History and Constitution.—Mississippi was discovered in 1542 by De Soto; but the first settlements were formed in the neighbourhood of Natchez by some Frenchmen about 1700, but they did not thrive. When the country was ceded to the British in 1763, some respectable settlements were founded. In 1800 all that is now comprised in Mississippi and Alabama was formed into a territory by the name of Mississippi Territory. In 1817 this territory was divided into two portions:—the western was admitted as a member of the Union, and the present constitution was formed. The legislative body consists of a Senate consisting of 32 members, elected for four years; and a House of Representatives, consisting of not less than 36 nor more than 100 (at present 92) members, elected for two years. The right of voting is vested in every free white male citizen of the United States 21 years of age. The revenue for 1851 was 221,200 dollars; the expenditure for the same period 223,637 dollars. The acknowledged

debt of the state (Mississippi being one of the repudiating states) is 7,971,707 dollars.

MISSOURI. [MISSOURI.]

MISSOURI, one of the United States of North America, lies between 36° 30' and 40° 30' N. lat., 88° 55' and 95° 38' W. long. It is bounded E. by the states of Kentucky and Illinois, from which it is divided by the Mississippi River; N. by Iowa; W. by the Nebraska and Indian territories; and S. by the state of Arkansas. The area is 65,037 square miles, or nearly 7000 square miles larger than England and Wales. The population in 1850 was 682,044, of whom 2618 were free-coloured persons, and 87,422 slaves; being 10.49 inhabitants to a square mile. The federal representative population, according to the Census of 1850, was 647,075, in which number three-fifths of the slaves are included. This, according to the present ratio of representation, entitles the state to send seven representatives to Congress. To the Senate, like each of the other United States, Missouri sends two members.

Surface; Hydrography; Communications.—The state is divided by the river Missouri into two parts, having marked differences of surface and general character. The southern part consists of an undulating country rising into mountains as it approaches the Ozark range. That portion of the state north of the Missouri is a rolling prairie or level country. Looking at these districts more in detail, and beginning with the extreme south-east, we find that an extensive bottom-land extends along the Mississippi, commencing on the north at Cape Girardeau, north of the mouth of the Ohio River, and extending southward to that of the Arkansas. It includes many large swamps, which are rendered almost impenetrable by a dense growth of trees, mostly cypress. The most extensive of these swamps, called the Great Swamp, commences a few miles south of Cape Girardeau, and passes southward to the mouth of the river St. Francis, penetrating far into the state of Arkansas. Of this swamp above 100 miles belong to Missouri. Within the bottom are numerous lakes, lagoons, and marshes; but it contains also many isolated tracts of considerable extent, which are elevated above the range of the highest floods. The bottom, almost throughout its whole extent, supports a dense and heavy growth of timber of excellent quality, but little use is made of it. Since the earthquakes of 1811-12 this tract has been inundated and uncultivated; but it is capable of being reclaimed, and has a very fertile soil.

The high grounds along the Mississippi begin a few miles below Cape Girardeau, and extend up to the mouth of the Missouri River. The highest part lies between St. Genevieve and the mouth of the river Maramec, where the banks of the Mississippi, composed of solid masses of limestone, rise in some places 360 feet above the water. This undulating country extends westward to the river Gasconade, occupying the basin of the Maramec River as far south as the lead-mining district. It is diversified with prairies and forests, the lower lands being well wooded, but the high grounds very thinly; scarcely a shrub is seen on the natural meadows. This is the most populous section of the state.

Between the rivers Gasconade and Osage, both of which are affluents of the Missouri River, a range of low hills approaches the Missouri, rising from 150 to 200 feet above the level of its water. They are thinly wooded, and constitute the most northern offset of the Ozark Mountains, a region of which the undulating country between Cape Girardeau and the river Gasconade may be considered as the most northern and lowest portion. This elevated tract covers more than half of the state south of the Missouri River. The surface is extremely broken and mountainous. The hills and mountains, which rise from 500 to more than 1000 feet above their bases, are exceedingly numerous, but do not form continuous ranges, being divided into knobs and peaks with rounded summits, and presenting perpendicular cliffs and abrupt precipices of sandstone. They are covered with a poor soil, which is generally shallow, and overgrown almost exclusively with pitch-pine, cedar, and bramble. Along the numerous rivers which originate in this mountain tract are bottoms of moderate extent and tolerable fertility, but they are subject to excessive floods. The country west of this mountain region, especially the basin of the Osage River, is chiefly a rolling prairie, diversified with forests, which however are only of moderate extent, and produce little or nothing but stunted timber. North of this region, along both sides of the Missouri, extends a rich alluvial bottom, which is probably more fertile, and better settled than any other part of Missouri, with the exception of the country near the confluence of the Missouri and Mississippi; but a large part of it is still in a natural state, and covered with a deep and heavy growth of timber.

In the country north of the Missouri, which comprehends about one-third of the state, the surface is generally undulating or level. The bottoms along the Missouri and Mississippi are remarkably fertile, especially those of the Missouri. The country between these two large rivers is diversified by the broad valleys of rivers and creeks, and intervening tracts of undulating upland, which are united with the valleys by gentle slopes. The woodlands occur only upon the margins of the watercourses, and the uplands are extensive prairies completely destitute of a timber growth. These prairies occupy at least nineteen-twentieths of the whole region, and comprehend some of the best land in the state.

The Mississippi washes the eastern boundary for 470 miles, and the Missouri traverses the state from west to east, with a winding course of above 400 miles. [MISSISSIPPI.] Some of their affluents require notice. White River and Francis River are described in ARKANSAS, State of. *Maramec River*, which enters the Mississippi about 20 miles below St. Louis, has a course not exceeding 180 miles; but it is important as flowing from the lead district and affording navigable channels to a fertile and improving tract of country: steam-boats ascend it for 60 miles. *Salt River*, which joins the Mississippi about 60 miles above the mouth of the Missouri, runs more than 200 miles with rather a gentle course, and through a tolerably fertile bottom. *Cuivre*, or *Copper River*, joins the Mississippi about 40 miles above the Missouri. Of the rivers which join the Missouri, the Gasconade and Osage are the principal. The *Gasconade* is rather small, and runs about 120 miles; but derives importance from the supplies of timber and planks it furnishes to the country below. The *Osage* rises in the plains between the Arkansas and Kansas rivers, and flows in a general direction east-north-east about 400 miles, joining the Missouri near the centre of the state. About the head-waters is some of the best cotton land in the state; and on its northern bank is a tolerably wide bottom with an alluvial soil of considerable fertility. It is 375 yards wide at its mouth, and navigable by steam-boats of light draught for 200 miles. The Grand Chariton and Nodaway rivers are affluents of the upper course of the Missouri; all of them are navigable for some distance.

Missouri is very badly provided with means of internal communication. Good carriage-roads even are few in number, and not well maintained; and in railways Missouri is one of the worst furnished of the United States. The only line in operation is one from St. Louis to Franklin, a distance of 37 miles; but two or three important trunk lines, with short subsidiary lines, have been authorised by, and received grants of land and credit from the state legislature. These projected lines are in all about 1200 miles in length. One of these, called the St. Louis and Pacific, of which the line in operation is a portion, is to proceed from St. Louis westward to the western boundary of the state, about 300 miles, whence it is to be continued ultimately to San Francisco in California. Another about 280 miles long is called the Hannibal and St. Joseph line, and is to connect the Mississippi and Missouri rivers from the places so named. The others are short lines.

Geology, Mineralogy, &c.—Eruptive and Metamorphic rocks occupy the central portion of the mountainous country south of the Missouri; and surrounding them is a broad band of Lower Silurian strata, consisting of various sandstones, and limestones. Skirting the Silurian rocks on the east is a narrower belt of light gray and very fossiliferous limestones, bearing much resemblance to the Silurian limestones, but belonging to the Devonian formation. Lower Carboniferous, or mountain limestone strata, occur along the banks of the Mississippi and Missouri throughout the state. Upper Carboniferous strata, or coal-measures, forming a portion of the great coal basin of Illinois, Missouri, Michigan, and Arkansas, occupy a large part of the northern half of Missouri. In the south-eastern corner of the state, are some cretaceous rocks; and recent deposits occur along the Mississippi from about the mouth of the Ohio downwards.

Missouri is extremely rich in minerals. The broken and mountainous country described under Southern Missouri, the igneous and palaeozoic district just noticed, is the great metal region of Missouri: it is said to occupy an area of 18,000,000 acres. The most valuable of the metals of Missouri perhaps is iron, which occurs in various forms and almost unlimited quantities. The ore occurs most frequently as hematite, and micaceous ochre and red oxides. Two mountain peaks, the Iron Mountain and Pilot Knob, which are about 6 miles apart, and form the eastern extremities of the Ozark Mountains, are said to contain an almost inexhaustible amount of micaceous ore, which yields 60 per cent. of pig iron. Lead is also found over a large portion of the metal region; the carbonate is said to yield 72 per cent., and the sulphuret from 66 to 80 per cent. of lead, and to contain 6 per cent. of silver. The lead-mines have been long worked, but during the last few years less than formerly, owing to the migration of the miners to California and Australia. Copper is found in the south and west of this region. The ore occurs most commonly in the form of pyrites; but oxides and carbonates are also met with. It is found in combination with lead, iron, nickel, cobalt, and manganese. Zinc, antimony, and tin are also found.

The coal-measures, as above indicated, occupy a very large area, mostly north of the metal region, but intruding into it. The coal is chiefly bituminous, but cannel coal is found in a few places. The coal-field of Missouri has been as yet but little worked; but, taken in connection with the immense iron-beds just noticed, its value may be said to be almost inappreciable.

Building stones of various kinds abound. Porphyries and sienites well fitted for ornamental and architectural purposes, are numerous in the mountain districts. Marbles of various kinds are plentiful. Limestones of excellent texture are quarried in many places. Sandstones are very common, but generally of a coarse and friable kind. Sands of excellent qualities for glass-making; kaolin or porcelain clay; pipe-clay; clays suitable for earthenware and pottery; and brick-earth are abundant. Gypsum is found in some places. Saltpetre occurs

in caverns near the Maramec, Gasconade, and one or two other rivers in vast quantities.

Climate, Soil, and Productions.—The climate of Missouri is cold and very variable. The winters are severe and long. The Mississippi can in some years be crossed on the ice at St. Louis, and sometimes it is frozen for two months and more. The summers are often hot, but sudden and frequent changes of temperature occur during the north-western winds, whose chilling blasts are experienced over all the countries west of the Alleghany Mountains, but in this state are felt in all their force. They are however dry and bracing.

The soil in most of the uplands is formed by the disintegration of sandstones and limestones; and the richer bottom lands suffer from the sand washed down by the floods. A good deal of the sandy land is mainly adapted for the growth of the yellow pine, of which it supports a vast quantity of great value for lumber. The arenaceous soils in the rolling prairies of the north are often very fertile; and so are the soils formed from the decomposition of the carboniferous limestones, especially in the vicinity of streams. In the southern districts along the river bottoms where clay abounds, an excellent soil is found.

Maize, wheat, oats, and tobacco appear at the present time to form the staple productions of Missouri. Rye, barley, and buckwheat are raised, but not very largely. Cotton was formerly grown in three or four places, but its culture appears to have been nearly abandoned. Hemp and flax are cultivated successfully. A little rice is grown. Both common and sweet potatoes are grown in considerable quantities. The peach, nectarine, apple, pear, and most of the other fruits of England ripen well; and orchard products generally are raised extensively. Nearly all the ordinary vegetables likewise flourish. The wild grape abounds in parts. Some wine, and a considerable quantity of maple sugar are made. The river bottoms are heavily timbered; oak, ash, elm, hickory, white and black walnut, and cotton wood being the most abundant. On the barrens are extensive forests of yellow pine.

The prairies form excellent pasture-grounds, and cattle abound where the bottoms and prairies are near one another. In summer the cattle feed on the grass of the prairies, and in winter on the cane and rushes of the alluvial soil. Horses are numerous. Sheep have largely increased in number during the last few years; and a great deal of attention is now given to the preparation of wool, which has come to be regarded as one of the staples of the agriculturists of Missouri. Swine are very numerous, being readily raised in the forests. A very large quantity of bees-wax and honey is annually obtained. Wild animals still abound. Buffaloes, elk, and deer are met with in large herds on the prairies east and west of the Ozark Mountains. The animals which are killed for their skins only are beavers, otters, bears, foxes, cats, racoons, martens, and lynxes: but the fur trade has decreased of late years.

The manufactures of Missouri are at present very limited. There are only three or four cotton- and woollen-factories, and those not on a large scale in the state. Iron-works are increasing in number and importance. Grist- and saw-mills, tanneries, and the establishments connected with an agricultural and pastoral country are numerous. The manufactures are chiefly concentrated around St. Louis. The mining capabilities of the state are only beginning to be developed; and their progress will probably for some time be slow.

Commerce is almost limited to the export of maize, tobacco, and live stock, with hemp and flax in a moderate quantity; and lead and copper. Furs still form an article of export. The imports chiefly consist of manufactured goods, with some colonial goods and wine. In 1852 they amounted in value to 914,826 dollars. The shipping owned in the state amounts to about 25,000 tons, all employed in the river trade, and nearly all propelled by steam. Ship-building is carried on to a small extent.

Divisions, Towns, &c.—Missouri is divided into 100 counties. Jefferson City is the capital of the state; but St. Louis is the commercial centre, and by far the most populous city in the state. Few other towns are of much extent; the following are the more important: the population is that of 1850:—

Jefferson City, the capital, is built on elevated ground on the right bank of the Missouri, 137 miles from its mouth, in 38° 36' N. lat., 92° 8' W. long., 980 miles W. from Washington: population about 2500. Some of the state buildings are handsome, and the little city has a pleasing appearance. It is a place of inconsiderable trade.

St. Louis, a city, port of entry, and the commercial and manufacturing centre of Missouri, stands on the Mississippi, 20 miles below the mouth of the Missouri, and 157 miles W. from Jefferson. The rise of this city in population has been remarkably rapid. It contained only 1600 inhabitants in 1810; 16,469 in 1840; and 77,860, of whom 40,114 were natives of foreign countries, in 1850, when it had risen to be the eighth city in the Union in regard to population. By a state census, taken in 1852, the population was found to be 94,819. It is now the principal port on the Mississippi after New Orleans, and the commercial depôt of the Upper Mississippi, Missouri, and Ohio rivers with their tributaries. As a manufacturing town it possesses extraordinary advantages, lying as it does in close contiguity to unbounded supplies of coal and iron, and of scarcely inferior supplies of lead, copper, and other metals. The city, which stretches for two miles

along the Mississippi, reaches back nearly three miles, and is built on uneven ground, rising in terraces from the river. In the older part the streets are narrow; but in the newer portion they are wide, regularly laid out, and lined with numerous handsome public, commercial, and private edifices. Besides the county buildings, court-house, jails, market-houses, &c., there are a large and costly Roman Catholic cathedral, and fifty other churches; numerous academies and schools; literary institutions; hospitals, orphan asylums, and other charitable institutions; a United States arsenal, barracks, land-office, &c.; several very large commercial and trading establishments; and numerous hotels on a scale of great magnificence. The St. Louis University, which in 1854 had 10 professors, 225 students, a library of 15,000 volumes, a museum, &c., is situated about 3 miles from the city. Twenty-four daily and weekly newspapers, of which three are in German, are published in the city. Iron-foundries, machine tool, and agricultural implement factories, ship-yards, glass-works, cigar and tobacco factories, distilleries, and numerous other large manufacturing establishments are carried on. The amount of tonnage which entered in 1852 was 681,252 tons; the value of goods imported was 954,946 dollars. St. Louis is the starting point for the extensive system of railways projected and commenced in the state.

Boonville, on the right bank of the Missouri, 52 miles N.W. from Jefferson, population 2326, is a regular station for steam-boats, and a place of considerable business. *Hannibal*, on the Mississippi, 90 miles N.E. from Jefferson, population 2557, is one of the chief of the rising commercial towns of the state. *Herculaneum*, on the Mississippi, 102 miles E. by S. from Jefferson, population about 800, is the chief port-town of the lead-mining district. Several lead- and shot-factories are in the vicinity. *Independence*, about 4 miles S. from the Missouri River, and 129 miles W. by N. from Jefferson, population about 1000, is noteworthy as a great station for the overland emigration to the Pacific, and consequently a place of considerable local consequence. *Potosi*, the capital of Washington county, 80 miles S.E. from Jefferson, population about 1000, is the chief town of the lead- and iron-mining district, though at present an inconsiderable place. *Saint Charles*, on the left bank of the Missouri, 87 miles N. by E. from Jefferson city, population about 2000, lies on the line of route from St. Louis to the northern part of the state, and is a place of much business. It contains several churches, academies, and schools, a convent, St. Charles's Methodist College, and numerous mills and factories.

Government, &c.—The constitution is framed on that adopted on the admission of the state into the Union. By it the right of voting is vested in every free white male citizen of the United States 21 years of age. No law can be passed for the emancipation of slaves without the consent of their owners; or to prevent the importation of slaves with their owners, or otherwise than as merchandise. Free negroes and mulattoes are not to be permitted to come into the state. The legislature, styled the General Assembly, consists of a Senate of not less than 14 nor more than 33 (at present 18) members, elected for four years; and a House of Representatives, consisting of not more than 100 (at present 49) members, elected for two years. The governor is elected for four years. The annual revenue of the state is about 325,000 dollars; the ordinary expenditure is under 200,000 dollars; but the legislature of 1852-3 authorised an extraordinary expenditure of 107,000 dollars. The state debt is 802,000 dollars.

History.—Although this country for more than a century had been visited by the French from Canada, no settlement was formed before 1763. In that year St. Genevieve was founded, and in 1764 St. Louis. But these and a few other places remained in a backward state up to 1803, when the United States got possession of the country, which was then comprehended in LOUISIANA. The following year the state now called Louisiana was separated from it, and the present state became the territory of Missouri. In 1821 it was admitted into the Union, as an independent state.

(*Statistical Gazetteer of the United States*; Warden, *Account of the United States*; James, *Account of an Expedition to the Rocky Mountains, performed by Major Long*; Pike, *Exploratory Travels through the Western Territory of North America*; Lewis and Clarke, *Travels to the Source of the Missouri*; Marcou, *Geological Map of the United States*.)

MISTLEY. [ESSEX.]

MITAU, or MITTAU. [COURLAND.]

MITCHAM. [SURREY.]

MITCHELDEAN. [GLOUCESTERSHIRE.]

MITCHELDEVER. [HAMPSHIRE.]

MITCHELSTOWN, county of Cork, Ireland, a market- and port-town, and the seat of a Poor-Law Union, is pleasantly situated near the river Funcheon on a small tributary, in 52° 17' N. lat., 8° 17' W. long., 30 miles N.N.E. from Cork, 129 miles S.W. by S. from Dublin. The population in 1851 was 3091. Mitchelstown Poor-Law Union comprises 18 electoral divisions, with an area of 86,957 acres, and a population in 1851 of 27,269. The town consists of an extensive square, containing some well-built houses, and of two principal streets with several smaller streets intersecting these at right angles. It contains the parish church—a handsome building, enlarged in 1830, a spacious Roman Catholic chapel, a National school, and a town library. There are also a court-house, fever hospital, dispensary, bridewell, and Union workhouse. Mitchelstown College, a group of neat buildings

with a chapel attached, was founded by the Earl of Kingstown for the support of 12 males and 16 females of his decayed Protestant tenantry. Each receives 40*l.* a year, besides a house and garden. On one side of the square is the gateway to the extensive demesne of Mitchelstown, the seat of the Earl of Kingstown, proprietor of the town. The mansion with its towers and battlements forms a striking object. It was erected in 1823 and is the largest and finest of the modern castles in Ireland. Petty sessions are held monthly. Fairs are held January 10, March 25, May 23, July 30, November 12, and December 2.

Mitchelstown and Kingstown caves are two series of beautiful stalactite caverns under small limestone hills about 8 miles from Mitchelstown on the Dublin road. One series discovered in 1833, is 870 feet in extreme length by 572 feet in breadth.

MITFORD, a hundred in Norfolk, which, with the adjoining hundred of Launditch, has been constituted a Poor-Law Union. Launditch hundred is bounded N. by the hundred of Gallow, E. by the hundred of Eynsford, W. by the hundred of Fræbridge Lynn, and S.W. by South Greenhoe hundred. Mitford hundred is bounded W. and S. by Forehoe hundred, S.E. by the hundred of Wayland, and N.E. by that of Launditch. The two hundreds include 53 parishes, with an area of 90,213 acres, and a population in 1851 of 25,701. Mitford and Launditch Poor-Law Union comprises 60 parishes and townships, with an area of 102,352 acres, and a population in 1851 of 29,383.

MITYLENE. [LEBOS.]

MOBILE. [ALABAMA.]

MOCHA, or MOKHA, the chief port of Yemen in Arabia, on the shores of the Red Sea, a little north of the straits of Bab-el-Mandeb. It is a walled but mean and dirty town of about 10,000 inhabitants.

MODBURY. [DEVONSHIRE.]

MODENA, DUCHY OF, a state of North Italy, extending north and south of the central ridge of the Apennines, is bounded N. by the Po and a part of the duchy of Mantua, which lies on the south bank of the Po; W. by the duchy of Parma; S. by Tuscany; and E. by the Papal States. This, which is the duchy of Modena proper, must be distinguished from the states belonging to the Duke of Modena, which include several districts and principalities south of the Apennines, and extending to the coast of the Mediterranean, namely, Garfagnana Estense, Lunigiana Estense, and the duchy of Massa and Carrara.

The territories of the Duke of Modena comprise seven provinces, which, with their respective areas and populations, are as follows:—

Provinces.	Area in Square Miles.	Population in 1850.
Modena	612	204,491
Reggio	732	161,646
Guastalla	122	50,859
Frignano	406	57,450
Garfagnana	209	37,897
Massa-Carrara	245	56,867
Lunigiana		17,248
Total	2,326	586,458

Lunigiana is part of the valley of the Magra, which was called in the middle ages *Lunigiana*, from the ancient town of *Luna*, an Etrurian city on the left bank and near the mouth of the Magra, which continued to exist throughout the empire, and was famous for its quarries of white marble. The Normans plundered it in 857. In the time of Dante, who calls it *Luni*, it had fallen into complete decay. The ruins that still remain on the site are of Roman buildings. The port of *Luna* was still more celebrated than the town; it is now called the *Bay of Spezia*. The *Gulf of Spezia* is about 7 miles in depth and 3 miles in width; it contains several minor ports, among which *Porto Venero* and *Lerici* are respectively the ancient *Portus Veneris* and *Portus Eriæ*. The gulf however belongs to *Sardinia*. The bishops of *Luna* had feudal jurisdiction over part of this mountainous and sequestered region, and the marquises *Malaspina* over the other. It is now divided between the states of *Modena*, *Sardinia*, and *Tuscany*. The part belonging to *Modena*, called *Lunigiana Estense*, consists of 10 communes. *Fosdinovo*, a small place near the *Magra*, is its capital. *Carrara* and *Massa* are noticed in separate articles. [CARRARA; MASSA.]

A large portion of the territory belonging to the Duke of Modena is covered by the chain of the Apennines and its offsets, which slope gradually towards the north; about one-third of it forms part of the great plain of *Lombardy*, and is very fertile; and a small strip extends along the shores of the Mediterranean. Of the mountainous part some valleys are tolerably fertile, but the greater part is either rocky or covered with oak- and chestnut-trees. The highest summits of the Apennines are—*Monte Cimone* (7000 feet) and *Camporaghena* (6500 feet). The snow generally leaves these summits in the month of April. The principal rivers of the Modenese territory, which have their sources in the Apennines and run into the Po, are:—1. The *Secchia*, which rises in the Apennines of *Camporaghena*, and flowing through the whole length of the province of *Modena*, passes near the capital, receives many affluents, supplies numerous canals for irri-

gation, and, after a winding course of nearly 100 miles, enters the Po within the borders of *Mantua*. 2. The *Panaro* rises at the foot of *Mount Cimone*, and running in a parallel direction to the *Secchia*, waters the eastern part of the duchy, and then enters the territory of *Ferrara*, where it falls into the Po. Both these rivers are navigable for boats from the neighbourhood of *Modena* to the Po. 3. The *Crosetolo* rises in one of the lower ridges of the Apennines, passes near *Reggio* and by *Guastalla*, below which it enters the Po. The *Tassoni Canal*, which communicates with the *Crosetolo*, is about 14 miles long. In the plain of *Modena*, Artesian wells have been in use from time immemorial; many of them are of very considerable depth, and the supply of water is abundant. South of the Apennines the *Magra*, which rises in the Apennines north of *Pontremoli*, crosses the Modenese territory of *Lunigiana*, and enters the sea west of *Carrara*. Two smaller streams, the *Avenza* and the *Frigido*, water the territory of *Massa* and *Carrara*. The *Serchio* is the river of *Garfagnana*. Two roads cross the central Apennines, and make a communication between the northern and southern divisions of the Modenese states; one road leads from *Reggio* to *Fivizzano* and *Aulla* in the valley of the *Magra*; another from *Modena* to *Castelnuovo* in *Garfagnana*, and from thence to *Massa*. A railway has been projected from *Bologna* to *Piacenza*, through *Modena*, *Reggio*, and *Parma*, with a branch from *Reggio* to *Mantua*, which is already connected by railroads with *Venice* and *Milan*.

The chief products of the country are wheat, maize, rice, pulse, hemp, oil, wine, silk, and fruita. *Polenta*, or pudding of Indian corn, flour, beans, and chestnuts in the mountain districts south of the Apennines, are the principal articles of food for the peasantry. Horned cattle and swine are exported in considerable numbers. The other articles of exportation are fruit, silk, corn, marble, brandy, wine, and vinegar. The manufactures of the duchy consist of woollens, silks, gauzes, paper, straw-hats, glass, and pottery. There are abundant sources of petroleum in several parts of the duchy.

The government of *Modena* is the most absolute in Italy, there being no provincial states of any kind. The duke is assisted in the administration by a council of state, consisting of 14 members. The revenue in 1851 amounted to 8,418,622 francs, the expenditure to 8,728,133 francs. The judicial establishment consists of two supreme courts, one at *Modena*, and the other at *Massa*; and two secondary courts, one at *Modena*, and the other at *Reggio*. There are also justices of the peace in every canton or district, each of which embraces several communes. For municipal matters, each commune has its *podestà*, or *sindaco*, and a municipal council. For religious purposes the Modenese possessions are divided into five bishoprics—*Carpi*, *Guastalla*, *Massa-Carrara*, *Modena*, and *Reggio*. The military force numbers 3500 men, or including three regiments of reserve 14,656 men. These corps are recruited by voluntary enlistment with bounty money. There are two urban battalions, which act as a kind of civic guard, one at *Reggio* and the other at *Modena*, besides a *guardia nobile*, or body guards, who attend the sovereign and his family. There is a military academy at *Modena*.

The establishments for public instruction consist of a lyceum at *Modena*; colleges for the study of law and medicine at *Modena*, *Reggio*, and *Mirandola*; schools of philosophy, at *Carpi*, *Correggio*, and *Castelnuovo*, the chief town of *Garfagnana*; besides several colleges for boarders kept by the *Jesuits* and other religious orders.

The principal town is *Modena*, the Roman *Mutina*, which is situated on the ancient *Æmilian* road, 59 miles N. by W. from *Florence*, 21 miles W. from *Bologna*, in 44° 37' N. lat., 10° 57' E. long., in the centre of a wide plain between the *Panaro* and the *Secchia*, and has about 27,000 inhabitants. The town is well and regularly built, and has several handsome churches and palaces. Most of the streets have arcades on each side. The ducal palace is a magnificent princely residence; it contains a fine gallery of paintings by the great masters, and a valuable library of 90,000 printed volumes and 3000 manuscripts. The cathedral, a gothic building of the 11th century, is remarkable chiefly for its lofty square marble tower. In this tower is kept the *Bucket* taken from the *Bolognese* by the Modenese in 1325, and which forms the title of *Tassoni's* '*Secchia Rapita*' (*Rape of the Bucket*). The other remarkable buildings are, the theatre, the college, the barracks, the hospital, and the old citadel, which, with its *Place d'Armes*, covers nearly one-third of the site of the city. *Modena* is surrounded by fortifications of no great strength, but forming fine walks and affording peculiarly beautiful views of the Apennines. A canal uniting the *Secchia* with the *Panaro* affords a line of boat navigation between *Modena* and the Po. The manufactures comprise broadcloth, sail-cloth, silks, hats, leather, and glass.

Reggio, the *Rhegium Lepidi* of the Romans, a walled town in the midst of a fine and fertile plain, 15 miles W. from *Modena*, is well-built; it has a fine cathedral, several handsome churches, a lyceum, a theatre, an old castle, in which *Ariosto* was born, some manufactories of linen and silks, and nearly 20,000 inhabitants. There is a public library of 30,000 volumes and a museum in the town. Among the industrial products are silks, canvass, articles of horn, wood, and ivory. The trade of *Reggio* in agricultural produce and cattle is very considerable. A fair is held during the whole month of May. *Mirandola*, an old looking walled town, in a low unhealthy flat in which

rice is grown, has several churches, and about 4600 inhabitants. *Finale*, near the borders of Ferrara, has 6000 inhabitants. *Correggio*, the birthplace of the great painter Antonio Allegri: population, 3500. *Concordia*, a walled town on the right bank of the Secchia, has 3500 inhabitants. *Carpi*, on the high road from Modena to Mantua, has 5000 inhabitants, a magnificent cathedral, an old castle, and some silk factories.

The territory of the Guastalla originally belonged to the dukes of Mantua. On the death of the last duke in 1746 it came into the hands of the emperor who gave it to the Duke of Parma in 1748. Napoleon I. gave it to his sister Pauline, and subsequently incorporated it with the so-called kingdom of Italy. On the downfall of Napoleon in 1815 Guastalla was annexed to Parma, and given together with this duchy to the ex-empress Maria Louisa. The ex-empress died in 1847, when the duchy of Guastalla with certain districts on the right bank of the Enza, came into the possession of the Duke of Modena by virtue of a convention with the Duke of Parma, who received certain other territories in exchange. The city of *Guastalla*, an episcopal and walled town, is situated near the right bank of the Po, in 44° 54' 57" N. lat., 10° 39' 54" E. long., 16 miles N. from Reggio, and has about 10,000 inhabitants. The town is well-built; it has a citadel, a cathedral, a public library of 12,000 volumes, and several churches. The chief manufactures are silk goods and flannel. The French defeated the Imperialists under the walls of Guastalla in 1734. The Austrian general Brown took the city from the Spaniards in 1748.

In consequence of a revolt of his subjects (March 23, 1848) the Duke of Modena withdrew from his states. A provisional government was appointed, and a Sardinian force calling itself a 'liberating army' occupied the country, for the purpose of annexing it to Piedmont. After the capitulation of Milan to the Austrians [MILAN], the Sardinians evacuated the Modenese territories. An Austrian force then entered and restored the duke to his states.

MÖDLING. [ENS, LOWER.]

MÖERIS, LAKE. [EGYPT.]

MŒSIA, the name of a province of the Roman empire, extending north of the range of Mount Hæmus, the modern Balkan, as far as the Danube, and eastward to the Euxine, and corresponding to the present provinces of Servia and Bulgaria. Its boundaries to the west were the rivers Drinus and Savus, which divided it from Pannonia and Illyricum. Strabo (vii. 295) says that the old inhabitants of the country were called Mysi, and were a tribe of Thracians, and that they were the ancestors of the Mysi of Asia Minor. The Romans first invaded the country under Augustus (Dion, cap. 51), and it was afterwards made into a Roman province, and divided into Mœsia Superior, to the west, between the Drinus and the Cæsus, or modern Iaker, and Mœsia Inferior, extending from the Cæsus to the Euxine. Being a frontier province of the empire, it was strengthened by a line of stations and fortresses along the south bank of the Danube, of which the most important were Axiopolis (Rassova), Durostorum, Nicopolis ad Istrum, Viminacium, and Singidunum. In the interior of the country were the towns of Naisus (the modern Nissa), Sardica, and Marcianopolis; and on the coast of the Euxine, Odessus, or Odysus, near the modern Varna, Dionysopolis, and Tomi, the place of Ovid's exile and death. A Roman wall was built from the Danube to the Euxine, from Axiopolis to Tomi, as a security against the incursions of the Scythians and Sarmatians, who inhabited the delta of the Danube.

The conquest of Dacia by Trajan removed the frontiers of the empire farther north, beyond Mœsia; but after the loss of that province, about A.D. 250, Mœsia became again a border province, and, as such, exposed to the irruption of the Goths, who, after several attempts, crossed the Danube and occupied Mœsia in the reign of the emperor Valens. The Moso-Goths, for whom Ulphilas translated the Scriptures, were a branch of Goths settled in Mœsia. Some centuries later the Bulgarians and Slavonians occupied the country of Mœsia, and formed the kingdoms of Bulgaria and Servia.

MOFFAT. [DUMFRIESHIRE.]

MOGADORE. [MAROCCO.]

MOGULBUNDY. [CUTTACK.]

MOHACS. [HUNGARY.]

MOHILEV, a government of European Russia (in the division called West Russia), lies between 53° 5' and 55° 10' N. lat., 28° 50' and 32° 40' E. long. It is bounded N. by Vitepsk, E. and S. by Smolensk and Tchernigov, and W. by Minsk. The area is 18,724 square miles, and the population in 1846 was stated to be 931,300. The surface is level, yet there are fewer lakes, marshes, and fens than in most of the adjoining provinces; the soil is generally fertile. The principal river is the DNIÉPER, which enters the government on the north-eastern boundary and runs west as far as Orscha, whence it flows south to its junction with the Beresina; from this point it forms the south-western boundary of the government. Of the feeders of the Dnieper the principal are, on the left bank, the Swinaja, the Bolotinka, and the Sodscha; on the right the Druéz. Most of the lakes are in the north-west part.

The climate is drier and milder than in Vitepsk; and apples and pears, which there thrive only in sheltered spots, succeed here without any particular care.

The chief occupations of the inhabitants are agriculture and the

breeding of cattle. The soil is equally favourable to both, and if the higher lands produce the finest corn, the low grounds on the banks of the rivers have the most nutritious pastures; but both these branches of rural economy are in a very backward state. About 4,000,000 chetwerts of corn are grown annually, a quantity which allows of a large surplus for exportation. Rye, barley, oats, some wheat, and buckwheat in the most sandy soils are the chief bread-stuffs grown. Hemp and flax are staple articles and cultivated for exportation. Peas and beans are cultivated almost exclusively on the lands of the nobles. Almost all the landowners have kitchen-gardens and orchards; in the latter all kinds of fruit are cultivated, chiefly however apples and cherries. Hops and poppies are grown in the gardens. The fescue grass (*Festuca ovina*, Linn.), here called manna, is found in the fields and in some parts is gathered. In the forests and low grounds there are prodigious quantities of bilberries. The forests are a great source of wealth to the province; in particular the banks of the Sodscha and the Druéz, and the whole circle of Tsoherikof, are covered with the finest fir, which are partly felled for the Black Sea fleet, and floated down the Dnieper. The pastures are very good. The horses and cattle are of inferior breed. The sheep have been improved by crossing the Saxon sheep. Deer and other large game are rather scarce; hares and feathered game of all kinds abound. The fisheries are productive; the Dnieper and Sodscha yield annually above 40,000 poods (a pood is 36 lbs.) of sturgeon and shad, the whole of which is consumed in the province. The chief mineral is bog-iron. The industrial establishments are chiefly tanneries, distilleries, glass and iron-works, and paper-mills. The trade consists in the exportation of corn, flour, flax, hemp, linseed, timber, cattle, honey, wax, wool, tallow, hides, and some manufactures. The principal trading towns are Mohilev and Matislawl. The inhabitants are for the most part Russniaks or Little Russians, who speak a dialect which is a mixture of Polish and Russian. Jews and Gipsies are pretty numerous. The religion of the majority of the inhabitants is that of the Greek Church. The Greek churches have an archbishop, to whose diocese Vitepsk also belongs, and who resides at Mohilev; the Roman Catholics are also numerous, and have an archbishop resident at Mohilev. The Jews have synagogues and schools in almost all the towns, and have got into their hands almost all the retail business, the sale of brandy, and some of the trades or professions.

Mohilev, the capital of the province, is a considerable town, situated in 53° 50' N. lat., 30° 25' E. long., in a pleasant well-cultivated country on the left bank of the Dnieper, and has 21,080 inhabitants. It is the residence of the civil and military governors, of a Greek archbishop, and of the Catholic primate of Russia and Poland. The city is surrounded by a decayed rampart, and is divided into four quarters. Many of the streets are broad and paved, and in the centre of the city there is a large square. The public edifices are numerous, and some of them rather splendid, as the church of St. Joseph. The town has a theological college, a gymnasium, and an infirmary; some manufactories of ironware and leather; and a considerable trade in corn with Odessa by the Dnieper.

The other principal towns are *Matislawl*, 5000 inhabitants; *Dubrowna*, 4000 inhabitants; *Skiof*, a fortified place, 2500 inhabitants; and *Orscha*, 4000 inhabitants.

MOHILL, Leitrim, Ireland, a market and post-town and the seat of a Poor-Law Union, is situated in 53° 58' N. lat., 7° 50' W. long., distant 9½ miles E. by S. from Carrick-on-Shannon, and 92½ miles N.W. by W. from Dublin. The population in 1851 was 1223. Mohill Poor-Law Union comprises 23 electoral divisions, with an area of 92,956 acres, and a population in 1851 of 31,724. The parish church stands on the site of an abbey said to have been founded in 608. In the town are a Roman Catholic chapel, a Methodist chapel, a fever hospital, dispensary, and Union workhouse. Petty sessions are held monthly, and fairs 15 times a year. About a mile south of the town is Lough Rynn, on the shore of which is a lodge of the Earl of Leitrim.

MOHILLA. [COMORO ISLES.]

MOIRA. [DOWN.]

MOISDON. [LOIRE-INFÉRIEURE.]

MOISSAC. [TARN-ET-GARONNE.]

MOKSOBO. [BIRMA.]

MOLA. [BARI, TERRA DI.]

MOLD, the county town of Flintshire, a market-town, and municipal and parliamentary borough, in the parish of Mold, is pleasantly situated on the right bank of the river Alen, in 53° 10' N. lat., 3° 7' W. long., 191 miles S.W. from London. The population of the borough of Mold in 1851 was 3432. It contributes to the Flint district in returning one member to the Imperial Parliament. The living is a vicarage in the archdeaconry and diocese of St. Asaph.

Mold is called in Welsh 'Yr Wyddgrug,' a lofty hill, which designation it owes to the Bailey Hill, an eminence partly natural and partly artificial, on which formerly stood an ancient castle. In the time of William Rufus the castle was in the possession of the English. In 1144 this castle was stormed by the Welsh under their prince, Owen Gwynedd, and razed. It was afterwards rebuilt, and repeatedly taken in the contests between the English and the Welsh. Of the castle no part remains; but the moats which encompassed it may still be traced. The town contains some good houses. The church is of

the perpendicular style, and is a handsome edifice. It contains some good monuments, and in the churchyard is the grave of the painter Wilson. Methodists, Independents, Baptists, and other Dissenters have places of worship. There are National schools and a savings bank. A county hall, in which the assizes are held, has been recently erected. A county court is held in the town. A large market-house has been lately built; the market-days are Wednesday and Saturday. There are four annual fairs. A branch of the Chester and Holyhead railway to Mold, 18 miles long, quits the main line not far from Chester.

MOLDAU. [AUSTRIA; BOHEMIA.]

MOLDAVIA, one of the two Danubian principalities under the sovereignty of Turkey and the protectorate of Russia, is situated between 45° 25' and 48° 18' N. lat., 25° 10' and 28° 30' E. long. It is bounded E. by the Russian province of Bessarabia, from which it is separated by the river Pruth; S. by the Danube and Wallachia; W. by Transylvania; and N. by the Austrian crownlands of Bukovina and Galicia. Its greatest length from south to north, between the Pruth and the Danube, is about 200 miles; its general breadth between the Pruth and the crest of the Carpathians is about 90 miles, but to the north of 47° 30' the width hardly exceeds 50 miles. The area is about 17,000 square miles; and the population is stated at 1,254,447.

The Danube, which touches only a small part of Moldavia, receives within the limits of the principality the rivers Sereth and Pruth. The *Sereth* rises in the Bukovina, to the south-east of Czarnowicz, and runs first eastward, then to the south, entering Moldavia on the north-west in the district of Suchava. Thence the course of the river is towards the south, first between ridges of mountains and hills, and then for several miles above its mouth in the Danube, through wide marshy plains, into which many lateral valleys, some of them of considerable extent, open. The Sereth receives the drainage of all the west and centre of the principality. Its principal feeders are the Suchava, the Moldava (from which the province is named), the Bistriz, the Trotus, the Milkov (which flows past Fokshani, and separates Moldavia from Wallachia), the Busco (which rises in the Busa Pass of the Carpathians, and flows entirely within Wallachia, first towards the south-east, then to the north-east to its junction with the Sereth), and the Birlat, which carries into the Sereth the drainage of a long central valley that commences to the west of Jassy. The length of the Sereth is about 200 miles. It is navigable for boats. Its valley is the best corn district in Moldavia. A long wooded offshoot of the Carpathians, called the Strunga Mountains (the ancient Bastarnic Alps), extends all through the principality, first south-eastward, and then southward, terminating in the plain above the junction of the Birlat with the Sereth, and forming the watershed between the Sereth and the Pruth. This latter river forms part of the northern and the whole of the eastern boundary of Moldavia; its basin comprises only a narrow strip of land in Moldavia south of 47° N. lat., but to the north of that parallel, from the neighbourhood of Jassy, the level land and the slope of the Carpathians drained by the Pruth is of considerable extent. A few miles above its junction with the Danube the Pruth sends off an arm into Moldavia which forms the lake Pralitz. Between this lake and the Danube the town of Galatz is situated. The Pruth is navigable; its banks are in parts marshy and unhealthy. The Danube touches Moldavia only on the southern frontier for about 12 miles, between the mouth of the Sereth and the Bessarabian town of Reni.

The Carpathians extend along the western frontier of Moldavia, and separate the principality from Transylvania. These mountains send out offsets into the interior of Moldavia, which decline in height as they advance to the banks of the Sereth and Pruth, where they terminate in hills covered with vineyards. Moldavia is divided into Upper Moldavia, or *Tzara-de-Susa*, which is subdivided into 6 districts, and Lower Moldavia, or *Tzara-de-Shoes*, which is subdivided into 7 districts. Each district is governed by an officer called *Ispravniks*. The districts, with their chief towns and population in 1850, are given in the following table:—

	Districts.	Chief Towns.	Population in 1850.
Upper Moldavia.	Neamtz	Piatra	99,210
	Dorohoi	Mihailia	99,222
	Suculava	Falticeni	71,044
	Roman	Roman	80,677
	Botoshani	Botoshani	146,361
	Jassy	Jassy	128,566
Lower Moldavia.	Bakeou	Bakeou	132,244
	Putna	Fokshani	124,217
	Cocarien	Galatz	67,293
	Tacutzi	Tacutzi	86,505
	Vaslui	Vaslui	84,708
	Tulova	Berlatu	83,674
	Falsii	Us	78,722
Total		1,254,447	

The climate of Moldavia is much colder in winter than might be expected in a latitude corresponding with the north of Italy: the

ivers are generally frozen, and the ground covered with snow for a considerable time. The summers are exceedingly hot. The country is subject to earthquakes, but they are not very violent. It possesses much mineral wealth, of which however little advantage has been taken, in consequence of the long unsettled state of the country. There is an abundance of rock-salt in the vicinity of the Carpathian Mountains; there are also some mineral-springs; asphaltum of two kinds, red and black, is found in several parts; a great quantity of saltpetre is also produced, chiefly in the northern part of the principality. The sand of the river Bistriz contains gold, but not in a large quantity. The soil is generally exceedingly fertile, and, notwithstanding a very inferior state of agriculture, produces every kind of grain and vegetable in the greatest abundance. A great number of horses, cattle, and sheep is fed on the rich meadows which Moldavia contains, and the vast forests produce every kind of timber.

Jassy, the capital of Moldavia, is situated on the Bachel, or Baglui, a small muddy stream which flows into the Pruth, in 47° 9' N. lat., 27° 30' E. long., and has about 60,000 inhabitants. It is the residence of the Hospodar of Moldavia, of the principal authorities of the principality, and of a Greek archbishop. The Hospodar's palace is on an eminence on the southern side of the town, and is surrounded by a wall. This wall is all that remains of the strong fortifications of the town, which were destroyed by the Russians in 1788. *Jassy* occupies a large space of ground, most of the houses being separated from each other by courts and gardens and plantations of trees. It was almost entirely destroyed by fire in 1827. The modern part of the town is tolerably well built; but the older part consists chiefly of wooden buildings one story high, with wide spaces between vacant or filled with ruins. The principal street, which is very broad, is furnished with shops on each side; the other streets are narrow and crooked; most of them are laid with rough planks of oak; in the rainy season they are covered with wet mud, and in summer with a thick layer of black dust, which the slightest wind raises in clouds. The number of churches is about 40: the most remarkable of these is the church of the Three Saints, a richly ornamental Byzantine structure. The town has also a Catholic and a Lutheran church, a great number of monasteries, an hospital, a bazaar, public baths, a college, and several printing-offices. There are not many manufactures, but a considerable commerce is carried on in agricultural produce, especially during the fairs which are held here.

Galatz, or *Galatz*, in 45° 23' N. lat., 28° 5' E. long., is situated on the left bank of the Danube, about 3 miles E. from the mouth of the Sereth and 10 miles W. from the junction of the Pruth with the Danube. Galatz is the only port of Moldavia, so that it is the place of export and import for the whole province. It has been a free port since 1834, and steamers ply regularly to Vienna and Constantinople. Galatz is for the most part better built than the other towns of Moldavia, having numerous houses of stone, several Greek churches, a convent, an hospital, and a large bazaar always well filled with merchandise, together with a great number of warehouses for grain and other produce; the streets however are narrow and dirty. Vessels of 300 tons burden can come close up to the town. There is a large export trade in corn and in preserved meats for ships. In 1847 there were exported from the ports of Galatz and Ibrail 1,836,647 quarters of corn (wheat, maize, and barley); in 1849, an ordinary year, the quantity shipped at the two ports was 1,005,240 imperial quarters. Other exports are tallow, timber, wool, hides, and skins. The chief imports are British and Austrian manufactures, colonial products, olive-oil, hardware, &c. The population is about 30,000. A British vice-consul resides at Galatz, and several Greek and British commercial houses are established there.

Fokszani, or *Fokshani*, is built on the Milkov, in 45° 41' N. lat., 27° 10' E. long., partly in Moldavia, partly in Wallachia, and has about 25,000 inhabitants. It was almost destroyed in 1784, during the war between the Russians and the Turks, but has been since rebuilt. It has a tolerable trade in hardware. It contains several Greek churches and a curious old convent. Fokszani is about 45 miles W. from Galatz. Among the other towns may be mentioned *Bakeou*, on the right bank of the Sereth, about 100 miles N.N.W. from Galatz, and 60 S.W. from Jassy: population, 12,000. At *Bakeou*, Stanislas Leczynski, king of Poland, was taken prisoner by Nicholas Mavrocoordato, prince of Moldavia. *Roman*, higher up the Sereth, here crossed by a wooden bridge, stands in a fine corn country, and has about 8000 inhabitants.

A good Macadamised road runs up the valley of the Sereth to the Bukovina. Another road runs from Fokshani up the valley of the Birlat to Jassy, whence it runs along the eastern base of the Strunga Mountains, and joins the former road in the north of Moldavia. There is a road from the valley of the Sereth to Jassy and the north-east of the principality, which crosses the Strunga Mountains at the town of Turgu-Formos (6000 inhabitants).

Among the population of Moldavia are many Wallachians, Armenians, Greeks, Jews, Gipsies, and Hungarians. The mass of the people profess the religion of the Russo-Greek Church; but the Hungarian part of the population is Catholic. The revenue of Moldavia is stated to be about 9,370,000 piastres.

Moldavia has been subjected to great devastations by the several hordes which invaded the Byzantine empire, and a great number of its inhabitants, descended from the Roman settlers, retired to the west

of the Carpathian Mountains. About the middle of the 13th century a colony of the same inhabitants re-occupied the country, under a chieftain called Bogdan, whence it is called by the Turks and the natives *Bogdania*. The language of the inhabitants, who call themselves *Roomoon*, consists of Latin with an admixture of Slavonic. Divine service is performed in the Slavonic tongue.

From that time the rulers of Moldavia, called 'voivodes' (a Slavonic term which signifies military leader), were often subject to the kings of Hungary, but also frequently asserted their independence, until they submitted to the protection of the Turks in 1536, under the voivode Roydan. The sultan granted to Moldavia his protection, for which an annual tribute was paid. The voivodes were to be elected by the principal clergy and the boyars, or nobles, and their election was to be confirmed by the sultan, who was not to interfere in the local administration of the principality, neither were Turks permitted to settle there. The voivodes had the power of life and death over their own subjects, and even the right to make peace and war, without being accountable to the Sublime Porte. No inhabitant of Moldavia was to be summoned by the Turkish government to Constantinople or any part of the Turkish dominions on any pretext whatever.

Moldavia was exposed to several wars which were carried on between Turkey and Poland, as the latter country had an old claim on the principality, which was finally abandoned by the peace of 1621.

In 1711 the Turks abolished the privilege of electing the voivodes, and nominated to that dignity the Greek princes of the Fanar (the name of the Greek quarter of Constantinople). The princes, called also 'hospodars,' governed with the assistance of a council, composed of 12 members appointed by the prince every year, with the exception of the metropolitan, whose ecclesiastical dignity entitles him to a permanent seat. The laws were administered according to a code framed after that of Justinian. There were a great many offices, several of which were copied from those of the Greek empire. The national army was composed of about 6000 men.

The tribute paid to the Porte was not so oppressive as the monopoly of trade: several articles, as wheat, timber, and cattle were exported to Constantinople, and bought from the inhabitants at a fixed price, which amounted to about one-fourth of the current market-price. As the hospodars were obliged to give considerable presents to the Turkish officers, and as they also sought to enrich themselves, the country was ground down by a most oppressive taxation.

Peter the Great in 1710 made an unsuccessful campaign, for the purpose of gaining possession of Moldavia. Moldavia was occupied by the Russians in 1739, but was evacuated by the peace of Belgrade. By the 10th article of the treaty of Kutchuk Kainarji, in 1774, Russia obtained the right to intercede with the Porte in favour of the above-mentioned principalities. The 4th article of the treaty of Jassy, January 9, 1792, confirms all the privileges of the two principalities, and exempts the inhabitants from the payment to the Sultan of tribute for two years. By the treaty of Bucharest (1812) the eastern part of Moldavia, situated on the left bank of the Pruth, was ceded to Russia, the rights and privileges of the two principalities were confirmed, and a release from tribute again granted for two years.

The events of the Greek revolution had a fatal influence on Moldavia, which was entered by Prince Ipsilanti at the head of a troop of the Heterists, or Greek patriots; he was defeated and obliged to escape to the Austrian territory, but the Turkish troops, which occupied both the principalities, committed great excesses. This led to many demands on the part of Russia, which were temporarily adjusted by the treaty of Akerman in 1826. At the peace of Adrianople in 1829 it was stipulated "that the hospodars should, instead of for seven years, as had hitherto been the case, be invested with their dignity for life;" that the hospodars should administer the internal government of their provinces, with the assistance of their divan, according to their own pleasure, but without any infraction of the rights guaranteed to the two countries by treaties or hattisherifs (ordinances of the sultan), nor shall their administration be disturbed by any command tending to the violation of those rights; that the Turks should evacuate all the fortified points and cities on the left bank of the Danube; that no Turks should be permitted to settle in the principalities; that the principalities should be relieved from all those contributions of corn, provisions, cattle, and timber, which they were formerly bound to furnish for the supply of Constantinople and the victualling of the fortresses on the Danube; and that forced service from labourers should be abolished. In order to indemnify the Turks for the renunciation of those rights, the principalities are bound, independently of the annual tribute formerly paid, to pay yearly a pecuniary compensation. Moreover, upon every fresh nomination of the hospodar, the principality where that event occurs shall be bound to pay to the Sublime Porte a sum equal to the annual tribute of the province. A Russian general, Kisseleff, administered the provinces from 1832 to 1834, when Michel Sturdza was elected Hospodar of Moldavia. He governed tranquilly till April, 1848. At this date the revolutionary movement which originated in France reached Jassy, whose inhabitants demanded a new constitution. The hospodar put down the movement, but nevertheless resigned his power. In June 1849 Gregory Ghika, a native boyard, was elected hospodar, not however for life, but for a term of seven years, according to an article of the convention of Balta Liman, concluded between Russia and Turkey, May 1, 1849.

At the outbreak of hostilities between Russia and Turkey in 1853 a Russian army occupied Moldavia and Wallachia, and advanced to the Danube for the purpose of invading Bulgaria and marching upon Constantinople. Repulsed from the Danube in Little Wallachia, and unable, in consequence of the bravery of the Turks and the vigilance of their general, Omer Pasha, to effect a passage of the river from Wallachia, they crossed the Danube near Galatz in the spring of 1854, and after seizing the fortresses of the Dobruzscha advanced to attack Silistria, which they bombarded for forty days. On the arrival of French and English troops at Varna for the support of the sultan, the Russians, after losing vast numbers of men, raised the siege of Silistria, recrossed the Danube, and in the latter end of autumn evacuated the principalities, which were immediately occupied by an Austrian army. During the Russian occupation the hospodars retired from their states, but returned with the Austrians. [WALLACHIA.]

MOLFETTA. [BARI, TERRA DL.]

MOLINA. [CASTILLA LA NUEVA.]

MOLITERNO. [BASILICATA.]

MÖLLEN. [LAUBENBURG.]

MOLOSSI, a people of ancient Epirus, who occupied the southern part of that country along the banks of the river Arachtus, and extended to the shores of the Ambracian Gulf. Their principal town was Ambracia. [EPIRUS.]

MOLSHEIM. [RHIN, BAR.]

MOLTON, SOUTH. [SOUTH MOLTON.]

MOLUCCAS, or SPICE ISLANDS, a group of the Indian Archipelago, which extends from the eastern coast of Celebes to the western coast of Papua or New Guinea, and includes the islands from which spices are obtained, and several others. The principal of them are Amboyna, Banda, Ceram, Gilolo, Booro, Waigiou, Zula, Mangola, Ooby, Batchian. Several of these islands are noticed in separate articles in this work, AMBOYNA, BANDA, BOORO, CERAM, &c. The present article presents a general view of the group.

Surface, Soil, &c.—Nearly all the Moluccas are mountainous, and some of them contain peaks which rise to the height of 7000 or 8000 feet. The rocks of which they are composed seem to be mostly of a volcanic nature, and there are at least eight volcanoes still in action. These volcanoes seem to be the southern extremity of that extensive series which commences on the north in the peninsula of Kamtchatka, and continues southward through the Kuriles, Japan, and the Philippines, inlosing the eastern shores of Asia, as it were, with a volcanic barrier. On the other hand, it may be said that the most southern of these volcanoes constitute the eastern extremity of another volcanic barrier, which skirts Eastern Asia on the south, and proceeds from the Moluccas westward through the Lesser Sunda Islands and Java, where it terminates. Like other volcanic countries, the surface of all these islands is very rugged and broken, but their lower parts possess a great degree of fertility; and the coast, which in many parts rises from the water's edge to a considerable elevation with a very steep acclivity, contains a great number of harbours for every kind of vessels. Except where the declivity is too steep, the mountains are covered with forests, containing a great variety of trees, valuable as timber or for cabinet-work.

Climate.—As none of these islands is more than 9 degrees from the equator, the climate is hot all the year round, but the heat is not excessive, on account of their comparatively small size and the uninterrupted continuance of the monsoons for at least ten months of the year. The seasons are dependent on these periodical winds. The rainy season begins in October or November, with the north-westerly monsoon; for while the north-east monsoon and fair weather prevail in the Chinese Sea and in the sea between Sumatra and the eastern coasts of Africa, the wind blows from north-west and west in the sea surrounding the Moluccas. During this wind the rains fall in torrents, but seldom continue above two or three hours at a time. The rainy season is also the hot season, and the mid-day heat during that time varies between 89° and 95°; the extremes are 77° and 100°, or somewhat more. The rains cease in the end of April or in May, when the wind settles in the south-east, and the weather becomes more temperate. Rains however occur from time to time, and the atmosphere contains considerable moisture. The mid-day heat is a few degrees lower than it is during the rains, and the difference between it and the temperature of the cool nights is greater, but hardly exceeds 12 degrees.

Productions.—The agricultural productions do not differ from those of Java, with the exception of rice, which is not cultivated, but imported, though not in great quantities. The common food of the people is derived from the sago-palm, which grows wild in the forests and also in plantations. Fish, wild deer, and hogs are also articles of food. The productions raised for exportation to Europe are cloves and nutmegs; edible birds'-nests, sea-slugs (trepang), and shark-fins are sent to China. A small quantity of gold is also exported, as well as birds of paradise, which visit these islands from New Guinea and the Arroo Islands, where they breed. The fertility of the soil and the climate favours the growth of all tropical products; turtle-shells, mother-of-pearl, honey, bees'-wax, ambergris, sandal-wood, and various kinds of beautiful wood for cabinet furniture are to be had, but the jealous spirit of the Dutch has hitherto excluded all European vessels but their own from the islands, and consequently the articles

named and many others are neglected. When the English were in possession of the Moluccas, they obtained from them cordage, cables, and timber.

Inhabitants.—These islands are inhabited by two races, the Malays and the Papuas. The Malays are in possession of the coasts, where they cultivate the ground or gain their subsistence by fishing. They are Mohammedans. Their language contains a great number of foreign words, and Dr. Leyden is of opinion that the Ternate or Molucca language has been an original tongue. The Papuas have been extirpated on the smaller islands, but they still maintain their ground in the mountainous districts of the larger islands. They seem to belong to the same race which inhabits the continent of Australia. They are described as an inoffensive race who cultivate the ground.

Division.—The number of islands probably amounts to some hundreds, of which however many are small and uninhabited. They may be divided into three groups: the Gilolo Group, or Moluccas proper; the Ceram Group; and the Timor Laut Group. The *Gilolo Group* is the most northern, and extends from 2° S. lat., to 3° N. lat., and contains the islands of Gilolo, Morty, Mandioly, Batchian, Ooby, and Mysole, with numerous smaller islands lying between and about them, among which the islands of Ternate and Tidore are the most important. In figure *Gilolo* bears a remarkable resemblance to CELEBES, being composed of four long peninsulas, which radiate from a common centre near 1° N. lat. Its greatest length from south to north may be 220 or 230 miles, and its surface, on a rough estimate, about 3000 miles. The northern and north-eastern peninsulas rise into high mountains, and are densely wooded; the southern attain only a moderate elevation. The chief products are sago, cocoa-nuts, spices, fruits, edible birds'-nests, pearls, gold-dust. Horses, horned cattle, and sheep are reared. Manufactured goods, opium, china, and iron are imported by the Dutch. The island is divided into several petty states; the chief town is Gilolo, or Jilolo, at the head of a bay on the west side of the island to the north-east of Ternate. The sea between Gilolo and Celebes is called the *Molucca Passage*. *Morty* rises with a gentle ascent to a considerable height, and is said to have good harbours. *Mandioly*, *Batchian*, and *Tawaly* are separated from one another by narrow straits which afford good anchorage. They are of moderate elevation, and are governed by their own sovereign, to whom also the island of *Ooby*, or *Paulo Oby*, belongs. The last-mentioned island is very little known. The islands of Ternate and Tidore are small, being only from 20 to 30 miles in circuit, but the soil is fertile, and they are very populous. Their sultans possess the greater part of Gilolo, and also several districts on the eastern coast of Celebes. The island of *Waygiou*, off the north-west coast of Papua, or New Guinea, is sometimes reckoned among the Moluccas. It lies a little south of the equator, and is crossed by the meridian of 131° E. long. The island is stated to be fertile and populous and to have good harbours. It extends east and west with two deep indentations on its northern and southern shores near the centre of the island; the northern inlet forms the bay of Offak (0° 1' 3" S. lat., 130° 43' E. long.). Farther east, but on the north shore also, is another harbour, *Port Boni*, sheltered by an island. *Waygiou* is mountainous in the centre, the shores and some other parts are marshy.

To the Gilolo group belong two smaller groups lying farther north-west. The eastern group, called the *Salibabo Islands*, consists of three islands of some extent, Tulour, Salibabo, and Kabruang, and several smaller ones. The island of Salibabo has a good harbour at Leron, in the narrow strait which divides that island from Kabruang. The western group, called the *Sangir Islands*, consists of a larger island and numerous smaller islands. Sangir Island is about 70 miles long; through its central part runs a ridge of high mountains, which terminates on the north in an active volcano.

The Ceram group occupies the middle, between 3° and 5° S. lat., and comprehends the two large islands of CERAM and BOORO, and among the smaller ones, which lie to the south of them are AMBOYNA and BANDA islands.

The *Timor Laut* group is the most southern and least known. It consists of the large island of Timor Laut and the KNY, or KI, ISLANDS, noticed in a separate article. Timor Laut is about 70 miles long and 25 miles wide, mountainous and wooded. The centre of the island is nearly in 7° 50' S. lat., 131° 20' E. long. Timor Laut must not be confounded with the large island of Timor, which lies considerably to the west and is one of the lesser SUNDA ISLANDS. The island of Arroo [ARROO], lying farther east, is also sometimes considered as belonging to the Moluccas.

History.—The Portuguese arrived at the Moluccas in 1510, and had hardly begun to form settlements when the vessels of Magalhaens arrived from the east, and a dispute arose between the Portuguese and Spaniards respecting the possession of the islands, which lasted for several years. The Dutch took the Moluccas from the Portuguese about 100 years afterwards, and, in order to secure to themselves the exclusive trade in nutmegs, maces, and cloves, they formed numerous small settlements on nearly all of them, by which they kept the petty sovereigns in subjection, and, with their assistance, were enabled to extirpate all the spice-trees in the islands, except Amboyna and Banda, which they subjected entirely to their sway. In 1796 the British took possession of the Moluccas, and kept them to the peace of Amiens, when they were restored to the Dutch. The British again

took possession of them in 1810, and again gave them up to Holland at the treaty of Paris in 1814. Since that time the Dutch have abandoned a few of the smaller establishments, but they still maintain their hold more or less upon all these islands. In June 1853 a bill was brought into the Dutch chambers by the government for opening the trade in spices; and making four free ports—Ternate, Amboyna, Banda, and Kajelie. At the last-named place British vessels trading to China call for water and provisions, and it lies on the track to Australia. That the bill was made law we are unable to say.

(Forest, *Voyage to New Guinea*; Stavroinus, *Voyages*; Delano, *Voyages and Travels*; Crawford, *History of the Indian Archipelago*; Hogendorp, *Coup d'Œil sur Java, &c.*)

MOMBAS is a sea-port town situated on that part of the eastern coast of Africa which is called the coast of Zanguebar, in 4° 4' S. lat., 39° 38' E. long. It is built on the eastern side of Mombas Island, which occupies the greater portion of a bay, about 5 miles long and 3 miles wide. The island is 3 miles long by 2 miles broad; the two straits which divide it from the continent are hardly half a mile across. The eastern strait constitutes the harbour of the town, which is one of the most perfect in the world. The castle, built by the Portuguese in 1635 on a rock of moderate elevation, lies to the south of the town. The town is not large; it consists of the city and the Black Town, which occupies the most northern portion of it. The former, which was once inhabited by the Portuguese, is now inhabited by the Arabs. Some free coloured people and slaves constitute the population of the Black Town. The population probably does not exceed 3000 or 4000, and the town, it is said, has fallen into decay.

Vasco de Gama visited this port in 1498, and was well received, but nearly fell a sacrifice to the treachery of the inhabitants. It was afterwards taken and burnt by Francisco de Almeida in 1505. Twenty-three years later it was taken by Nunho da Cunha after a stout resistance from the inhabitants, and was again reduced to ashes. The Portuguese remained in possession of it till 1631, when the king of the country retook it, and put all the Christians to death. Since then European vessels seldom visit this part of the coast, the government of Mombas having more than once seized such vessels when they put into the harbour for provisions. In 1720 Mombas was in possession of the Imam of Muskat, who lost it afterwards by a rebellion of its inhabitants. In 1824 the Imam sent a force against the town, which then placed itself under British protection, in order to preserve its independence. It is governed by an Arab sheikh.

MOMPOX. [NEW GRANADA.]

MONA. [ANGLESEY; MAN, ISLE OF.]

MONACO, the Principality of, a small state in the Western Riviera of Genoa. It consists of the small towns of Monaco and Mentone, and the village of Rocca-bruna, with a small territory about five miles in length along the coast, between Nizza and Ventimiglia, and extends inland about three miles. The country is rocky, but produces oranges, citrons, lemons, and other fruits, and oil. The town of Monaco is built on a steep naked rock rising above the sea-coast, is fortified, and has about 2000 inhabitants, and a harbour for small vessels. Mentone, farther to the east, lies on the sea-shore in a narrow strip of fertile land sheltered by mountains from the north winds, and planted with olive- and lemon-trees: it has a warm southern climate, and carries on some trade by sea. Mentone has about 4000 inhabitants, and a handsome church.

Since the 14th century the principality of Monaco has been in possession of the Genoese family of Grimaldi, under the protection of France and of the Genoese republic. It is now under the protection of the king of Sardinia. The prince resides half the year in Paris and the other half in Monaco. He has a palace at Monaco and a handsome villa near Mentone. The Sardinian troops took military possession of Monaco and Mentone during the revolutionary troubles of 1848-9, and we believe that the principality has been since purchased by the government of Sardinia. The name of Monaco is derived from a temple dedicated to Hercules Monoecus ('solitary'), which stood on the rock where the town now stands. [See SUPPLEMENT.]

MONAGHAN, an inland county in the province of Ulster, Ireland, is bounded N. by county Tyrone, E. by Armagh and Louth, S. by Meath and Cavan, and W. by Fermanagh. It lies between 53° 54' and 54° 25' N. lat., 6° 33' and 7° 20' W. long. Its greatest length from north to south is 37 miles; from east to west it is 23 miles. The area is 500 square miles, or 319,757 acres, of which 285,885 acres are arable, 21,585 acres uncultivated, 5816 acres in plantations, 304 acres in towns, and 6167 acres under water. The population in 1841 was 200,442; in 1851 it was 141,813.

Surface, Hydrography, and Communications.—The northern part of the county belongs to the basin of the Blackwater, the southern part to the basins of the Fane and the Glyde, and the western part to the basin of the Erne. The general surface is hilly, the hills being for the most part detached and scattered in an irregular manner. The Slieve Beagh range, of which the chief summit is 1254 feet high, extends along the north-west boundary into the county of Fermanagh. The portion of the county lying south-east of that range is a comparatively level tract, and forms the northern limit of the great plain of Ireland. This district is bounded on the south by a series of heights lying east and west, and connected with the Fewa Mountains of Armagh. Mullash, on the border, is 1034 feet high. The division

of the county south of these heights, sloping on the west towards Lough Erne, and on the east towards the Irish Sea, is divided by several eminences, of which the principal is Crieve Hill, 886 feet in height. Patches of bog occur in all parts of the county.

There are no navigable rivers in the county. The Blackwater has about 10 or 12 miles of its course along the north-eastern boundary, partly upon and partly within the border, for about 12 miles, before it enters the county of Louth, through which it flows into the Irish Sea. The Glyde rises in the south part of the county, and has a course parallel to the Fane; the Lagan, a feeder of the Glyde, and a much more considerable stream, has about 13 miles of its course along the southern boundary. The Finn is the most important of the streams which flow into the Erne; it rises in the Slieve Beagh Mountains, and has about 20 miles of its course within the county. The Ulster Canal, which unites Lough Neagh with Lough Erne, crosses the county in a south-west direction near Monaghan and Clones. Its length within the county is about 20 miles.

The loughs are numerous, but all of them are small. Muckno or Barrac Lough, near Castle Blayney, is the largest. It is of very irregular form, about 3 miles long, and in some parts about a mile wide: it contains a number of small islands. The river Fane runs through it. Lough Inner, on the south-west border near Rockcorry, is about 3 miles long, exceedingly narrow, and of very irregular form. Lough Emy, near Emyvale, and Glas Lough, near the town of Glaslough, in the northern part of the county; Lough Leesborough, between Rockcorry and Newbliss, and Lough Long, near the village of Drum, in the western parts; the White Lough and Corin Lough, near Ballybay, in the central parts; Lough Egish, or Eglis, Lough Avaghon, and Lough Bawn, near Ballytrain, in the southern part; Lough Ballyhoe (through which the Lagan runs), on the southern border of the county, and Lough Ross, on the eastern border, are next in size to Muckno and Inner.

There are numerous good roads in the county. The principal line is that from Dublin to Londonderry, Carrickmacross, Castleblayney, and Monaghan. A branch road runs from Carrickmacross to Monaghan by Ballybay. Other roads lead from Carrickmacross to Dundalk, from Castleblayney to Newry and to Armagh, from Monaghan to Armagh, and from Monaghan by Clones to Cavan. A road from Dublin by Cootehill (Cavan) passes through Clones, and joins the Londonderry mail-road at Omagh in Tyrone.

Geology, Mineralogy, &c.—The carboniferous limestone of the great central field of Ireland occupies that part of the county which lies north-west of a line drawn through Monaghan and Clones. The Slieve-Beagh Mountains are composed of the rocks belonging to the calp series of this formation. The rest of the county, with the exception of a small tract on the southern border, belongs to the transition formation, which occupies an extensive district in the east of Ulster and north of Leinster. The rocks consist of grauwacke slate, fissile clay-slate, flint-slate, and chlorite slate, with hornblende slate, schistose porphyry, and other metamorphic rocks. On the southern border is a small coal-field, not wrought, resting on a tract of carboniferous limestone, and flanked on the west by a patch of new red-sandstone, which contains a valuable deposit of gypsum. Escarpments, or low steep ridges of alluvial matter, usually composed of clay and limestone gravel, are found in several parts of the county. Those near Tyhallon, not far from Monaghan, are composed entirely of jasper, quartz, agates, and argillaceous sand. Limestone of great variety and excellent quality is quarried; also fine marble, and valuable freestone for building. A fine white sandstone, dug in the Slieve-Beagh Mountains, is extensively used for architectural purposes. Ironstone is found, but of inferior quality, and several quarries of slates or flagstones are worked. Lead-ore has been found to a small extent. Some potters'-clay is found, and brick earth in nearly all parts of the county.

Climate, Soil, and Produce.—North-west winds prevail during the greater part of the year. These bring frequent rains from the Atlantic up the valley of the Erne, rendering the climate exceedingly moist. The evil however is to a great extent counteracted by the ventilation and drainage of numerous valleys. The soil of the county varies much, but is mostly a strong deep loam resting on a firm subsoil of clay, mixed with lime, gravel, or sand. In the elevated parts the soil is moory or peaty. The lowlands are generally wet and moory, especially in the north-west, near the Slieve-Beagh Mountains. The western side of the county has a soil naturally wet, but capable of great improvement. The southern extremity consists of rich and productive land. The most fertile part of the county is the central, including the baronies of Monaghan, Cremorne, and Dartree. The barony of Monaghan is altogether a tillage district, except some 'rough grazing' in the mountains, on which some young cattle are kept: there is no grazing-land in the district capable of fattening cattle. The occupations are almost wholly agricultural. Spade husbandry is much practised. Flax, from its improved culture, is increasing greatly in quantity and value. The culture of wheat and of green crops is extending. The manufacture of linen is reviving.

In 1853 there were 152,404 acres under crop; of which 2519 acres grew wheat; 78,537 acres oats; 4962 acres barley, bere, rye, peas, and

beans; 23,926 acres potatoes; 8305 acres turnips; 2664 acres mangold-wurzel, carrots, vetoches, and other green crops; 17,392 acres flax; and 14,099 acres were in meadow and clover. In 1841 the plantations covered 8007 acres, yielding oak, ash, elm, beech, fir, mixed timber, and fruit. In 1852, on 19,338 holdings, there were 10,258 horses, 5110 mules and asses, 64,621 cattle, 9830 sheep, 18,716 pigs, 10,072 goats, and 263,099 head of poultry. The estimated value of the live stock here enumerated was 553,938*l.*

Divisions and Towns.—The county is in the diocese of Clogher in the united sees of Armagh and Clogher. It is divided into five baronies—Cremorne, central and east; Dartree, central and west; Farney, south; Monaghan, central; and Trough, north. The principal towns are MONAGHAN, CLONES, CASTLEBLAYNEY, and CARRICKMACROSS, which are noticed under their respective titles. The following are some of the other towns and more important villages, with the population of each in 1851:—

Ballybay, or Ballibay, population 1617, a well-built town, 9 miles S. from Monaghan and 86 miles N.N.W. from Dublin, contains a neat parish church, a Roman Catholic chapel, two Presbyterian meeting-houses, several endowed schools, a public library, a market-house, and district dispensary. The linen manufacture is carried on; in the neighbourhood are extensive bleach-fields. Petty sessions are held here. Fairs for cattle, horses, and pigs are held on the third Saturday of every month. There is a weekly market on Saturday. *Emyvale*, a small post-town situated on the left bank of an affluent of the Blackwater, 8 miles N. from Monaghan, is a neat clean place consisting chiefly of one street. The general employment is weaving. There is a large flour-mill on the stream, as also a mill for working iron, principally in the manufacture of spades and shovels. A cattle fair is held monthly. *Glaslough*, a neat and thriving market-town, 6 miles N.E. by N. from Monaghan, on the margin of a beautiful lake called Glas Lough, or Green Lake. The town contains the parish church of Donagh, and a district dispensary. Flax-spinning and weaving are carried on. Gray marble is quarried in the neighbourhood. There is a market every Friday for corn and flax. Fairs are held on the third Friday of every month except February. *Newbliss*, population 481, a small market-town 9 miles S.W. from Monaghan and 71½ miles N.W. from Dublin by road, consists of a single street of good width, containing houses of respectable appearance. The church is a handsome building recently erected. There are a Presbyterian meeting-house, a neat market-house, a dispensary, and a school of the London Hibernian Society. Petty sessions are held monthly. There is a well-attended market on Saturday, chiefly for pigs and flax. Fairs are held on the last Saturday of every month. *Rockcorry*, population 316, a small market-town 9 miles S. by W. from Monaghan, contains a Presbyterian and a Methodist meeting-house, a neat market-house, and a dispensary. Petty sessions are held monthly. Fairs are held on the last Wednesday of every month. The town belongs to Baron Cremorne, by whom the neighbourhood has been much improved. *Scots-house*, in the barony of Dartree, 14 miles S.W. from Monaghan, contains a parish church and a Roman Catholic chapel. In the neighbourhood are the remains of an ancient embankment called Worm Ditch, which has been traced several miles from this point.

The county of Monaghan returns two members to the Imperial Parliament. The assizes are held in Monaghan, and quarter-sessions there, and at Carrickmacross, Castleblayney, and Clones. Petty sessions are held in eight places. The county court-house and jail are in Monaghan, and there are bridewells at Carrickmacross, Castleblayney, and Clones. The county infirmary is in Monaghan. There are fever hospitals at Carrickmacross, Clones, Monaghan, Rockcorry, and Trough; and dispensaries in fourteen places. A savings bank is established in Monaghan; the amount owing to depositors on November 20th, 1853, was 18,128*l.* 13*s.* 11*d.* The constabulary force consisting of 208 men and officers, has its head-quarters at Monaghan. The county is divided into 4 police districts comprising 24 stations. In September 1852 there were 141 National schools in operation, attended by 7014 male, and 5862 female children.

History and Antiquities.—In the invasion of Ireland by the Anglo-Normans, Henry II., having bestowed all Ulster on John de Coursey, that chieftain overran various parts of the province in 1177, and built castles to secure his conquests. Among others he built two in the district of Farney in this county, and gave them in charge to MacMahon, an Irish chieftain, who had gained his confidence. MacMahon subsequently demolished the castles, and set himself in opposition to De Coursey. In the reign of Henry V. the MacMahons seem to have risen in arms, for they are noticed among the septa whom Talbot, lord Furnival, the lord-lieutenant, brought into the king's peace. In the reign of Elizabeth, Monaghan was constituted a shire by the Irish Parliament which assembled at Dublin in 1568. The country however still remained in an unsettled state in consequence of the turbulent spirit of the MacMahons. In the troubles excited by the Earl of Tyrone, the county was the scene of hostilities, and some of the MacMahons appear to have joined the earl. In the rebellion of 1641 Monaghan came early into the power of the insurgents, but in the course of the subsequent struggle, no events of particular interest occurred in it. In the war of the Revolution a sharp conflict took place at Glaslough, in which the Protestants were victorious.

There are no feudal remains of importance in the county. The

chief ecclesiastical antiquity is the ruin of the abbey of Clones, which is said to have been founded in the 6th century. At Clones there is a round tower still entire, and at Inniskean, near the eastern border, there is one less perfect in its form, but remarkable for having the door on a level with the ground. Rath and other earth-works appear in various parts of the county. A singular structure consisting of several apartments, arched with flat stones nicely fitted together, and inclosed within a wall of similar materials, was a few years since discovered at a depth of several feet under a hillock, about 3 miles from Monaghan. It is supposed to have been the abode of ancient hunters, and to have been covered for concealment with the earth which had been removed to make way for its erection.

MONAGHAN, Ireland, the chief town of the county of Monaghan, and the seat of a Poor-Law Union, is situated on the road from Dublin to Londonderry, in 54° 15' N. lat., 6° 58' W. long., distant by road 76 miles N.N.W. from Dublin. The town is governed by a provost, 12 free burgesses, and a body of freemen. The population in 1851 was 3484, besides 640 inmates of the workhouse. Monaghan Poor-Law Union comprises 21 electoral divisions, with an area of 112,789 acres, and a population in 1851 of 49,032.

The three principal streets of the town meet in a central square called the Diamond. The town is lighted, and the streets are paved and well kept. The parish church is a large modern gothic structure. There are a Roman Catholic chapel, two Presbyterian, and two Methodist meeting-houses. On the west side of the town is a Diocesan school, founded in the reign of Elizabeth; the number of scholars in 1851 was 34. There are several National and Endowed schools. The county court-house is a handsome modern building in the centre of the town. The county infirmary occupies an elevated site on the east side of the town. The county jail is on the north side. A well-built market-house stands in the principal square. There are also a linen-hall, an infantry barrack, a fever hospital, a dispensary, and a savings bank. The manufacture of linen is carried on. The Ulster Canal connecting Lough Erne with Lough Neagh, passes near the town, and facilitates its trade with Belfast. The assizes and quarter and petty sessions are held in the town. Fairs are held on the 1st Monday of every month. The principal market-day is Monday; markets for agricultural produce are held on Tuesday, Wednesday, and Saturday. Monaghan obtained a charter from James I. The borough returned two members to the Irish Parliament, but was disfranchised at the Union.

MONAN'S ST. [FIFESHIRE.]

MONASTEREVAN. [KILDARE.]

MONÇAO. [ENTRE DOURO E MINHO.]

MONCONTOUR. [CÔTES-DU-NORD.]

MONDEGO. [PORTUGAL.]

MONDONEDO. [GALICIA, Spanish.]

MONDOVI. [CONE.]

MONDRAGON. [BASQUE PROVINCES.]

MONESTIER, LE. [ALPES, HAUTES.]

MONEYMORE. [LONDONDERRY, County of.]

MONFERRATO, the name of a district in Piedmont, which comprises the country drained by the Tanaro, and extends from the right bank of the Po to the Ligurian Apennines. Many parallel offsets branch off in a northern direction, from the Ligurian Apennines to the southern bank of the Tanaro; and the intervening valleys are watered by numerous streams, the Stura, the Gesso, the Borbio, the Pesio, the Ellero, the Tanaro, the Belbo, the two Bormide, the Erro, and the Orba, all of which join the Tanaro above Alessandria, below which town the Tanaro enters the Po. North of the Tanaro another range of hills, parallel with the course of the Po, runs from the mount of Superga, opposite to Turin, to the town of Casale, and divides the valley of the Upper Po from that of the Tanaro. The greater part of this hilly region, on both sides of the Tanaro, went by the name of Monferrato, and was divided into High Monferrato, south of the Tanaro, and Lower Monferrato, between the Tanaro and the Po. The principal towns of Lower Monferrato were Alessandria, Asti, Casale, and Valenza; those of Upper Monferrato were Mondovi, Acqui, and Alba. It is a favoured region, rich in corn, wine, fruit, silk, and cattle. The wines of Monferrato are the best in northern Italy; the muscat of Asti is particularly esteemed.

Monferrato gave the title of Marquis to an ancient family, descended from the imperial house of Saxony, from the 11th century till the time of Charles V., when, the male line becoming extinct, the marquises fell to the Gonzaga of Mantua. On the death of Francesco Gonzaga in 1612, without male issue, the Duke of Savoy claimed the inheritance; this led to a war between the dukes of Savoy and Mantua, in which Spain and France took part, and which was not concluded till the peace of Cherasco in 1630, when the territory in dispute was divided between the dukes of Mantua and Savoy. During the war of the Spanish succession the Duke of Savoy obtained the whole of Monferrato. This territory is now divided among the provinces of Acqui, ALBA, ALESSANDRIA, ASTI, CASALE, and MONDOVI.

MONFLANQUIN. [LOT-ET-GARONNE.]

MONGHIR. [HINDUSTAN.]

MONGOLIA (*Mongolistan*), 'the Country of the Mongols,' comprehends a vast extent of country in the interior of Asia, between 38° and 68° N. lat., 84° and 124° E. long. Its length from east to west exceeds

1700 miles, and its width, from north to south, between 100° and 110° E. long., 1000 miles; but towards both extremities of its length it narrows to 600 miles. Its area may amount to between 1,200,000 and 1,300,000 square miles. It is bounded N. by Siberia, E. by Mandshooria, S. by China proper, and W. by the Chinese province of Kansu and the Chinese government of Thianshan Pelu.

The middle portion of Mongolia is occupied by the Great Gobi (Ta-Gobi), which stretches across the country south-west and north-east from the boundary-line of the province of Kansu to the Dalai Nor, near the boundary of Da-uria, with an average width of about 200 miles. The Gobi is the worst part of the country, the surface being covered with sand or small stones, and the vegetation being very scanty and occurring only in single spots. Vast tracts of it are level, but at great distances from one another there are hills of moderate elevation. The whole region is destitute of trees, and the water, which is only found at some distance below the surface is brackish. South-east of the Gobi extends a more elevated and uneven country, which terminates in a mountain-range of considerable elevation.

This range begins on the south, near the most southern point of Mongolia, not far from the banks of the river Hoang-ho, about 38° N. lat., and extends northward along that river for nearly 400 miles. It is covered with wood, and called Alashan, or Ho-lang Shan. Near 42° N. lat. it turns abruptly to the east, forming nearly a right angle, and it is then called Inshan by the Chinese, and Onglian Oöla by the Mongols. In this direction the chain continues, between 41° and 42° N. lat., about 600 miles, when it again turns north, though less abruptly, and proceeds in a north-by-east direction from 42° to 55° N. lat. under the name of Khing-khan Oöla. The highest portion of this mountain range seems to be at the point where it turns northward, and where a peak, called Petaha, rises far above the snow-line, and is supposed to attain a height of more than 15,000 feet above the sea. The country which skirts this range along its western and northern base, and extends from it to a distance of between 50 and 100 miles, has a broken surface, the hills rising to some height above the valleys and small plains. It is not deficient in water, but trees occur only in isolated tracts. As its elevation above the Gobi is considerable, and probably not less than 5000 feet above the sea-level, and as it is also much exposed to the cold winds which blow with great force over the desert, it is nearly unfit for agriculture, and only used as pasture-ground for horses, cattle, and sheep.

South of the Inshan Mountains the country exhibits fertile valleys and mountains, partly wooded, as far west as the place where the Hoang-ho River turns southward: this fertile tract is included in the Chinese provinces of Pe-tche-li and Shan-si. But the tract farther west, which is surrounded by the great northern bend of the Hoang-ho, partakes strongly of the features of the Gobi, and forms part of Mongolia: it is called the country of the Ordes, taking its name from a Mongolian tribe which belongs to the great division of the Tabakhar Mongols. This whole tract is covered with hills composed of loose sand, mostly without water, and entirely destitute of trees. But the numerous depressions contain extensive meadows, with rich grass and bushes. The attempts to cultivate some parts of it have not proved successful, and accordingly it is abandoned to the Mongols and their herds; but in order to prevent them from plundering the adjacent agricultural districts of the neighbouring provinces of Shan-si and Kan-si, the great Chinese wall was built across the peninsula from east to west from Pao-tsheou to Ning-gia.

That part of Mongolia which is to the east of the Khing-khan Oöla, and extends nearly to the shores of Hoang-Hai, or the Yellow Sea, from which it is only divided by a narrow fertile tract belonging to the province of Leao-tong, is called Kortahin. This name is properly only applied to the tract north of the river Sira Muren, or Leao-ho, which resembles the country of the Ordes, except that it is less intersected by sand-hills. A great portion of it seems to be of inferior fertility; but south of the Sira Muren the country contains numerous meadows clothed with rich grass, and agriculture has been introduced here by the Chinese, who send to this country their criminals who are condemned to transportation. A great part of it serves only as pasture-ground. Great quantities of grain, especially wheat, are exported from the province of Leao-tong to Peking and Shanghai. The most southern district of this country is traversed by an offset of the Khing-khan Mountains, which branches off from the principal range near the peak of Petaha, and extends in a south-eastern direction to the Hoang-hai, where it forms the high, rocky, and mountainous shores along the western side of the Gulf of Leao-tong north of the mouth of the river Lan-ho. The declivities of this range are abundantly watered, but the northern side is bare and destitute of wood; whilst the southern is overgrown with pine, fir, oak, lime, walnut, and other trees, and is the haunt of numerous wild animals, among which are tigers and leopards. It constitutes the most extensive hunting-ground of the Chinese emperor, and contains the royal palace of Ichol, which was visited by Lord Macartney and described by Sir George Staunton. The tract on both sides of the Lan-ho is an agricultural country of great fertility and well cultivated. Though included within the boundary of Mongolia, it is inhabited by Chinese, and is very populous. Besides several small towns, it contains the large town of Quan-tsing.

The country which extends along the north-western side of the Ta-Gobi is nearly unknown, with the exception of the eastern part,

which is traversed by the caravan road from Kiachta in Siberia to Khalgan in China. Here too the surface of the country is frequently broken by hills and isolated ridges; but the intervening level tracts contain rich pasture-ground. It is mostly well watered, but wood is scarce. In advancing northward the hills grow higher, and the valleys or intervening level tracts become narrower, till near the boundary-line between Mongolia and Siberia the country rises into mountains, which run in a continuous chain, and are that portion of the Altai Mountains which is known under the name of Khing-khan Oöla. [ALTAI MOUNTAINS.] The width of this mountainous and uneven country, which lies between Siberia and the Ta-Gobi, seems on an average to be about 150 miles. In it originate the river Selenga and its numerous upper branches. Here also rise the Kerlon and the Onon, two large rivers, which by their union form the Amur. [AMUR.] This country, which is rich, when compared with other portions of Mongolia, belongs to the high-priest of the Buddhists, who resides in the neighbourhood of the town of Urga, and is called Kootookhtu. It forms a separate government of the Chinese empire, and its general governor, called 'vang,' or 'kiun-vang,' as well as the lieutenant, called 'amban,' resides in the town of Urga, or Oergo. This town is built in a small plain; but though sheltered by mountains against the northern winds, the climate is too cold to permit the most common vegetables to be raised, which are accordingly brought to it from Mai-mat-shin, a place two degrees farther north. Its population does not exceed 7000, of which 5000 are said to be lamas, or persons belonging to the ecclesiastical establishment of the Kootookhtu; but it is a place of considerable traffic, being a depôt for the goods intended for the trade with Siberia, and also for those Chinese productions and manufactures which are consumed in the parts of Mongolia farther to the west. Many of the Mongolian princes, whose tribes wander about in the Ta-Gobi and the adjacent countries, are obliged to reside in this town, in order that their views may be known to the Chinese governor, who is a Mandshoo, and commonly a relation of the emperor. Here also is the supreme court, called Yamoun, for the administration of justice in that part of Mongolia which is inhabited by the Khalkas. This place may in fact be called the capital of Eastern Mongolia. The small town of Mai-mat-shin is on the very boundary-line of Siberia, and less than a mile from Kiachta. [KIACHTA.]

Of the western portion of Mongolia, extending from 84° to 96° E. long., between Siberia and the most western extremity of the province of Kan-su, all our knowledge is derived from the geography of the Chinese empire, the Tay-tsing-hoei-tien, and the maps annexed to it. Its western part is traversed by a mountain range, which near its western extremity is connected with the Altai Mountains, not far from the eastern bank of the Irtysh. This range, the Ektag Oöla, is commonly called on our maps the Great Altai. It seems to rise to a considerable elevation, but to disappear about 94° E. long.; for farther east only isolated mountain masses or short ranges occur in the desert. That portion of Mongolia which lies south of this range seems to partake largely of the nature of the Gobi, extending mostly in extensive sterile plains. The great number of rivers which, descending from the southern declivity of the Ektag Oöla, join the Irtysh before it reaches the lake of Zaizan, seems to indicate that a tract of fertile country extends along the northern banks of that river. The Irtysh is the largest river in this country, and probably runs 160 miles before it falls into Lake Zaizan. Another large river, the Ooroongoo, falls into Lake Kialibash, which has no outlet. The country between the Ektag Oöla and the principal chain of the Altai Mountains appears to be traversed by several subordinate ridges running east and west. Though it is much better watered than any other part of Mongolia, the greatest part of it is a desert, especially towards the east, but towards the west the tracts of pasture are more extensive and less interrupted by sandy districts. In this part there are several extensive lakes, all of which receive considerable rivers without having any outlet. The most northern is the Upsa Nor, which receives from the east a considerable river, the Tes, besides several smaller ones. The Yeke Aral Nor, to the south-south-west of the Upsa Nor, is the receptacle of the Djabekan, a river whose course can hardly be less than 500 miles. In this part Mongolia extends to the north of the Altai Mountains, comprehending the country in which the upper branches of the Yenesei have their origin and course. The mountain range which divides the last-mentioned tract from the lake Upsa Nor and the river Tes is called the Tangnoo Oöla.

This part of Mongolia is divided into two governments, the government of Kobdo and that of Uliassutai, the boundary-line between them running near 92° E. long. The capital of the former is Kobdo, not far from the northern extremity of Lake Yeke Aral Nor: the capital of the latter is Uliassutai, situated on the river Iro, an affluent of the Djabekan. The latter place is stated to contain 2800 houses, and to be regularly built. Caravans pass from it to Urga and to China, and its commerce seems to be considerable. Nothing is known of Kobdo. A general, appointed by the Chinese emperor, resides in each town, a Mandshoo by birth, who has under his inspection the Mongol inhabitants of the country; he unites in his person the military and civil authority.

As the whole surface of Mongolia, with the exception of the deep depression of the Ta-Gobi, is more than 3000 feet elevated above the sea-level, and as it stretches out in vast plains, to which the compara-

tively low ranges of mountains along its northern border cannot afford shelter against the northern and north-eastern winds, the climate is much colder than in that part of Siberia which extends along the base of the Altai range west of Lake Baikal. No month in the year is free from snow, and even frost, though the heat in summer is nearly insupportable, on account of the want of trees and the sandy surface of the country. Sudden and great changes in the temperature are of frequent occurrence. It is however remarkable that the numerous herds which pasture on this plain find subsistence all the year round: even after a fall of snow the grass is seen above it, and serves to nourish the animals. This evidently shows that the quantity of snow which falls is comparatively small, and much less than that which annually covers the northern countries of Europe or of North America. This fact is a proof of the great dryness of the air; and to this want of moisture the unfitness of the soil for agricultural purposes, even where it is not composed of sand or stones, is mainly to be attributed. A little millet is grown in a few sheltered places between high hills, which attract the moisture. Rain is rare, except near the great ranges of mountains, especially about Urga. Gales of wind are frequent, and, especially in the Gobi, blow with great force, and frequently for many days together.

The wealth of the Mongols consists in their numerous herds of camels, horses, and sheep. Cattle are only numerous on the more hilly tracts, especially towards the boundary of China; there are none in the Gobi. Asses and mules are only found in the vicinity of China. Wild animals are numerous, especially hares, antelopes, dahiggetais, or wild asses, deer, foxes, sables, squirrels, and marmots. Water-fowl are plentiful on the numerous lakes and swampy tracts. In some places the desert is covered with small stones, among which several kinds of precious stones occur, as chalcedony, agate, onyx, jade, carnelian, &c., which are collected by the Chinese.

Inhabitants.—The inhabitants are called Mongols, and constitute the principal stock of a nation which is widely diffused over the extensive table-lands of Central Asia.

This nation is divided into two great divisions, the Eastern or Proper Mongols, and the Western Mongols, or Kalmucks. All the tribes belonging to this nation have, from time immemorial, led a nomadic life, and subsisted on the produce of their herds, without attempting to cultivate the ground; a circumstance which must be attributed to the countries they inhabit being entirely unfit for agriculture, with the exception of very small tracts.

The Proper Mongols inhabit that portion of Central Asia which is bounded by a line drawn from the northern extremity of Lake Baikal to the northern extremity of Lake Balcash, thence to the Hoang-ho, where the range of the Alashan rises near the town of Ninghia; from this place it follows the Great Wall, from the eastern extremity of which it runs to the junction of the rivers Nonni and Songari in Mandshooria, whence it returns to the northern extremity of Lake Baikal. The whole country encompassed by this line is in possession of the Proper Mongols, with the exception of some plains between the Ektag Altai and Lake Balcash, which are occupied by Kalmuck tribes. There are however Mongols also in other parts of Asia, especially in the country about the sources of the Hoang-ho, and about Lake Kookoonor, and in the western parts of Tibet, where they are called Khor-Katsai Mongols. All the Mongols speak the same language, and admit that they all belong to the same nation, and have a common origin.

The Proper Mongols are divided into three great nations, the Tshakhar, Khalkhas, and Sunnit. The Tshakhar inhabit the best part of Mongolia, being in possession of the tract which skirts the great Chinese Wall on the north, and extends to the Ta-Gobi, a distance of from 150 to 200 miles from the wall. They obtained the full confidence of the court of Peking by yielding to the sway of the Mandshoo, before they had made any considerable progress in the conquest of China. The Khalkha, or Khalkhas Mongols, occupy the northern part of Mongolia, along the southern boundary of Siberia. They voluntarily submitted to the Chinese emperor to avoid destruction in their unsuccessful war with the Oelöth Kalmucks in 1683. The Sunnit occupy the country between the Tshakhar and Khalkhas, or that part of Mongolia through which the Ta-Gobi extends. They are less numerous and powerful than their neighbours, and less esteemed by the Chinese. They submitted to the Mandshoo when the Tshakhar joined them in 1634.

The Mongols however have a literature, which they owe to the Chinese, and which consists chiefly of translations of Chinese books, and a few original historical works, especially the history of their great hero, Gengis Khan.

The whole nation is divided into 26 tribes, called 'aimak.' Each of these divisions has an hereditary prince, except the Khalkhas, who constitute one aimak, but are governed by four hereditary princes, called 'khan.' All four claim a descent from Gengis Khan. Each aimak has its territory, in which it wanders about with its herds. The order of society resembles the feudal system, and the noblemen are called 'taidahis.' The Mandshoo have introduced among them a military division, according to which the whole nation forms 135 banners, each of which is subdivided into regiments and companies. Each Mongol is bound to serve as a horseman from his 18th to his 60th year. The Mongols are governed by the decrees of the Li-fan-yuen, or Tribunal of Foreign Affairs, which has instituted for them a

civil government, resident at Urga, and two military governments, at Uliassutai and Kobdo. All their princes are obliged to pay a fixed tribute as a token of their dependency, but it is small, and they receive ten times its amount back in presents, given to them as a remuneration for their services and fidelity. A few receive even a fixed salary. Some of their princes also are always married to a princess of the imperial blood, and thus are more closely attached to the interests of the emperor. By these means the court of Peking keeps the unruly and warlike temper of this nation in subjection, in which it is powerfully supported by the indelible hatred which the Mongols bear to the Chinese.

According to a rough estimate, it is thought that this nation, after having lived in peace for more than a century, can bring to the field 500,000 warriors; and, as each male is a warrior, it is presumed that the whole population does not much exceed two millions.

The Mongols have been sometimes strangely confounded with the Tartars, and Mongolia is called Tartary on many old maps. No two nations could physically be more distinct, though both are addicted to the same nomadic mode of life. The Tartars belong to the Turki race, from whom the European Turks are descended. Personally they are a noble and intrepid race (though animated by fierce passions and addicted to plunder and robbery), observant of the duties of hospitality, and all believers in Mohammed. They are all distinguished by the same striking features of the finely-formed and light-coloured Caucasian family to which they belong. The Mongols, on the other hand, are characterised by a short stature, dark yellow colour, flat nose, strong cheek-bones, large and prominent ears, and by the almost complete absence of beard. The Mongol race, which is far more numerous than the Tartar, is dispersed over almost all the eastern countries of Asia; but it is to the restless hordes of middle Asia, and to the Buriates, Bashkirs, Kalmucks, and other roving tribes that the name of Mongols is chiefly restricted. Addicted to the same nomadic manner of life, and equally fond of horse and cattle breeding with the Tartars, they wander in quest of pasturage over their boundless plains, carrying with them their whole stock of property, and even their houses, which are placed upon wheels and drawn by oxen. Thus they leave scarcely a trace of their former residence in the places which they abandon. Contending for temporary pasture-grounds, or propelled by urgent necessity, those innumerable crowds of Mongols, though naturally fainthearted and cowardly, have often invaded the neighbouring countries.

The distinctive names of Mongols and Tartars did not become known until after the conquests of Gengis Khan, who honoured his Mongols with the pompous title of 'Koekae Monghoel,' or Celestial People; whereas the conquered Turki hordes were called Tributaries, or Tatars, as the word should be more correctly written. Gengis Khan, born in 1163, became the chief of a petty Mongol clan in the 18th year of his age, and having first overcome the neighbouring hordes, he soon united the numerous wandering tribes into a conquering nation, and successively subdued the greatest part of Asia. His son Oktai followed him, under the title of Great Khan, and was equally successful. In their expeditions to the west, the Mongol armies advanced even to Hungary and Silesia; so that after the dreadful battle of Wahlstadt (1241) the Mongol empire extended from the northern provinces of China to the frontiers of Poland and Germany. The Mongols (Khalkhas), under their khan Kublai, conquered all China, and remained in possession of that country for a century. In the course of the thirteenth century this vast empire gradually split into several independent sovereignties, till it was once more united, and even considerably enlarged in the direction of Hindustan, by the famous Tamerlane, after whose brilliant career (1335-1405) the Mongol empire slowly dissolved. In the year 1519 a lineal descendant of Timur, Zehireddin Mohammed Baber, founded a new monarchy in Hindustan, erroneously called the Mogul empire. Being himself of Turki origin, Baber not only wrote his interesting 'Memoirs' in the purest Turki dialect, but often censures in the strongest terms the depravity, perfidy, venal character, and cowardice of the Mongols.

(Timkowsky; Pallas; Klaproth; Staunton, *Account of an Embassy to China*; M'Leod, *Narrative of a Voyage to the Yellow Sea*; Ritter, *Erkunde von Asien*; Abulghasi Behadurkhan, *Historia Mongolorum et Tatarorum*; Hüllmann, *Geschichte der Mongolen*.)

MONISTROL. [LOIRE, HAUTE.]

MONMOUTH, the capital town of Monmouthshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated at the confluence of the rivers Wye and Munnow, in 51° 48' N. lat., 2° 42' W. long., distant 129 miles W. by N. from London. The population of the borough in 1851 was 5710. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and, in conjunction with the boroughs of Newport and Usk, returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Monmouth and diocese of Llandaff. Monmouth Poor-Law Union contains 33 parishes and townships, with an area of 92,427 acres, and a population in 1851 of 27,348.

Monmouth appears to be the Blestium of the Roman Itineraries. It was in early times occupied by the Saxons, who fortified it to maintain their conquests between the Severn and the Wye, and to prevent the incursions of the Welsh. The town was at one period

surrounded by walls and by a moat on the sides which are not protected by the river: one gate still remains, but the walls have been demolished. A remnant only is left of the castle. Monmouth Castle was the favourite residence of John of Gaunt, of his son Henry Bolingbroke, afterwards Henry IV.; and the birth-place of Henry V., who was thence called Harry of Monmouth. Charters were granted to the borough by Edward VI., and by subsequent sovereigns. The town is lighted with gas and well supplied with water. The parish church of St. Mary has a tower which dates from about the 14th century, and is surmounted with a beautiful spire. The body of the church was rebuilt about the beginning of the 18th century. A district church has been opened, which is a restoration of a curious edifice of early Norman date. Wesleyan Methodists, Independents, and Roman Catholics have places of worship; and there are National and Infant schools, and Jones's Charity school and almshouses. The Haberdashers' Company of London are trustees for Jones's charity. The town possesses a dispensary and a savings bank. A county court is held here. Markets are held on Wednesday and Saturday; and on the first Wednesday in each month there is a great market or fair for cattle. Three fairs are held annually. There is a considerable trade in timber and iron. Fishing is carried on in the Wye with coracles. Monmouth is much resorted to in the summer by tourists. The neighbourhood of Monmouth abounds with old castles, abbeys, and other memorials of the olden time, and the scenery of the Wye is here very beautiful.

MONMOUTHSHIRE, a maritime English county, lying between 51° 29' and 51° 59' N. lat., 2° 39' and 3° 17' W. long., is bounded W. and N.W. by the Welsh counties of Glamorgan and Brecknock, N. and N.E. by Herefordshire, E. by Gloucestershire, and S. by the Bristol Channel and the estuary of the Severn. Its greatest length, from a point in the Black Mountains on the north, to the Goldcliff Headland on the south coast is 31 miles: its greatest breadth from the point where the Wye enters the county on the east to a little west of Tredegar, is 28 miles. The area is 576 square miles, or 363,399 statute acres. In 1841 the population was 134,368; in 1851 it amounted to 157,418.

Coast-line and Surface.—The coast-line extends 22 miles along the estuary of the Severn, and a part of the Bristol Channel, between the mouths of the Wye and the Rumney. The only indentation within this distance is that formed by the estuary of the Usk, which is navigable for vessels of the largest size, up to the town of Newport. The coast is exposed to the high spring-tides which rush up the Severn from the Bristol Channel, rising at Newport to 40 feet, and at Chepstow sometimes to 60 feet, the highest tidal altitude reached in Great Britain. The southern part of the county east and west of the Usk, consists of two extensive levels, called respectively the Caldecot and Wentloog Levels, which are protected from the wash of the sea by vast sea-walls and earth-works, and are under the control of a Court of Sewers. The Caldecot Level is diversified by the hill and headland of Goldcliff.

The district north of the Caldecot Level, and between the Usk, the Wye, and the Munnow, is in parts undulating, but generally presents an irregular hilly surface, rising here and there into bold bluffs, and diversified by wooded knolls and deep shady dells. This part of the county is famous for its scenery, which is greatly set off by a background of misty mountains on the north and west, by numerous primitive churches, half concealed by clustering ivy or the shade of aged yews, by the picturesque ruins of feudal strongholds and grand ecclesiastical structures, and on the eastern boundary by the graceful windings of the Munnow and the Wye. The most northern part of the county consists of a long narrow projection, formed by offshoots from the Black Mountains of Brecknockshire, inclosing between their dark and lofty ridges two wild and secluded glens, one of which, watered by the Grunty Vawr, forms the chief portion of a detached part of Herefordshire, called the Ffwddog; the more eastern glen called the Vale of Ewias, and celebrated for its romantic mountain scenery, is watered by the Honddu.

South of the glen of the Grunty Vawr, and about 4 miles N.W. from Abergavenny, is a remarkable peaked mountain 1856 feet high, called the Pen-y-Val, or Sugar-Loaf. At a distance of 3 or 4 miles E. from the Sugar-Loaf, is a much more wild and rugged height, called Scyrryd Vawr, or Holy Mountain, 1498 feet high, on the north-eastern point of which formerly stood the ancient chapel of the Archangel Michael. North-east of the Holy Mountain, and commanding the finest scenery of the Munnow, is Graig Hill.

From the west side of the Vale of Crickhowell, in Brecknockshire, and at a little distance from the left bank of the Usk, a high range of hills enters the county west of Abergavenny, and after running for a few miles south-south-east, sweeps gradually round to the south-west, terminating on the left bank of the Rumney, a little west of Newport. In the northern part of the chain, is the Blawrenge Mountain, 1720 feet high. This ridge lies on the eastern edge of the South Wales mineral field, and between it and the Rumney, on the western boundary of the county, are several lower chains of hills, inclosing vales watered by small rivers, which converge upon the Usk, near Newport. All this western district is dotted with iron and coal works.

Hydrography and Communications.—The principal rivers of Mon-

monmouthshire are the Wye, the Usk, the Rumney, the Ebbw, the Sirhowy, the Avon-Llwyd, and the Munnaw.

The *Wye* first enters Monmouthshire at a detached portion, the parish of Welsh Bicknor, of which it forms the western and southern boundary; thence it flows between the counties of Hereford and Gloucester, until it reaches Hadnock Wood, in the parish of English Newton, where for a short distance it divides Herefordshire from Monmouthshire: it then enters Monmouthshire, and flowing past the town of Monmouth, it again at Redbrook becomes the boundary of the county, and continues so to its mouth in the estuary of the Severn. Sea-going vessels work up to Chepstow bridge. The tide ascends the river as far as Tintern, 5 or 6 miles higher up. Above Chepstow the Wye is navigated by trows or heavy barges which are dragged by gangs of men over the weirs and rapids that occur in the river above the tide-way. It is the portion of this river bordering Monmouthshire that is most frequently visited by tourists; and the whole extent from Monmouth to Chepstow is of remarkable beauty. From Tintern to Chepstow the river flows between high and steep banks crowned with woods, and on approaching the Windcliff, a bold cliff, 800 feet high, it sweeps past a fine range of rocks called the Bannagar Crags. Tintern Abbey, one of the finest ecclesiastical ruins in Europe, on one of the loveliest spots in England, is the gem of the scenery of the Wye. The *Usk* enters Monmouthshire about 3 miles west of Abergavenny, flows near that town, and through the middle of the county past the towns of Usk, Caerleon, and Newport, into the Bristol Channel. The *Rumney* first reaches Monmouthshire at its most western point, and flowing in a south-south-east direction, divides it from Glamorganshire, until it falls into the Bristol Channel. The *Ebbw* is formed by the Ebbw-Vach and the Ebbw-Vawr, two small streams that rise within the Brecknockshire border, and flowing south-south-east unite their waters a short distance above Crumlin. From this point the Ebbw flows south past Crumlin and Newbridge, to its junction with the Sirhowy, on the right bank, whence it runs south-east past Bassaleg, entering the Wentloog Level, through which it flows by a very winding channel into the estuary of the Usk. The *Sirhowy* also rises in Brecknockshire; it enters Monmouthshire, a short distance above the Tredegar iron-works, and flows through a long vale west of the Ebbw, in a general south-south-east direction to within about a mile of its junction with the Ebbw: through this distance its course is eastward. The *Avon-Llwyd* rises on the western side of the Blawrenge Mountain, and flows south-south-east through a vale studded with iron-works and intersected by tramways and inclined planes, to Pontypool; hence its course is due south to Llantarnam Abbey, when it turns eastward, and joins the Usk on the left bank at Caerleon. The *Munnaw* rises on the eastern slope of the Hatterel Hills, in Herefordshire, near the village of Dorston. After a south-south-east course of about 15 miles, it reaches the boundary of this county about a mile south of the village of Clodock, in Herefordshire, and after separating the two counties for a considerable distance, it enters Monmouthshire about 3 miles north-north-west of Monmouth, passes that borough, and falls into the Wye. There is good fishing in all these streams. The Wye and the Usk are both famous for their salmon. A canal runs from Newport to the neighbourhood of Pontypool, thence to the west of Abergavenny and up the Vale of Usk to Brecknock. The Crumlin Canal branches from the former between Newport and Malpas, and runs along the left bank of the Ebbw to the village of Crumlin. In connection with these canals are many tramroads and railways, having several inclined planes and tunnels of great length, on which iron and coal are conveyed from the various works.

The county is well provided with common roads. The principal are the following—the road from Chepstow by Caerwent to Newport, and thence to Cardiff; that from Chepstow to Monmouth and Hereford; and that from Ross through Monmouth and Abergavenny to Brecon and Caermarthen. The South Wales railway from Swansea to Gloucester enters Monmouthshire a little east of Cardiff, and passes through Newport and Chepstow, where it crosses the Wye by a bridge of peculiar construction. [CHEPSTOW.] Its length in the county is about 28 miles. The Western Valleys railway, formerly a tramroad belonging to the Monmouthshire Canal company, was adapted in 1850 to passenger traffic; it passes through Risca, Abergarn, Newbridge, and Crumlin, to the vicinity of the Nant-y-glo iron-works near Blaina; and has a branch to Ebbw Vale. The Newport and Pontypool railway forms part of a continuous line from Newport to Hereford, Shrewsbury, and Chester. Numerous tramways from the coal-mines and iron-works converge upon Newport, and the quays, wharfs, and staiths on the left bank of the Usk, to the south of that town.

Soil, Climate, &c.—In the vales of Wye and Usk, and in many of the southern parishes, the crops are much earlier than in the northern and western portions of the county, where the narrow valleys are swept by the winds, and are subject to frequent rain. In the mountainous portion on the north-west, little wheat is grown; oats and barley form the principal grain crops. In the fertile Vale of Usk, the Vale of Wye, and the northern and eastern districts generally, wheat is the principal crop. Orchards are seen in favourable situations; the hills are also frequently covered with oak-coppice. The levels bordering the Bristol Channel consist partly of a black and

sterile peat, but chiefly of an alluvial loam, which is productive either as pasture or meadow, or under tillage.

Geology and Mineralogy.—That part of Monmouthshire which lies east of a line drawn from Abergavenny to Newport, and prolonged thence to the Bristol Channel, is composed of the old red-sandstone formation. At Chepstow, a tongue of carboniferous limestone, from the coal-basin of the forest of Dean, runs into Monmouthshire, and is bordered on the south by a strip of new red-sandstone, which forms the shore of the Severn. Close to Usk the strata of the old red-sandstone have been pierced by the underlying rocks which form an oblong district in the midst of the old red-sandstone formation. The district to the west of the supposed line consists of the coal-measures of the South Welsh coal-field, skirted by a narrow band of carboniferous limestone. The important minerals in this county are coal, limestone, and ironstone. There are 12 beds of coal, varying from 3 to 9 feet thick, and having an aggregate thickness of about 95 feet. The principal strata lie at a considerable depth; so much so, that some of them cannot be profitably worked, but as the district is intersected by deep valleys, the expense of sinking shafts is avoided, levels for ingress and egress to the mine being driven into the side of the hills. Limestone is burnt extensively for building purposes and manure, and is used in large quantities in the manufacture of iron. It is reckoned that about a ton of limestone is required for the manufacture of every ton of iron. The ironstone of this district is an argillaceous ore, occurring sometimes in strata, sometimes in detached lumps or balls; the proportion of iron contained in it varies from 18 to 55 per cent. The principal iron-works of Monmouthshire are the Rumney, Tredegar, Sirhowy, Ebbw Vale, Victoria, the British, Pentwyn, Beaufort, Blaen-Afon, Coalbrooke Vale, Blaina, Bute, Nant-y-Glo, the Varteg, Abersyochan, and Pontypool, which terminates the mineral range in that direction. The products of the iron-works and the collieries in Monmouthshire are shipped almost entirely at Newport. The area of the Monmouthshire mineral district is estimated at 89,000 acres.

Divisions, Towns, &c.—Monmouthshire is divided into 6 hundreds:—Abergavenny, north-west; Caldecot, south-east; Raglan, central and east; Skenfrith, north-east; Usk, central; and Wentloog, west. It contains 8 market-towns—ABERGAVENNY, CAERLEON, CHEPSTOW, MONMOUTH, NEWPORT, PONTYPOOL, which will be found under their respective titles, and Tredegar and Usk, which we notice here.

Tredegar, population 8505 in 1851, about 12 miles W. by S. from Abergavenny, and about 1 mile from the Brecknockshire border, has risen up around the extensive Tredegar iron-works. The market is held on Saturday. There are here a district church, and chapels for Wesleyan Methodists and Baptists; also schools supported by the iron-works company. The Ebbw Vale branch of the Western Valleys railway has its terminus near Tredegar.

Usk, a small neat and clean town of considerable antiquity, is situated at the junction of the Olwy and the Usk, 12 miles S.W. from Monmouth, population of the borough 1479 in 1851. Usk unites with Monmouth and Newport in the return of a member to the Imperial Parliament. The borough is governed by a portreeve, two bailiffs, and burgesses. On an eminence above the town are considerable remains of the castle. Several ancient encampments are near the town.

The following are the only other places that require notice: the populations are those of 1851:—

Caerwent, population of the parish 420, the Roman military station, *Venta Silurum*, and afterwards a town of considerable importance, is now a poor village. It is situated in the south of the county, at a short distance from Caldecot Castle. The church is partly Norman, with a lofty embattled tower. The chief objects of interest are the Roman fortifications, which remain in a very perfect state. Roman coins of the reign of Severus, tessellated pavements, and fragments of sculpture, have been discovered on the site. About 4 miles N. from Caerwent is the only cromlech in Monmouthshire. *Newbridge*, situated in the Ebbw Vale, 11½ miles from Newport by the Western Valleys railway, is a considerable town of only a few years growth. Higher up the vale, on the left bank of the Ebbw, is *Crumlin*, also a rising place, 12 miles by railway from Newport, with which it is also connected by canal. In the valley of the Wye, between Chepstow and Monmouth, are—*Brookweir*, a busy village, in which ship-building is carried on to some extent: *Llandogo*, a picturesque village of white cottages straggling up the sides of a hill on the right bank, amongst noble trees; near it is a small waterfall called the Cleidan Shoots: and *Tintern*, celebrated for its ancient abbey.

By the Poor-Law Commissioners the county is divided into 6 Poor-Law Unions—Abergavenny, Bedwelty, Chepstow, Monmouth, Newport, and Pontypool. These Unions comprise 161 parishes and townships, with an area of 354,006 acres, and a population in 1851 of 177,020. The county, with the exception of 4 parishes, is in the diocese of Llandaff and archdeaconry of Monmouth. Two members of Parliament are returned for the county, and one for Monmouth and the boroughs connected with it. The county is in the Oxford circuit; the assizes are held at Monmouth. Quarter-sessions are held alternately at Monmouth and at Usk. County courts are held in Abergavenny, Chepstow, Monmouth, Newport, Pontypool, Tredegar, and Usk.

History and Antiquities.—Monmouthshire at the time of the Roman invasion was occupied by the Silures, whose capital was Caerwent. The Silures were reduced by Julius Frontinus in the reign of Vespasian;

from this time the Romans occupied their country until A.D. 408, a period of 330 years. During the Heptarchy the Saxons and the Welsh princes were continually at war; the Saxons drove back their adversaries, and compelled them to pay tribute. Wales was now divided into three principalities—Gwynedd, Powisland, and Deheubarth. Monmouthshire, once within the limits of Deheubarth, afterwards formed at some times a separate district under the name of Gwent, at others was comprehended in Morganwg, or the kingdom of Glamorgan. Canute entered Gwent in 1034, and defeated the prince of South Wales, and the English occupied the castles of Monmouth, Chepstow, and Caerleon before the Norman Conquest. The Norman barons made incursions at their own expense, and were rewarded with the gift of the lands which they subdued. The barons held these lands by feudal tenure under the crown, and built castles and towns. Henry VIII, in the 27th year of his reign, abolished the government of the lords of the marches, divided Wales into 12 shires, and annexed Monmouthshire to England.

Two Roman roads traversed this county: the Via Julia, extending from the mouth of the Severn to Caerwent, Caerleon, and onwards to Neath; and Akeman-street, running eastward from Caerwent over the rivers Wye and Severn to Cirencester. The stations which antiquaries have acknowledged to be Roman are—Isca Silurum (Caerleon), Venta Silurum (Caerwent), and Gobannium (Abergavenny). The county contains many Roman encampments (called caers or gaers), and numerous druidical remains. Of this last class of antiquities the three stone pillars on the summit of a hill near Trelech church, a short distance from Llandogo, are the most famous.

In no part of England are to be found remains of so many feudal castles as are met with in that part of Monmouthshire east of the Uk. Those connected with the chief towns are noticed in the articles before referred to. In Wentwood Forest or Chase, a wooded tract of 2200 acres belonging to the Duke of Beaufort, are ruins of no less than five castles, and there were originally six. But the grandest remains of this kind in the county are Raglan Castle, Caldecot Castle, and White Castle. The ruins of Raglan Castle, the ancestral seat of the Duke of Beaufort, are situated near the village of Raglan, on a gentle elevation to the right of the road leading from Chepstow to Abergavenny. The different parts of the building present specimens of the styles that prevailed from the time of Henry V. to the early part of the 17th century. After the battle of Naseby, in 1645, Charles I. took refuge in Raglan Castle for two months; and this was the last castle in England that defied the power of Cromwell. The Marquis of Worcester, its owner, then eighty-five years old, defended it against Fairfax from June 3rd to August 19th, when a capitulation was effected on honourable terms. The farmers of the neighbourhood for a century afterwards used this noble structure as a quarry. Enough however still remains to convey an idea of its olden grandeur. Caldecot Castle, partly of Norman erection, is situated near Caerwent, and a little to the left of New Passage. It was long held by the Bohuns, earls of Hereford; it now belongs to the duchy of Lancaster. The plan is rectangular, with round towers at the corners. The principal parts remaining are the grand entrance gateway, the hall, and the keep. White Castle, a gigantic moated ruin, on a high ridge five miles east from Abergavenny, is a place of immense strength. Part of it dates from before the Norman Conquest. Its massive walls, flanked by huge round towers, with the extensive barbican, remain entire.

The principal ecclesiastical antiquities of this county are Tintern and Llanthony abbeys. The well-known ruins of Tintern Abbey are situated on the right bank of the Wye, about nine miles below Monmouth. The roof and tower of the building have fallen, but the greater part of the rest of the abbey remains in tolerable preservation. It is a singularly beautiful example of the transition style from early English to decorated. The abbey was founded in 1131 for Cistercian monks by Walter de Clare, and dedicated to St. Mary. The abbots and monks first celebrated mass within the church in 1263. The whole is now the property of the Duke of Beaufort. Llanthony Abbey stands at the foot of the Black Mountain, in the Vale of Ewias. The abbey was cruciform, and, though of small dimensions, well proportioned. The building is of the 12th century, and in a style of transition from Norman to early English architecture.

Religious Worship and Education.—According to the Returns of the Census for 1851 it appears that in March of that year there were 434 places of worship in the county, of which 159 belonged to the Church of England, 126 to five classes of Methodists, 79 to Baptists, 51 to Independents, 8 to Roman Catholics, and 6 to Mormons. The total number of sittings provided was 105,201. The number of day schools was 295, of which 118 were public schools with 10,120 scholars, and 177 were private schools with 4096 scholars. The number of Sunday schools was 278, with 26,622 scholars. Of literary and scientific institutions the county contained 6, with 744 members, and 1784 volumes in the libraries belonging to them.

Savings Banks.—In 1853 Monmouthshire possessed 5 savings banks, at Abergavenny, Chepstow, Monmouth, Newport, and Pontypool. The total amount owing to depositors on November 20th 1853 was 123,376*l.* 12*s.* 10*d.*

MONOMOTAPA. [SOFALA.]

MONONGAHELA. [MISSISSIPPI, RIVER.]

MONOPOLI. [BARI, TERRA DI.]

MONPAZIER. [DORDOGNE.]

MONPONT. [DORDOGNE.]

MONROE. [MICHIGAN.]

MONROVIA. [LIBERIA.]

MONS (*Berghen*), the capital of the province of Hainault, is situated in 50° 27' N. lat., 3° 59' E. long., on the river Trouille (by which the city is divided into two parts), 38 miles by railway S. from Brussels, 20 miles E.N.E. from Valenciennes, and has 25,000 inhabitants. It is surrounded by strong fortifications in form of a polygon flanked with 14 bastions. It is supposed that Mons occupies the site of the Roman station which was so bravely defended by Quintus Cicero, brother of the orator, against the attacks of the Eburones, Nervii, and other tribes ('De Bell. Gall.' v. 39-52). About A.D. 653 a hermitage, and then a chapel, dedicated to St. Peter, were built on the spot; and some time after Alberic, count of Hainault, made it his place of residence, a circumstance which attracted many other inhabitants. The town from this time went on increasing, and in 804 Charlemagne made it the capital of Hainault. Towards the end of the 10th century Mons sustained a siege against Hugh Capet, and about 50 years later was again invested by Baldwin of Flanders. In 1290 the city was enlarged, and new walls, inclosing a greater area, were built. In the war which Jacqueline of Bavaria, countess of Hainault, sustained with the duke of Burgundy, Mons, after an obstinate resistance, fell into his hands in 1436. Under the reign of Charles V. Mons attained the highest degree of prosperity; and such was the extent of the woollen manufacture carried on, that at the hour when the workmen left their labour the streets were too narrow for the traffic, and the passing of carriages through them was forbidden. Manufactures of hardware were also pursued, and there were several streets wholly inhabited by goldsmiths. This state of prosperity was cut short by the exactions of the Duke of Alva in 1569, which caused the inhabitants to revolt. After some resistance they capitulated, and many were driven from the city, others executed. Mons was quiet under the rule of the arch-dukes of Austria, but its prosperity had passed away. In 1678 Mons was invested by the French under Marshal Luxembourg, but the siege was raised in consequence of the treaty of Nimeguen. In 1691 the city was again assailed by Louis XIV., and was defended with the greatest bravery until the walls were altogether destroyed, and nearly all the houses were in ruins. Mons remained in possession of the French until the peace of Ryswick. They occupied it again in 1701, and were besieged in 1709 by Prince Eugene and the Duke of Marlborough, to whom the town capitulated 24 days after the opening of the trenches. By the treaty of Utrecht, Mons was restored to Austria: it was taken again by the French in 1746, and reverted to Austria once more in 1748. It was taken by the French under Dumourier in 1792. In 1794 it was declared part of France, and was the capital of the department of Jemappe until 1814. The fortifications were greatly strengthened in 1818. The east side of the town is protected by two large ponds, and the whole neighbourhood can be inundated by means of the Trouille.

Mons is entered by 5 gates. It contains 76 streets, besides a great number of lanes. The former are for the most part wide, clean, and well paved. There are 3684 houses, with a population of 23,231.

The church of St. Waudru, which is built on the site of the hermitage already mentioned, is a remarkable specimen of Gothic architecture, and one of the finest ornaments of the city. The present building, the first stone of which was laid in 1460, was not finished until 1589. There are several other churches in Mons, of which St. Elizabeth's is surmounted by a rich cupola. The other buildings of note in the city are:—the town-hall, built in 1440; the tower of the castle, built on the site of Cæsar's Castrum in 1662; the Palace of Justice; the college; the military hospital; the arsenal; and the theatre.

Mons has several sugar and salt refineries, soap- and starch-works, oil-crushing-mills, saw-mills, and flour-mills. Woollen and cotton manufactures, cutlery, pins, gloves, and small wares are also manufactured. It derives great advantages from the numerous productive coal-fields by which it is surrounded. Steam-engines are employed for draining the mines and for lifting the coal, which is largely exported by railway and canal to France. There are about 400 pits in the coal-field of Mons, in which over 26,000 persons are employed. There are extensive bleaching-grounds in the vicinity of Mons. The town is the residence of many rich proprietors, and is the centre of a very active trade in coals, flax, hemp, grain of various kinds, mill-stones, horses, and cattle.

Mons has tribunals of first instance and of commerce, and is the residence of the governor of Hainault. It has communication by railway with all parts of Belgium and France. A canal, fed by the Haine, which passes close to the town, runs from Mons to the Schelde at Condé, in the French department of Nord; it was cut by the French between 1807 and 1814 for the more ready conveyance of coal. A new branch has been recently cut from this canal to enter the Schelde lower down, where both banks of that river belong to Belgium. About 10 miles south from Mons is Malplaquet, where the Duke of Marlborough and Prince Eugene defeated the French in 1709, but with a loss of 20,000 men.

MONSARAS. [ALEMTEJO.]

MONT-DAUPHIN. [ALPES, HAUTES.]

MONT-DE-MARSAN. [LANDES.]
 MONT'S-D'OR. [PUY-DE-DÔME.]
 MONT-LOUIS. [PYRÉNÉES-ORIENTALES.]
 MONTAGNAC. [HÉRAULT.]
 MONTALTO. [FERMO.]
 MONTARGIS. [LOIRET.]

MONTAUBAN, a town in the south of France, capital of the department of Tarn-et-Garonne, is situated on the Tarn, in 44° 1' 6" N. lat., 1° 21' 17" E. long., at an elevation of 318 feet above the surface of the sea; 32 miles N. from Toulouse, and has 23,314 inhabitants in the commune.

The town was founded in 1144 by Count Alphonse of Toulouse. In the religious contests of the 16th century it was fortified by the Huguenot party, and resisted the attack of the Catholics, who besieged it under Monluc in 1580. In the following century, being still in the hands of the same party, it resisted the attack of Louis XIII. in 1621, and did not submit until after the siege and capture of Rochelle in 1629. Its fortifications were soon after destroyed.

The gates of the town, the only remains of its old fortifications, are of elegant architecture; the streets are well laid out and clean, and the houses, which are of brick, are in general well built. There is a handsome square in the centre of the town. The town walks, from which there is a fine view of the distant Pyrenees, are very attractive. The public buildings most worthy of notice are—the fine old cathedral, the town-hall, and the bishop's palace. The manufactures are woollen-cloth, kerseymere, serge, silk-stockings and broad silks, starch, and cards for dressing woollen goods; there are also soap-houses, potteries, brandy distilleries, tan-yards, and dye-houses. The town has a good corn-market, and there are five fairs in the year. The navigation of the Tarn and the Garonne affords ready communication with Bordeaux. The town has a theatre and a public library of 11,000 volumes. Montauban is the seat of a bishop; it has theological and communal colleges, a Calvinist theological seminary, a tribunal of first instance, and a consultative chamber of manufactures.

MONTAUBAN. [ILLE-ET-VILAINE.]
 MONTBAZON. [INDRE-ET-LOIRE.]
 MONTBÉLIARD. [DOUBS.]
 MONTBÉNOIT. [DOUBS.]
 MONTEBRISON. [LOIRE.]
 MONTCORNET. [AINE.]
 MONTCUQ. [LOT.]
 MONTDIDIER. [SOMME.]
 MONTE CASINO. [LAVORO, TERRA DL.]
 MONTE CATINI. [FIRENZE.]
 MONTE GARGANO. [CAPITANATA.]
 MONTE SANT ANGELO. [CAPITANATA.]
 MONTEBOURG. [MANCHE.]
 MONTECHARI. [BRESCIA.]
 MONTEGO BAY. [JAMAICA.]
 MONTELEONE. [CALABRIA.]
 MONTELMART. [DRÔME.]
 MONTELOVEZ. [MEXICO.]
 MONTEMAR O NOVO. [ALEMTEJO.]
 MONTEOR O VELHO. [BEIRA.]

MONTENEGRO (*Czerna Gora*, Black Mountain, so called from the dark forests that clothe its mountain sides), is a high rugged district, forming a small independent state, nominally under the protection of Austria, and situated on the borders of Albania, Herzegovina, and the Austrian territory of Cattaro. The country is described as a succession of high rugged limestone ridges diversified here and there by lofty peaks, and in some parts looking 'like a sea of immense waves turned into stone.' The highest summits of the region are between 5000 and 6000 feet high. The mountain sides are generally clothed with timber. Between the ridges high valleys slope down to the south-east drained by two streams, the Schiniza and the Rivoernovich, both affluents of the Lake of Scutari. The area of this mountainous district is stated to be 1481 square miles. It is said to contain about 120,000 inhabitants, a fierce Slavish race, which has always maintained its independence against the Turks. They are described as hospitable to strangers, but their habits of savage warfare in their constant border forays with the Turks, in which heads are cut off and exhibited as trophies, prove them to be little less than barbarians. The men are idle and gossiping, except when on their plundering excursions. The women, coarse, muscular, and strong, in consequence of their unfeminine occupations, are the 'beasts of burden' in Montenegro. The Montenegrins belong to the Greek Church; they were, till the accession of the present ruler, governed by a 'vladika,' or prince, who was at once a bishop, a judge, a legislator, and commander-in-chief. The office was hereditary in the family of Petrovich; but as every vladika was consecrated bishop, and could not marry, the succession always fell to a nephew or some other member of the family. The present ruler of Montenegro, Prince Danieli, on his accession refused to be consecrated bishop, with the view of founding a princely house for his own descendants. He rules his country with almost absolute sway, assisted by a senate of twelve members.

The following are the principal valleys of Montenegro:—1. Katunzka Nahia, the widest and most central, is watered by the Rivoernovich, and contains the capital, Cettigne, with a convent, the residence of the

Greek bishop, and the villages of Gnegnai, Xagneudo, and others. Mount Bukovizza rises above this valley in the centre of Montenegro. 2. Licsanska Nahia, which runs north of and parallel to the preceding, contains the village of Dobro and some hamlets. 3. Czarniska Nahia, the southernmost district of Montenegro, a long narrow valley between the Austrian territory on the west (from which it is divided by mounts Giurgevo, Ortich, and Resevich), and Turkish Albania on the east (from which it is separated by another ridge), contains several villages, Ocinichi, Optocichi, Dobraceli, &c.

In the wars of Venice with the Turks the Montenegrins acted as auxiliaries of the former power. After the fall of Venice in 1797 Cattaro was given up to Austria. By the treaty of Presburg in 1805 it was ceded to France; but before the French garrison could reach that district the natives, joined to the Montenegrins, rose in arms and occupied Cattaro, Castelnuovo, and the other towns. This served to the French as a pretext for taking forcible possession of the neighbouring republic of Ragusa; but the Montenegrins came down from the mountains and besieged General Lauriston within the town of Ragusa. A desperate war ensued between the Montenegrins and the French commanded by Marmont, Lauriston, and Molitor, in which no quarter was given; until the French at last took possession of Cattaro, and drove the Montenegrins back to their mountains.

Since 1814 the Montenegrins are nominally under the protection of Austria, to whom they are occasionally a source of trouble, on account of their incursions into the Turkish territory, and the consequent complaints of the Turkish authorities. In November 1852, Prince Danieli, at the head of a body of Montenegrins, captured the fortified Turkish fort of Zabljak, at the northern extremity of the Lake of Scutari, the fisheries of which are much coveted by the Montenegrins. In some petty engagements that followed the Montenegrins were victorious, until, in consequence of their outrages, the Turks blockaded all the coast approaches to their country; and on the land-side Omer Pasha, at the head of an army of 20,000 men, stormed the village of Grahovo, and occupied all the accessible parts of the country, confining the inhabitants to their mountain fastnesses, not however before they had given many proofs of fearless bravery. The pasha was preparing to complete the conquest of this troublesome district when Austria, alarmed at seeing so near her frontier a large Turkish force, which contained many of her own exiled subjects, interposed, and obtained the withdrawal of the Turks at the end of February 1853, and the restoration of the *status quo*.

The soil of the valleys of Montenegro is not very fertile; it produces fruits, some wine, maize, potatoes, tobacco, and vegetables, and has good pasturage and abundance of timber. The inhabitants live in 300 villages scattered among the valleys. Cettigne is the capital. The climate is healthy. The houses are built of stone and covered with shingle. Every village has its church. Cattle, sheep, goats, and pigs are numerously reared; mules and asses are used as beasts of burden; articles are transferred from one place to another on the backs of these animals, carriages being unknown. Fish are abundant. [See SUPP.]

MONTEPELOSO. [BASILICATA.]
 MONTEREALE. [ABRUZZO.]
 MONTEREAU. [SEINE-ET-MARNE.]
 MONTEREY. [CALIFORNIA: MEXICO.]
 MONTESCAGLIOSO. [BASILICATA.]
 MONTESEQUIEU-VOLVESTRE. [GARONNE, HAUTE.]
 MONTET-AUX-MOINES. [ALLIER.]

MONTEVIDEO, or SAN FELIPE DE MONTEVIDEO, the capital of the republic of Uruguay, in South America, is situated in 34° 58' S. lat., 56° 16' W. long., and built on a small promontory, which forms the eastern shore of its harbour, the western consisting of another projecting point connected with a hill, from which the town has received its name. It is 130 miles from Cape Santa Mary, which forms the northern point of the entrance of the La Plata River, and opposite the town the river is still 70 miles wide. Its harbour is more than 4 miles long, and more than 2 miles wide, but too shallow for large vessels; it is also exposed to the pamperos, or south-western winds, which blow over the pampas with exceedingly great force. With all these disadvantages it is the best harbour on the broad estuary of the La Plata River. The town is in general well built, the streets being wide, straight, and intersecting each other at right angles; they are paved, and have narrow footways. The houses are built with taste, and have flat roofs and parapets. The cathedral, dedicated to the apostles San Felipe and San Jago, is not distinguished by its architecture, nor are there any other public buildings of note. Montevideo is a very healthy place, but suffers from want of wood and water. The inhabitants use rain-water, which is collected in cisterns placed in the court-yard of each house; but there are also some wells dug near the sea-shore, from which water is brought in carts for the supply of the town. The population, which before 1810 is stated to have amounted to 36,000 souls, was reduced by war and a siege, which the town had to sustain against the Brazilians, to 15,000 souls. During the sway of General Rosas in Buenos Ayres it suffered greatly in its commerce and otherwise by the long irregular siege it sustained, and which terminated only on the downfall of Rosas. The population now perhaps does not exceed 12,000. Its commerce has recently been increasing; but the unsettled state of the republic of the Argentine Confederation, and the jealousy of Buenos Ayres,

prevent it from attaining any continuous prosperity. The principal articles of export are the produce of the numerous herds of the country, as hides, salted and jerked beef, butter, tallow, hair, and horns, to a very considerable amount—between 5 and 6 millions of dollars. The imports consist chiefly of British manufactures, hardware, flour, wine, colonial produce, salt, &c.

MONTFAUCON. [LOIRE, HAUTE.]

MONTFERRAND. [CLERMONT.]

MONTFORT. [ILLE-ET-VILAINE; SEINE-ET-OISE.]

MONTGOMERY, the capital of Montgomeryshire, North Wales, a municipal and parliamentary borough, and conjointly with Pool, or Welshpool, the seat of a Poor-Law Union, in the parish of Montgomery, is situated on the eastern border of the county, in 52° 34' N. lat., 3° 8' W. long., distant 168 miles N.W. by N. from London. The population of the borough in 1851 was 1248. In conjunction with five other boroughs Montgomery returns one member to the Imperial Parliament. The living is a rectory in the archdeaconry of Salop and diocese of Hereford. Montgomery and Pool Poor-Law Union contains 18 parishes and townships, with an area of 68,322 acres, and a population in 1851 of 16,561.

The town stands partly on the slope and partly on the summit of a hill. The four principal streets meet in the market-place in the centre of the town. The houses are well built, and the town has a respectable appearance. The church is an ancient cruciform building, in the early English style, with a tower of recent erection. There are in the town a chapel for Calvinistic Methodists, a Free school for 20 boys, and another school with a small endowment. The town-hall is a brick building, with a market-house underneath; the county jail is on the road to Shrewsbury. A market for corn and provisions is held on Thursday. There are four yearly fairs. The borough has returned a member to Parliament from the reign of Henry VIII.

Baldwin or Baldwin, who had been appointed lieutenant of the Marches by William the Conqueror, built a castle or fortress here, and laid the foundations of the town in 1092. Both were almost immediately captured by the Welsh, from whom they were taken in 1093 by Roger de Montgomery, earl of Arundel and Shrewsbury. In the civil war of Charles I., the castle was given up by the governor, Lord Herbert of Chisbury, to the Parliamentarians. It was afterwards dismantled by the order of the House of Commons. The castle stood on a steep eminence on the north of the town. The remains consist of part of a tower at the south-west angle, and some portions of the walls. A few fragments of the town wall remain. At the foot of the castle-hill are traces of a small fort; and on a neighbouring hill are the remains of an extensive British camp.

MONTGOMERY. [ALABAMA.]

MONTGOMERYSHIRE, a county of North Wales, lying between 52° 20' and 52° 51' N. lat., 2° 59' and 3° 55' W. long., is bounded N. by Denbighshire, E. and S.E. by Shropshire, S. by Radnorshire, S.W. by Cardiganshire, and W. and N.W. by Merionethshire. The area of the county is 755 square miles, or 483,323 statute acres. The population in 1841 was 69,607; and 67,335 in 1851. More than half of the population speak only Welsh.

Surface and Geology.—Montgomeryshire is an inland county, and belongs wholly to the mountainous tract of Wales. A large portion of it consists of wide, bleak, and lofty moorlands, where human habitations are wide apart; the river valleys, especially towards England, are low and warm, and clothed in many places with luxuriant timber. It belongs entirely to the basin of the Severn, with the exception of a small tract in the extreme west, on the confines of Cardiganshire and Merionethshire, which is drained by the Dovey and slopes towards the south-west. The edge of this part of the basin of the Severn is formed by an offshoot from Plinlimmon, which joins a branch of the Berwyn Mountains that screens the vale of the Dovey towards the south-east, and by the crest of the Berwyn range, which forms the northern boundary and separates the feeders of the Severn from those of the Dee. From the Breiddin Hills, which form the most eastern part of the county, and are partly in Shropshire, an irregular line of heights runs westward past Welshpool and Llanfair, near which it turns to the south-west and joins the branch of the Berwyn Mountains before mentioned. This range forms the watershed between the Severn and its feeder the Vyrnwy. The Breiddin Hills are distinguished by three peaks, on one of which, called Craig-y-Breiddin, is an obelisk in memory of Lord Rodney.

The south-eastern border is occupied by the heights which extend from the neighbourhood of Shrewsbury across Clun Forest to Rhayader in Radnorshire. The Berwyn Chain rises to the height of 2014 feet at the head of the Tanat on the northern boundary; but its culminating point, Cader Berwyn, farther east, reaches the altitude of 2563 feet. The Breiddin Hills are about 1200 feet high. Kerry Hill and Llandinam Mountain, in the chain that skirts the Shropshire and Radnorshire border, are 1895 feet high. Plinlimmon is partly in this county, but its summit (2463 feet) is just within the border of Cardiganshire.

The county is almost entirely occupied by the slate rocks which overspread so large a portion of Wales. The principal exceptions are the Breiddin Hills, which are composed of granite, greenstone, and conglomerate; and a small tract near the junction of the Severn and the Vyrnwy, where the new red-sandstone, or red marl of Cheshire

and Shropshire, is found. The mineral treasures are not very abundant. Lead and zinc are procured from mines near Llangynnog in the hills that bound the valley of the Tanat; lead in the Berwyn Mountains, copper in Plinlimmon, and copper and zinc between Llanfyllin and Oswestry, on the Shropshire border. Millstones are quarried in the Breiddin Hills; stones for other purposes in the neighbourhood of Plinlimmon; slates of rather inferior quality at Llangynnog in the vale of the Tanat, at Llanwddyn in the vale of the Vyrnwy, in the hills near Llanidloes, and at Machynlleth; and a little coal and limestone near the border of Shropshire. In the Plinlimmon Mountains, and several other parts of the county, are wide tracts of bog, from which peat is dug for fuel.

Hydrography, Communications, &c.—The Severn is the principal river of the county; it rises on the eastern side of Plinlimmon, and flows east about 12 miles to Llanidloes, receiving at that town the Glywedog and a number of small brooks. From Llanidloes the Severn flows north-east in a winding channel about 38 miles, past Newtown and Welshpool, to the junction of the Vyrnwy, a little below which point it enters Shropshire. That part of the course of the Severn which lies in Montgomeryshire or on the border may be estimated at 51 miles.

The Vyrnwy (spreading river) rises on the north-west border near Bwlch-y-Pawl, and receiving a number of small streams, flows south-east in a winding channel 22 miles to its junction at Mathrafel with the Einion, which is called the Banw above Llanfair. From Mathrafel the Vyrnwy flows 9 miles till it receives the Cain, 11 or 12 miles long, from above Llanfyllin; and about a mile lower down the Tanat. The vale of the Tanat is admired for its scenery. From the junction of the Tanat the Vyrnwy flows about 9 miles further to its junction with the Severn. Its whole course is about 50 miles. The Vyrnwy and its feeders are among the best angling streams in Wales; trout, salmon, grayling, and other fish abound. Most of the rivers in the county are well stocked with fish.

The south-western angle of the county is drained by the Wye, which rises on the south-east side of Plinlimmon near the source of the Severn, and flows south-east 13 miles into Radnorshire, receiving by the way the Tarrenig, the Bidno, and the Nant-y-Durrel.

The Dovey chiefly belongs to Merionethshire. It enters Montgomeryshire about 4 miles below Dinas-y-Mowddy, and flows about 10 miles to the neighbourhood of Machynlleth, where it again touches Merionethshire. Its remaining course is between Merionethshire on the north-west, and Montgomeryshire and Cardiganshire on the south-east. Its chief tributaries in this county are the Twymynd and the Dulais, which flow northward from the range connecting Plinlimmon with the Berwyn Mountains. The Twymynd forms a magnificent cataract at Frwd Vawr, not far from its source; after heavy rains the fall is very grand, with a perpendicular descent of 130 feet. The Llyfnant, another feeder of the Dovey, separates Montgomeryshire from Cardiganshire. The glen of the Llyfnant is one of the finest examples of Welsh river scenery; the river makes a fine fall over immense rocks called Pystyll-y-Llyn. The Dulais has its source in two small lakes, the Glas Llyn and Beigus Llyn.

Of the rivers only the Severn and the Dovey are navigable in this county. The navigation of the Severn begins at Welshpool; that of the Dovey in the neighbourhood of Machynlleth. The only navigable canal is the Montgomeryshire Canal, which commences in the Severn at Newtown, and runs along the valley of that river past Welshpool, about 4 miles below which it turns northward to Llanymynech in Shropshire, in which county it joins a branch of the Ellesmere Canal. It has a short branch below Welshpool to Guilsfield.

The principal roads which pass through Montgomeryshire are those from London by Shrewsbury to Caernarvon, Barmouth, Towyn, and Aberystwith. The road to Caernarvon crosses the north-eastern side of the county near the Denbighshire border. The Barmouth road passes through the centre of the county by Welshpool and Llanfair to Dinas-y-Mowddy in Merionethshire. The road across the Berwyn Mountains east of Mallwyd is one of the bleakest in Great Britain; but it commands views of Plinlimmon and Cader-Idris. The road to Towyn branches from the Barmouth road between Welshpool and Llanfair. The Aberystwith road passes through Montgomery and along the valley of the Severn by Newtown and Llanidloes to Llangerrig, and thence by the valley of the Wye into Cardiganshire.

Soil and Produce.—The soil in the mountainous uplands of the county is generally thin, cold, and moory; chiefly fitted for mountain pasture, but in some spots yielding oats, rye, and potatoes. In the valleys, especially towards England, the soil is good, and here wheat, barley, and flax are raised. Great numbers of small cattle, sheep, and ponies are bred. There were formerly vast forests in this county, of which there are some remains on the hills near Carno.

Divisions, Towns, &c.—Montgomeryshire takes its names from the town and castle of Montgomery, founded by Baldwin, lieutenant of the Marches to William the Conqueror and William Rufus, and recaptured, probably from the Welsh, by Roger de Montgomery, earl of Shrewsbury, who gave both to town and castle his own name. The Welsh call the town, from the name of its original founder, Tre Faldwyn, and the county Sir Tre Faldwyn. The county was formed in the reign of Henry VIII. It is divided into 9 hundreds:—Llanfyllin, north; Deythur, north-east; Pool, north-east; Cawrae, east; Mathrafel, central

and north-west; Machynlleth, west; Llanidloes, south; Montgomery, south-east; Newtown, central. The county is divided into four Poor-Law Unions:—Llanfyllin, Machynlleth, Montgomery and Pool, and Newtown and Llanidloes. These Unions include 69 parishes and townships, with a population in 1851 of 73,238. County courts are held in Machynlleth, Llanfyllin, Llanidloes, Newtown, and Welshpool. The principal towns, LLANFYLLIN, LLANIDLOES, MACHYNLLETH, MONTGOMERY, NEWTOWN, and POOL or Welshpool, are described in separate articles.

Llanfair, or *Llanfair Caer Binion*, population of the parish 2727 in 1851, is about 11 miles N.W. from Montgomery, on the right bank of the Vyrnwy. It is neatly built and of pleasing appearance; the two principal streets intersect nearly at right angles. The town-hall is neat and commodious, with a market-house underneath. The church is an ancient building. There are several Dissenting places of worship. Flannel is manufactured to a small extent. There is a market on Saturday, and several yearly fairs are held. Roman antiquities have been dug up in the neighbourhood.

Llanbrynmair, population 1982, on the road between Llanfair and Machynlleth, is surrounded by fine scenery. The church is an ancient structure, adorned with some fine specimens of carved oak. In the neighbourhood are two stone circles. *Llangynog*, population 568, is on the road from Llanfyllin to Bala, in Merionethshire, in a pleasant but narrow vale, watered by the Tanat, and inclosed by lofty and steep mountains. There are many detached farm-houses in the valley. The church is a small ancient building. Many of the inhabitants are employed in slate-quarries and lead-mines.

Of smaller places the following may be noticed; the population when given is that of 1851:—

Caer-Sws, a village at the junction of the Carno with the Severn. A Roman entrenched camp of square form and covering four acres is close to the village: it commanded all the passes round, and was connected with 5 Roman roads. A farm-house now stands in the centre of the area of the camp. *Cemmes*, a small village 7 miles N.E. from Machynlleth on the left bank of the Dovey, has some curious old houses and remains of a rude amphitheatre. In the parish of *Llanwrin*, population 768, which comprises a portion of the county on the right bank of the Dovey, is *Mathavarn*, where Henry VII. slept on his way from Milford Haven to Bosworth. The parish church of Llanwrin is four miles from Machynlleth, and is 163 feet long. *Meifod*, a well-built thriving little place two miles farther east on the left bank of the Vyrnwy, is supposed to occupy the site of the Roman station *Mediolanum*. It has a commodious Norman church and a very large church-yard. Several encampments are seen in the neighbourhood.

The county is chiefly in the diocese of St. Asaph. Nearly the whole of the hundred of Montgomery is in the diocese of Hereford. The hundred of Llanidloes is a peculiar of the bishop of Bangor. Montgomeryshire is included in the North Wales circuit. The assizes are held at Welshpool. The county jail and house of correction are at Montgomery, where the quarter-sessions are held. The county returns one member to Parliament, and Montgomery with its contributory boroughs returns one member.

History and Antiquities.—Montgomeryshire was, with the neighbouring counties, included in the territory of the Ordovices, and on the reduction of the island under the Roman power, in the province of Britannia Secunda. Various Roman antiquities have been found near Machynlleth. The site of a Roman camp is traceable at Caer Sws, about 5 miles west of Newtown. There are other marks of intrenchments near it, and traces of a Roman road called 'Sarn Swsan.' Ancient camps, cairns, and tumuli abound.

This county was the scene of hostility between the Welsh and the Mercians under Offa. The celebrated 'dyke' made by Offa traverses the county from north to south, passing a little to the east of Welshpool and Montgomery, and including the eastern part of the county in the Saxon territory. The rest of the county was included in Powys or Powysland, a designation which had previously been given to this part of Wales. In the latter part of the 9th century Powys became a separate principality, under chieftains who had their residence at Mathrafel, near the banks of the Vyrnwy, above Meifod. There are some earthworks and other traces of the castle of the princes of Powys at Mathrafel.

In 894, in the reign of Alfred, the Danes entered the county. After the Conquest, Powys became the continual object of attack by the Norman lords of the marches or frontiers. These hostilities led to the erection of the castles of Montgomery by the Normans, and Powys, near Welshpool, by the Welsh, and to a continued and severe struggle for the possession of these strongholds. In the latter part of the 11th century a desperate engagement was fought on the hills of Carno, between the forces of Gryffydd ap Cynan, lawful claimant of the throne of Gwynedd, or North Wales, assisted by Rhys ap Tewdwr, prince of South Wales, against those of Trahaiarn ap Caradog, his usurping competitor. The engagement was the most bloody of any recorded in the Welsh annals, and ended in the death of Trahaiarn and the entire defeat of his army.

The independence of Powys was overthrown before the final subjugation of North Wales: it became an English lordship, which remained for many years in the posterity of John de Charlton, who, in the time of Edward II., married the heiress of the Welsh chief-

tain. The barony and title passed to the Greys, a Northumberland family, until it became extinct in the reign of Henry VIII. The only remaining castles or ruins of castles worth mentioning, are those of Montgomery and Powys, which are noticed under MONTGOMERY and POOL respectively. There are no monastic ruins in the county of importance.

Statistics.—The registration county (which included a population in 1851 of 9807 more than the county proper) contained in March 1851, when the Census was taken, 846 places of worship, of which 89 belonged to Calvinistic Methodists, 78 to Wesleyan Methodists, 66 to the Church of England, 53 to Independents, 26 to Baptists, and 23 to Primitive Methodists. The total number of sittings provided was 62,886. The number of day schools was 127, of which 72 were public schools with 4854 scholars, and 55 were private schools with 1340 scholars. Of Sunday schools there were 312 with 23,001 scholars; and of evening schools for adults there were 6 with 130 pupils. There were three literary societies with 271 members—one of these societies possessed 300 volumes in its library. In 1853 there were two savings banks in the county, at Machynlleth and Welshpool. The amount owing to depositors on November 20th 1853 was 64,903*l.* 0*s.* 5*d.*

MONTIGNAC. [DORDOGNE.]

MONTIGNY-LE-ROL [MARNE, HAUTE.]

MONTILLA. [CORDOVA.]

MONTLUÇON. [ALLIER.]

MONTLUEL. [AIN.]

MONTMAROULT. [ALLIER.]

MONTMARTRE. [PARIS.]

MONTMEDY. [MEUSE.]

MONTMIRAIL. [MARNE.]

MONTMORILLON. [VIENNE.]

MONTOLIEU. [AUDE.]

MONTONA. [ISTRIA.]

MONTORO. [CORDOVA.]

MONTPELLIER, a city in the south of France, capital of the department of Hérault, is situated on a hill near the Lez, in 43° 36' 44" N. lat., 3° 52' 57" E. long., at an elevation of 145 feet above the level of the sea, 30 miles by railway S.W. from Nîmes, 20 miles N.W. from Cette its port, and has a population of 40,222 in the commune. The town was built in the 10th century to replace the episcopal town of Mauguellonne, which stood on an island in a neighbouring lake, and had been destroyed by order of Charles Martel for favouring the Saracens. The town had at an early period lords of its own, who distinguished themselves in the crusades and other wars against the Mohammedans in the 11th and 12th centuries. Benjamin of Tudela describes the town as one of the chief commercial stations of France and of the world.

The lordship of Montpellier was at this time in the hands of the kings, first of Aragon, and subsequently of Majorca, a younger branch of the same house. These princes held their lordship immediately of the bishops of Mauguellonne, who divided with them the jurisdiction of the city, under the suzerainty of the kings of France. The portions both of the bishop and the king were united to the French crown by purchase in the 13th and 14th centuries respectively. The lordship was subsequently conferred on Charles le Mauvais, king of Navarre (1371), in exchange for certain lordships ceded by him to the King of France; but on the forfeiture of that king's domains for treason (1378), it was re-united to the French crown. In 1538 the bishopric of Mauguellonne was transferred to Montpellier. Montpellier came into the hands of the Huguenots in the reign of Henri III. After enduring a long siege it surrendered to Louis XIII. (1622), who ordered the construction of a citadel to retain the place in subjection.

Montpellier is situated on an eminence, from which there is an extensive view over the Mediterranean and the adjacent coasts. Except some of the gates and the citadel, there are few remains of the old fortifications. The citadel is of little strength; it is however well kept up, and has a good parade. The streets are narrow, crooked, and steep; but the houses, which are almost all of stone, are substantially built. Most of the squares are small and of irregular form; the public fountains are numerous. There are two town-walks, the esplanade between the town and the citadel, and the Peyrou, a terrace-walk planted with trees and covered with turf. On the upper part of the terrace there is a hexagonal tower adorned with columns, and inclosing a reservoir, which is supplied with water by an aqueduct about 5 miles long. The water from this reservoir falls in a cascade over artificial rocks, and supplies the various fountains of the city. The cathedral presents little that is worthy of notice. The former amphitheatre of St.-Côme, now the exchange, is adorned with a handsome Corinthian portico, and is perhaps the handsomest building in the city. The modern anatomical theatre is a fine building, and the gate of Peyrou, a triumphal arch opening on the promenade of Peyrou, is also handsome; but the former episcopal palace, now occupied as a medical school, the court-house, the prefect's house, &c., are of ordinary appearance.

The manufactures of Montpellier are considerable, and trade is prosecuted on a large scale. There are several banking-houses. Liqueurs, perfumery, preserves, dried fruits, verdigris, alum, cream of tartar, vitriol and aquafortis, woollen-cloth, muslins, printed cottons,

named and many others are neglected. When the English were in possession of the Moluccas, they obtained from them cordage, cables, and timber.

Inhabitants.—These islands are inhabited by two races, the Malays and the Papuas. The Malays are in possession of the coasts, where they cultivate the ground or gain their subsistence by fishing. They are Mohammedans. Their language contains a great number of foreign words, and Dr. Leyden is of opinion that the Ternate or Molucca language has been an original tongue. The Papuas have been extirpated on the smaller islands, but they still maintain their ground in the mountainous districts of the larger islands. They seem to belong to the same race which inhabits the continent of Australia. They are described as an inoffensive race who cultivate the ground.

Division.—The number of islands probably amounts to some hundreds, of which however many are small and uninhabited. They may be divided into three groups: the Gilolo Group, or Moluccas proper; the Ceram Group; and the Timor Laut Group. The *Gilolo Group* is the most northern, and extends from 2° S. lat., to 3° N. lat., and contains the islands of Gilolo, Morty, Mandioly, Batchian, Ooby, and Mysole, with numerous smaller islands lying between and about them, among which the islands of Ternate and Tidor are the most important. In figure *Gilolo* bears a remarkable resemblance to CELEBES, being composed of four long peninsulas, which radiate from a common centre near 1° N. lat. Its greatest length from south to north may be 220 or 230 miles, and its surface, on a rough estimate, about 8000 miles. The northern and north-eastern peninsulas rise into high mountains, and are densely wooded; the southern attain only a moderate elevation. The chief products are sago, cocoa-nuts, spices, fruits, edible birds'-nests, pearls, gold-dust. Horses, horned cattle, and sheep are reared. Manufactured goods, opium, china, and iron are imported by the Dutch. The island is divided into several petty states; the chief town is Gilolo, or Jilolo, at the head of a bay on the west side of the island to the north-east of Ternate. The sea between Gilolo and Celebes is called the *Molucca Passage*. *Morty* rises with a gentle ascent to a considerable height, and is said to have good harbours. *Mandioly*, *Batchian*, and *Tawaly* are separated from one another by narrow straits which afford good anchorage. They are of moderate elevation, and are governed by their own sovereign, to whom also the island of *Ooby*, or *Paulo Oby*, belongs. The last-mentioned island is very little known. The islands of Ternate and Tidor are small, being only from 20 to 30 miles in circuit, but the soil is fertile, and they are very populous. Their sultans possess the greater part of Gilolo, and also several districts on the eastern coast of Celebes. The island of *Waygiou*, off the north-west coast of Papua, or New Guinea, is sometimes reckoned among the Moluccas. It lies a little south of the equator, and is crossed by the meridian of 131° E. long. The island is stated to be fertile and populous and to have good harbours. It extends east and west with two deep indentations on its northern and southern shores near the centre of the island; the northern inlet forms the bay of Offak (0° 1' 8" S. lat., 130° 43' E. long.). Farther east, but on the north shore also, is another harbour, *Port Bons*, sheltered by an island. *Waygiou* is mountainous in the centre, the shores and some other parts are marshy.

To the Gilolo group belong two smaller groups lying farther north-west. The eastern group, called the *Salibabo Islands*, consists of three islands of some extent, Tulour, Salibabo, and Kabruang, and several smaller ones. The island of Salibabo has a good harbour at Leron, in the narrow strait which divides that island from Kabruang. The western group, called the *Sangir Islands*, consists of a larger island and numerous smaller islands. Sangir Island is about 70 miles long; through its central part runs a ridge of high mountains, which terminates on the north in an active volcano.

The Ceram group occupies the middle, between 3° and 5° S. lat., and comprehends the two large islands of CERAM and BOORO, and among the smaller ones, which lie to the south of them are AMBOYNA and BANDA islands.

The *Timor Laut* group is the most southern and least known. It consists of the large island of Timor Laut and the KEY, or KI, ISLANDS, noticed in a separate article. Timor Laut is about 70 miles long and 25 miles wide, mountainous and wooded. The centre of the island is nearly in 7° 50' S. lat., 131° 20' E. long. Timor Laut must not be confounded with the large island of Timor, which lies considerably to the west and is one of the lesser SUNDA ISLANDS. The island of Arroo [ARROO], lying farther east, is also sometimes considered as belonging to the Moluccas.

History.—The Portuguese arrived at the Moluccas in 1510, and had hardly begun to form settlements when the vessels of Magalhaens arrived from the east, and a dispute arose between the Portuguese and Spaniards respecting the possession of the islands, which lasted for several years. The Dutch took the Moluccas from the Portuguese about 100 years afterwards, and, in order to secure to themselves the exclusive trade in nutmegs, maces, and cloves, they formed numerous small settlements on nearly all of them, by which they kept the petty sovereigns in subjection, and, with their assistance, were enabled to extirpate all the spice-trees in the islands, except Amboyna and Banda, which they subjected entirely to their sway. In 1796 the British took possession of the Moluccas, and kept them to the peace of Amiens, when they were restored to the Dutch. The British again

took possession of them in 1810, and again gave them up to Holland at the treaty of Paris in 1814. Since that time the Dutch have abandoned a few of the smaller establishments, but they still maintain their hold more or less upon all these islands. In June 1853 a bill was brought into the Dutch chambers by the government for opening the trade in spices; and making four free ports—Ternate, Amboyna, Banda, and Kajelia. At the last-named place British vessels trading to China call for water and provisions, and it lies on the track to Australia. That the bill was made law we are unable to say.

(Forest, *Voyage to New Guinea*; Stavorinus, *Voyages*; Delano, *Voyages and Travels*; Crawford, *History of the Indian Archipelago*; Hogendorp, *Coup d'Œil sur Java*, &c.)

MOMBAS is a sea-port town situated on that part of the eastern coast of Africa which is called the coast of Zanguebar, in 4° 4' S. lat., 39° 38' E. long. It is built on the eastern side of Mombas Island, which occupies the greater portion of a bay, about 5 miles long and 3 miles wide. The island is 3 miles long by 2 miles broad; the two straits which divide it from the continent are hardly half a mile across. The eastern strait constitutes the harbour of the town, which is one of the most perfect in the world. The castle, built by the Portuguese in 1635 on a rock of moderate elevation, lies to the south of the town. The town is not large; it consists of the city and the Black Town, which occupies the most northern portion of it. The former, which was once inhabited by the Portuguese, is now inhabited by the Arabs. Some free coloured people and slaves constitute the population of the Black Town. The population probably does not exceed 3000 or 4000, and the town, it is said, has fallen into decay.

Vasco de Gama visited this port in 1498, and was well received, but nearly fell a sacrifice to the treachery of the inhabitants. It was afterwards taken and burnt by Francisco de Almeida in 1505. Twenty-three years later it was taken by Nunho da Cunha after a stout resistance from the inhabitants, and was again reduced to ashes. The Portuguese remained in possession of it till 1631, when the king of the country retook it, and put all the Christians to death. Since then European vessels seldom visit this part of the coast, the government of Mombas having more than once seized such vessels when they put into the harbour for provisions. In 1720 Mombas was in possession of the Imam of Muskat, who lost it afterwards by a rebellion of its inhabitants. In 1824 the Imam sent a force against the town, which then placed itself under British protection, in order to preserve its independence. It is governed by an Arab sheikh.

MOMPOX. [NEW GRANADA.]

MONA. [ANGLESEY; MAN, ISLE OF.]

MONACO, the Principality of, a small state in the Western Riviera of Genoa. It consists of the small towns of Monaco and Mentone, and the village of Roocabruna, with a small territory about five miles in length along the coast, between Nizza and Ventimiglia, and extends inland about three miles. The country is rocky, but produces oranges, citrons, lemons, and other fruits, and oil. The town of Monaco is built on a steep naked rock rising above the sea-coast, is fortified, and has about 2000 inhabitants, and a harbour for small vessels. *Mentone*, farther to the east, lies on the sea-shore in a narrow strip of fertile land sheltered by mountains from the north winds, and planted with olive- and lemon-trees: it has a warm southern climate, and carries on some trade by sea. Mentone has about 4000 inhabitants, and a handsome church.

Since the 14th century the principality of Monaco has been in possession of the Genoese family of Grimaldi, under the protection of France and of the Genoese republic. It is now under the protection of the king of Sardinia. The prince resides half the year in Paris and the other half in Monaco. He has a palace at Monaco and a handsome villa near Mentone. The Sardinian troops took military possession of Monaco and Mentone during the revolutionary troubles of 1848-9, and we believe that the principality has been since purchased by the government of Sardinia. The name of Monaco is derived from a temple dedicated to Hercules Monoecus ('solitary'), which stood on the rock where the town now stands. [See SUPPLEMENT.]

MONAGHAN, an inland county in the province of Ulster, Ireland, is bounded N. by county Tyrone, E. by Armagh and Louth, S. by Meath and Cavan, and W. by Fermanagh. It lies between 53° 54' and 54° 25' N. lat., 6° 33' and 7° 20' W. long. Its greatest length from north to south is 37 miles; from east to west it is 23 miles. The area is 500 square miles, or 319,757 acres, of which 285,885 acres are arable, 21,585 acres uncultivated, 5816 acres in plantations, 304 acres in towns, and 6167 acres under water. The population in 1841 was 200,442; in 1851 it was 141,813.

Surface, Hydrography, and Communications.—The northern part of the county belongs to the basin of the Blackwater, the southern part to the basins of the Fane and the Glyde, and the western part to the basin of the Erne. The general surface is hilly, the hills being for the most part detached and scattered in an irregular manner. The Slieve Beagh range, of which the chief summit is 1254 feet high, extends along the north-west boundary into the county of Fermanagh. The portion of the county lying south-east of that range is a comparatively level tract, and forms the northern limit of the great plain of Ireland. This district is bounded on the south by a series of heights lying east and west, and connected with the Fewa Mountains of Armagh. Mullyash, on the border, is 1034 feet high. The division

of the county south of these heights, sloping on the west towards Lough Erne, and on the east towards the Irish Sea, is divided by several eminences, of which the principal is Crieve Hill, 886 feet in height. Patches of bog occur in all parts of the county.

There are no navigable rivers in the county. The Blackwater has about 10 or 12 miles of its course along the north-eastern boundary, where it receives several streams from the Slieve Beagh Mountains. The Fane rises not far from Castle Blayney, and flows south-east, partly upon and partly within the border, for about 12 miles, before it enters the county of Louth, through which it flows into the Irish Sea. The Glyde rises in the south part of the county, and has a course parallel to the Fane; the Lagan, a feeder of the Glyde, and a much more considerable stream, has about 13 miles of its course along the southern boundary. The Finn is the most important of the streams which flow into the Erne; it rises in the Slieve Beagh Mountains, and has about 20 miles of its course within the county. The Ulster Canal, which unites Lough Neagh with Lough Erne, crosses the county in a south-west direction near Monaghan and Clones. Its length within the county is about 20 miles.

The loughs are numerous, but all of them are small. Muckno or Barrac Lough, near Castle Blayney, is the largest. It is of very irregular form, about 3 miles long, and in some parts about a mile wide: it contains a number of small islands. The river Fane runs through it. Lough Inner, on the south-west border near Rockcorry, is about 3 miles long, exceedingly narrow, and of very irregular form. Lough Emy, near Emyvale, and Glas Lough, near the town of Glaslough, in the northern part of the county; Lough Leesborough, between Rockcorry and Newbliss, and Lough Long, near the village of Drum, in the western parts; the White Lough and Corfin Lough, near Ballybay, in the central parts; Lough Eglis, or Eglis, Lough Avagham, and Lough Bawn, near Ballytrain, in the southern part; Lough Ballyhoe (through which the Lagan runs), on the southern border of the county, and Lough Ross, on the eastern border, are next in size to Muckno and Inner.

There are numerous good roads in the county. The principal line is that from Dublin to Londonderry, Carrickmacross, Castleblayney, and Monaghan. A branch road runs from Carrickmacross to Monaghan by Ballybay. Other roads lead from Carrickmacross to Dundalk, from Castleblayney to Newry and to Armagh, from Monaghan to Armagh, and from Monaghan by Clones to Cavan. A road from Dublin by Cootehill (Cavan) passes through Clones, and joins the Londonderry mail-road at Omagh in Tyrone.

Geology, Mineralogy, &c.—The carboniferous limestone of the great central field of Ireland occupies that part of the county which lies north-west of a line drawn through Monaghan and Clones. The Slieve-Beagh Mountains are composed of the rocks belonging to the calp series of this formation. The rest of the county, with the exception of a small tract on the southern border, belongs to the transition formation, which occupies an extensive district in the east of Ulster and north of Leinster. The rocks consist of grauwacke slate, fissile clay-slate, flint-slate, and chlorite slate, with hornblende slate, schistose porphyry, and other metamorphic rocks. On the southern border is a small coal-field, not wrought, resting on a tract of carboniferous limestone, and flanked on the west by a patch of new red-sandstone, which contains a valuable deposit of gypsum. Escars, or low steep ridges of alluvial matter, usually composed of clay and limestone gravel, are found in several parts of the county. Those near Tyballon, not far from Monaghan, are composed entirely of jasper, quartz, agates, and argillaceous sand. Limestone of great variety and excellent quality is quarried; also fine marble, and valuable freestone for building. A fine white sandstone, dug in the Slieve-Beagh Mountains, is extensively used for architectural purposes. Ironstone is found, but of inferior quality, and several quarries of slates or flagstones are worked. Lead-ore has been found to a small extent. Some potter's-clay is found, and brick earth in nearly all parts of the county.

Climate, Soil, and Produce.—North-west winds prevail during the greater part of the year. These bring frequent rains from the Atlantic up the valley of the Erne, rendering the climate exceedingly moist. The evil however is to a great extent counteracted by the ventilation and drainage of numerous valleys. The soil of the county varies much, but is mostly a strong deep loam resting on a firm subsoil of clay, mixed with lime, gravel, or sand. In the elevated parts the soil is moory or peaty. The lowlands are generally wet and moory, especially in the north-west, near the Slieve-Beagh Mountains. The western side of the county has a soil naturally wet, but capable of great improvement. The southern extremity consists of rich and productive land. The most fertile part of the county is the central, including the baronies of Monaghan, Cremorne, and Dartree. The barony of Monaghan is altogether a tillage district, except some 'rough grazing' in the mountains, on which some young cattle are kept: there is no grazing-land in the district capable of fattening cattle. The occupations are almost wholly agricultural. Spade husbandry is much practised. Flax, from its improved culture, is increasing greatly in quantity and value. The culture of wheat and of green crops is extending. The manufacture of linen is reviving.

In 1853 there were 152,404 acres under crop; of which 2519 acres grew wheat; 78,537 acres oats; 4962 acres barley, bere, rye, peas, and

beans; 23,926 acres potatoes; 8305 acres turnips; 2664 acres mangold-wurzel, carrots, vetches, and other green crops; 17,392 acres flax; and 14,099 acres were in meadow and clover. In 1841 the plantations covered 8007 acres, yielding oak, ash, elm, beech, fir, mixed timber, and fruit. In 1852, on 19,338 holdings, there were 10,268 horses, 6110 mules and asses, 64,621 cattle, 9830 sheep, 18,716 pigs, 10,072 goats, and 263,099 head of poultry. The estimated value of the live stock here enumerated was 553,938*l.*

Divisions and Towns.—The county is in the diocese of Clogher in the united sees of Armagh and Clogher. It is divided into five baronies—Cremorne, central and east; Dartree, central and west; Farney, south; Monaghan, central; and Trough, north. The principal towns are MONAGHAN, CLONES, CASTLEBLAYNEY, and CARRICKMACROSS, which are noticed under their respective titles. The following are some of the other towns and more important villages, with the population of each in 1851:—

Ballybay, or Ballibay, population 1617, a well-built town, 9 miles S. from Monaghan and 86 miles N.N.W. from Dublin, contains a neat parish church, a Roman Catholic chapel, two Presbyterian meeting-houses, several endowed schools, a public library, a market-house, and district dispensary. The linen manufacture is carried on; in the neighbourhood are extensive bleach-fields. Petty sessions are held here. Fairs for cattle, horses, and pigs are held on the third Saturday of every month. There is a weekly market on Saturday. *Emyvale*, a small post-town situated on the left bank of an affluent of the Blackwater, 8 miles N. from Monaghan, is a neat clean place consisting chiefly of one street. The general employment is weaving. There is a large flour-mill on the stream, as also a mill for working iron, principally in the manufacture of spades and shovels. A cattle fair is held monthly. *Glaslough*, a neat and thriving market-town, 6 miles N.E. by N. from Monaghan, on the margin of a beautiful lake called Glas Lough, or Green Lake. The town contains the parish church of Donagh, and a district dispensary. Flax-spinning and weaving are carried on. Gray marble is quarried in the neighbourhood. There is a market every Friday for corn and flax. Fairs are held on the third Friday of every month except February. *Newbliss*, population 481, a small market-town 9 miles S.W. from Monaghan and 71½ miles N.W. from Dublin by road, consists of a single street of good width, containing houses of respectable appearance. The church is a handsome building recently erected. There are a Presbyterian meeting-house, a neat market-house, a dispensary, and a school of the London Hibernian Society. Petty sessions are held monthly. There is a well-attended market on Saturday, chiefly for pigs and flax. Fairs are held on the last Saturday of every month. *Rockcorry*, population 316, a small market-town 9 miles S. by W. from Monaghan, contains a Presbyterian and a Methodist meeting-house, a neat market-house, and a dispensary. Petty sessions are held monthly. Fairs are held on the last Wednesday of every month. The town belongs to Baron Cremorne, by whom the neighbourhood has been much improved. *Scotshouse*, in the barony of Dartree, 14 miles S.W. from Monaghan, contains a parish church and a Roman Catholic chapel. In the neighbourhood are the remains of an ancient embankment called Worm Ditch, which has been traced several miles from this point.

The county of Monaghan returns two members to the Imperial Parliament. The assizes are held in Monaghan, and quarter-sessions there, and at Carrickmacross, Castleblayney, and Clones. Petty sessions are held in eight places. The county court-house and jail are in Monaghan, and there are bridewells at Carrickmacross, Castleblayney, and Clones. The county infirmary is in Monaghan. There are fever hospitals at Carrickmacross, Clones, Monaghan, Rockcorry, and Trough; and dispensaries in fourteen places. A savings bank is established in Monaghan; the amount owing to depositors on November 20th, 1853, was 18,128*l.* 13*s.* 11*d.* The constabulary force consisting of 208 men and officers, has its head-quarters at Monaghan. The county is divided into 4 police districts comprising 24 stations. In September 1852 there were 141 National schools in operation, attended by 7014 male, and 5862 female children.

History and Antiquities.—In the invasion of Ireland by the Anglo-Normans, Henry II., having bestowed all Ulster on John de Courcey, that chieftain overran various parts of the province in 1177, and built castles to secure his conquests. Among others he built two in the district of Farney in this county, and gave them in charge to MacMahon, an Irish chieftain, who had gained his confidence. MacMahon subsequently demolished the castles, and set himself in opposition to De Courcey. In the reign of Henry V. the MacMahons seem to have risen in arms, for they are noticed among the sept whom Talbot, lord Furnival, the lord-lieutenant, brought into the king's peace. In the reign of Elizabeth, Monaghan was constituted a shire by the Irish Parliament which assembled at Dublin in 1568. The country however still remained in an unsettled state in consequence of the turbulent spirit of the MacMahons. In the troubles excited by the Earl of Tyrone, the county was the scene of hostilities, and some of the MacMahons appear to have joined the earl. In the rebellion of 1641 Monaghan came early into the power of the insurgents, but in the course of the subsequent struggle, no events of particular interest occurred in it. In the war of the Revolution a sharp conflict took place at Glaslough, in which the Protestants were victorious.

There are no feudal remains of importance in the county. The

chief ecclesiastical antiquity is the ruin of the abbey of Clones, which is said to have been founded in the 6th century. At Clones there is a round tower still entire, and at Inniskean, near the eastern border, there is one less perfect in its form, but remarkable for having the door on a level with the ground. Baths and other earth-works appear in various parts of the county. A singular structure consisting of several apartments, arched with flat stones nicely fitted together, and inclosed within a wall of similar materials, was a few years since discovered at a depth of several feet under a hillock, about 3 miles from Monaghan. It is supposed to have been the abode of ancient hunters, and to have been covered for concealment with the earth which had been removed to make way for its erection.

MONAGHAN, Ireland, the chief town of the county of Monaghan, and the seat of a Poor-Law Union, is situated on the road from Dublin to Londonderry, in 54° 15' N. lat., 6° 58' W. long., distant by road 76 miles N.N.W. from Dublin. The town is governed by a provost, 12 free burgesses, and a body of freemen. The population in 1851 was 3484, besides 640 inmates of the workhouse. Monaghan Poor-Law Union comprises 21 electoral divisions, with an area of 112,789 acres, and a population in 1851 of 49,032.

The three principal streets of the town meet in a central square called the Diamond. The town is lighted, and the streets are paved and well kept. The parish church is a large modern gothic structure. There are a Roman Catholic chapel, two Presbyterian, and two Methodist meeting-houses. On the west side of the town is a Diocesan school, founded in the reign of Elizabeth; the number of scholars in 1851 was 84. There are several National and Endowed schools. The county court-house is a handsome modern building in the centre of the town. The county infirmary occupies an elevated site on the east side of the town. The county jail is on the north side. A well-built market-house stands in the principal square. There are also a linen-hall, an infantry barrack, a fever hospital, a dispensary, and a savings bank. The manufacture of linen is carried on. The Ulster Canal connecting Lough Erne with Lough Neagh, passes near the town, and facilitates its trade with Belfast. The assizes and quarter and petty sessions are held in the town. Fairs are held on the 1st Monday of every month. The principal market-day is Monday; markets for agricultural produce are held on Tuesday, Wednesday, and Saturday. Monaghan obtained a charter from James I. The borough returned two members to the Irish Parliament, but was disfranchised at the Union.

MONAN'S ST. [FIFESHIRE.]

MONASTEREVAN. [KILDARE.]

MONCAO. [ENTRE DOURO E MINHO.]

MONCONTOUR. [CÔTES-DU-NORD.]

MONDEGO. [PORTUGAL.]

MONDONEDO. [GALICIA, Spanish.]

MONDOVI. [CONE.]

MONDRAGON. [BASQUE PROVINCES.]

MONESTIER, LE. [ALPES, HAUTES.]

MONEYMORE. [LONDONDERRY, County of.]

MONFERRATO, the name of a district in Piedmont, which comprises the country drained by the Tanaro, and extends from the right bank of the Po to the Ligurian Apennines. Many parallel offsets branch off in a northern direction, from the Ligurian Apennines to the southern bank of the Tanaro; and the intervening valleys are watered by numerous streams, the Stura, the Geaso, the Borbio, the Peato, the Ellero, the Tanaro, the Belbo, the two Bormide, the Erro, and the Orba, all of which join the Tanaro above Alessandria, below which town the Tanaro enters the Po. North of the Tanaro another range of hills, parallel with the course of the Po, runs from the mount of Superga, opposite to Turin, to the town of Casale, and divides the valley of the Upper Po from that of the Tanaro. The greater part of this hilly region, on both sides of the Tanaro, went by the name of Monferrato, and was divided into High Monferrato, south of the Tanaro, and Lower Monferrato, between the Tanaro and the Po. The principal towns of Lower Monferrato were Alessandria, Asti, Casale, and Valenza; those of Upper Monferrato were Mondovi, Acqui, and Alba. It is a favoured region, rich in corn, wine, fruit, silk, and cattle. The wines of Monferrato are the best in northern Italy; the muscat of Asti is particularly esteemed.

Monferrato gave the title of Marquis to an ancient family, descended from the imperial house of Saxony, from the 11th century till the time of Charles V., when, the male line becoming extinct, the marquise fell to the Gonzaga of Mantua. On the death of Francesco Gonzaga in 1612, without male issue, the Duke of Savoy claimed the inheritance; this led to a war between the dukes of Savoy and Mantua, in which Spain and France took part, and which was not concluded till the peace of Cherasco in 1696, when the territory in dispute was divided between the dukes of Mantua and Savoy. During the war of the Spanish succession the Duke of Savoy obtained the whole of Monferrato. This territory is now divided among the provinces of ACQUI, ALBA, ALESSANDRIA, ASTI, CASALE, and MONDOVI.

MONFLANQUIN. [LOT-ET-GARONNE.]

MONGHIR. [HINDUSTAN.]

MONGOLIA (*Mongolistan*), 'the Country of the Mongols,' comprehends a vast extent of country in the interior of Asia, between 38° and 63° N. lat., 84° and 124° E. long. Its length from east to west exceeds

1700 miles, and its width, from north to south, between 100° and 110° E. long., 1000 miles; but towards both extremities of its length it narrows to 600 miles. Its area may amount to between 1,200,000 and 1,300,000 square miles. It is bounded N. by Siberia, E. by Mandshooria, S. by China proper, and W. by the Chinese province of Kansu and the Chinese government of Thianshan Pelu.

The middle portion of Mongolia is occupied by the Great Gobi (Ta-Gobi), which stretches across the country south-west and north-east from the boundary-line of the province of Kansu to the Dalai Nor, near the boundary of Da-uria, with an average width of about 200 miles. The Gobi is the worst part of the country, the surface being covered with sand or small stones, and the vegetation being very scanty and occurring only in single spots. Vast tracts of it are level, but at great distances from one another there are hills of moderate elevation. The whole region is destitute of trees, and the water, which is only found at some distance below the surface is brackish. South-east of the Gobi extends a more elevated and uneven country, which terminates in a mountain-range of considerable elevation.

This range begins on the south, near the most southern point of Mongolia, not far from the banks of the river Hoang-ho, about 38° N. lat., and extends northward along that river for nearly 400 miles. It is covered with wood, and called Alashan, or Ho-lang Shan. Near 42° N. lat. it turns abruptly to the east, forming nearly a right angle, and it is then called Inshan by the Chinese, and Oghian Oöla by the Mongols. In this direction the chain continues, between 41° and 42° N. lat., about 600 miles, when it again turns north, though less abruptly, and proceeds in a north-by-east direction from 42° to 55° N. lat. under the name of Khing-khan Oöla. The highest portion of this mountain range seems to be at the point where it turns northward, and where a peak, called Petsha, rises far above the snow-line, and is supposed to attain a height of more than 15,000 feet above the sea. The country which skirts this range along its western and northern base, and extends from it to a distance of between 50 and 100 miles, has a broken surface, the hills rising to some height above the valleys and small plains. It is not deficient in water, but trees occur only in isolated tracts. As its elevation above the Gobi is considerable, and probably not less than 5000 feet above the sea-level, and as it is also much exposed to the cold winds which blow with great force over the desert, it is nearly unfit for agriculture, and only used as pasture-ground for horses, cattle, and sheep.

South of the Inshan Mountains the country exhibits fertile valleys and mountains, partly wooded, as far west as the place where the Hoang-ho River turns southward: this fertile tract is included in the Chinese provinces of Pe-tche-li and Shan-si. But the tract farther west, which is surrounded by the great northern bend of the Hoang-ho, partakes strongly of the features of the Gobi, and forms part of Mongolia: it is called the country of the Ordes, taking its name from a Mongolian tribe which belongs to the great division of the Tabakhar Mongols. This whole tract is covered with hills composed of loose sand, mostly without water, and entirely destitute of trees. But the numerous depressions contain extensive meadows, with rich grass and bushes. The attempts to cultivate some parts of it have not proved successful, and accordingly it is abandoned to the Mongols and their herds; but in order to prevent them from plundering the adjacent agricultural districts of the neighbouring provinces of Shen-si and Kan-si, the great Chinese wall was built across the peninsula from east to west from Pao-tsheou to Ning-hia.

That part of Mongolia which is to the east of the Khing-khan Oöla, and extends nearly to the shores of Hoang-Hai, or the Yellow Sea, from which it is only divided by a narrow fertile tract belonging to the province of Leao-tong, is called Kortahin. This name is properly only applied to the tract north of the river Sira Muren, or Leao-ho, which resembles the country of the Ordes, except that it is less intersected by sand-hills. A great portion of it seems to be of inferior fertility; but south of the Sira Muren the country contains numerous meadows clothed with rich grass, and agriculture has been introduced here by the Chinese, who send to this country their criminals who are condemned to transportation. A great part of it serves only as pasture-ground. Great quantities of grain, especially wheat, are exported from the province of Leao-tong to Peking and Shanghai. The most southern district of this country is traversed by an offset of the Khing-khan Mountains, which branches off from the principal range near the peak of Petsha, and extends in a south-eastern direction to the Hoang-hai, where it forms the high, rocky, and mountainous shores along the western side of the Gulf of Leao-tong north of the mouth of the river Lan-ho. The declivities of this range are abundantly watered, but the northern side is bare and destitute of wood; whilst the southern is overgrown with pine, fir, oak, lime, walnut, and other trees, and is the haunt of numerous wild animals, among which are tigers and leopards. It constitutes the most extensive hunting-ground of the Chinese emperor, and contains the royal palace of Iohol, which was visited by Lord Macartney and described by Sir George Staunton. The tract on both sides of the Lan-ho is an agricultural country of great fertility and well cultivated. Though included within the boundary of Mongolia, it is inhabited by Chinese, and is very populous. Besides several small towns, it contains the large town of Quan-tshing.

The country which extends along the north-western side of the Ta-Gobi is nearly unknown, with the exception of the eastern part,

which is traversed by the caravan road from Kiachta in Siberia to Khalgan in China. Here too the surface of the country is frequently broken by hills and isolated ridges; but the intervening level tracts contain rich pasture-ground. It is mostly well watered, but wood is scarce. In advancing northward the hills grow higher, and the valleys or intervening level tracts become narrower, till near the boundary-line between Mongolia and Siberia the country rises into mountains, which run in a continuous chain, and are that portion of the Altai Mountains which is known under the name of Khing-khan Oöla. [ALTAI MOUNTAINS.] The width of this mountainous and uneven country, which lies between Siberia and the Ta-Gobi, seems on an average to be about 150 miles. In it originate the river Selenga and its numerous upper branches. Here also rise the Kerlon and the Onon, two large rivers, which by their union form the Amur. [AMUR.] This country, which is rich, when compared with other portions of Mongolia, belongs to the high-priest of the Buddhists, who resides in the neighbourhood of the town of Urga, and is called Kootookhtu. It forms a separate government of the Chinese empire, and its general governor, called 'vang,' or 'kiun-vang,' as well as the lieutenant, called 'amban,' resides in the town of Urga, or *Ceryo*. This town is built in a small plain; but though sheltered by mountains against the northern winds, the climate is too cold to permit the most common vegetables to be raised, which are accordingly brought to it from Mai-mat-shin, a place two degrees farther north. Its population does not exceed 7000, of which 5000 are said to be lamas, or persons belonging to the ecclesiastical establishment of the Kootookhtu; but it is a place of considerable traffic, being a depôt for the goods intended for the trade with Siberia, and also for those Chinese productions and manufactures which are consumed in the parts of Mongolia farther to the west. Many of the Mongolian princes, whose tribes wander about in the Ta-Gobi and the adjacent countries, are obliged to reside in this town, in order that their views may be known to the Chinese governor, who is a Mandshoo, and commonly a relation of the emperor. Here also is the supreme court, called Yamoun, for the administration of justice in that part of Mongolia which is inhabited by the Khalkas. This place may in fact be called the capital of Eastern Mongolia. The small town of Mai-mat-shin is on the very boundary-line of Siberia, and less than a mile from Kiachta. [KIACHTA.]

Of the western portion of Mongolia, extending from 84° to 96° E. long., between Siberia and the most western extremity of the provinces of Kan-su, all our knowledge is derived from the geography of the Chinese empire, the Tay-tsing-hoei-tien, and the maps annexed to it. Its western part is traversed by a mountain range, which near its western extremity is connected with the Altai Mountains, not far from the eastern bank of the Irtysh. This range, the Ektag Oöla, is commonly called on our maps the Great Altai. It seems to rise to a considerable elevation, but to disappear about 94° E. long.; for farther east only isolated mountain masses or short ranges occur in the desert. That portion of Mongolia which lies south of this range seems to partake largely of the nature of the Gobi, extending mostly in extensive sterile plains. The great number of rivers which, descending from the southern declivity of the Ektag Oöla, join the Irtysh before it reaches the lake of Zaizan, seems to indicate that a tract of fertile country extends along the northern banks of that river. The Irtysh is the largest river in this country, and probably runs 160 miles before it falls into Lake Zaizan. Another large river, the Ooroongoo, falls into Lake Kisilbash, which has no outlet. The country between the Ektag Oöla and the principal chain of the Altai Mountains appears to be traversed by several subordinate ridges running east and west. Though it is much better watered than any other part of Mongolia, the greatest part of it is a desert, especially towards the east, but towards the west the tracts of pasture are more extensive and less interrupted by sandy districts. In this part there are several extensive lakes, all of which receive considerable rivers without having any outlet. The most northern is the Upsa Nor, which receives from the east a considerable river, the Tea, besides several smaller ones. The Yeke Aral Nor, to the south-south-west of the Upsa Nor, is the receptacle of the Djabekan, a river whose course can hardly be less than 500 miles. In this part Mongolia extends to the north of the Altai Mountains, comprehending the country in which the upper branches of the Yenesei have their origin and course. The mountain range which divides the last-mentioned tract from the lake Upsa Nor and the river Tea is called the Tangnoo Oöla.

This part of Mongolia is divided into two governments, the government of Kobdo and that of Uliassutai, the boundary-line between them running near 92° E. long. The capital of the former is Kobdo, not far from the northern extremity of Lake Yeke Aral Nor: the capital of the latter is Uliassutai, situated on the river Iro, an affluent of the Djabekan. The latter place is stated to contain 2900 houses, and to be regularly built. Caravans pass from it to Urga and to China, and its commerce seems to be considerable. Nothing is known of Kobdo. A general, appointed by the Chinese emperor, resides in each town, a Mandshoo by birth, who has under his inspection the Mongol inhabitants of the country; he unites in his person the military and civil authority.

As the whole surface of Mongolia, with the exception of the deep depression of the Ta-Gobi, is more than 3000 feet elevated above the sea-level, and as it stretches out in vast plains, to which the compara-

tively low ranges of mountains along its northern border cannot afford shelter against the northern and north-eastern winds, the climate is much colder than in that part of Siberia which extends along the base of the Altai range west of Lake Baikal. No month in the year is free from snow, and even frost, though the heat in summer is nearly insupportable, on account of the want of trees and the sandy surface of the country. Sudden and great changes in the temperature are of frequent occurrence. It is however remarkable that the numerous herds which pasture on this plain find subsistence all the year round; even after a fall of snow the grass is seen above it, and serves to nourish the animals. This evidently shows that the quantity of snow which falls is comparatively small, and much less than that which annually covers the northern countries of Europe or of North America. This fact is a proof of the great dryness of the air; and to this want of moisture the unfitness of the soil for agricultural purposes, even where it is not composed of sand or stones, is mainly to be attributed. A little millet is grown in a few sheltered places between high hills, which attract the moisture. Rain is rare, except near the great ranges of mountains, especially about Urga. Gales of wind are frequent, and, especially in the Gobi, blow with great force, and frequently for many days together.

The wealth of the Mongols consists in their numerous herds of camels, horses, and sheep. Cattle are only numerous on the more hilly tracts, especially towards the boundary of China; there are none in the Gobi. Asses and mules are only found in the vicinity of China. Wild animals are numerous, especially hares, antelopes, dahiggetais, or wild asses, deer, foxes, sables, squirrels, and marmots. Water-fowl are plentiful on the numerous lakes and swampy tracts. In some places the desert is covered with small stones, among which several kinds of precious stones occur, as chalcedony, agate, onyx, jade, carnelian, &c., which are collected by the Chinese.

Inhabitants.—The inhabitants are called Mongols, and constitute the principal stock of a nation which is widely diffused over the extensive table-lands of Central Asia.

This nation is divided into two great divisions, the Eastern or Proper Mongols, and the Western Mongols, or Kalmucks. All the tribes belonging to this nation have, from time immemorial, led a nomadic life, and subsisted on the produce of their herds, without attempting to cultivate the ground; a circumstance which must be attributed to the countries they inhabit being entirely unfit for agriculture, with the exception of very small tracts.

The Proper Mongols inhabit that portion of Central Asia which is bounded by a line drawn from the northern extremity of Lake Baikal to the northern extremity of Lake Balcah, thence to the Hoang-ho, where the range of the Alashan rises near the town of Ninghia; from this place it follows the Great Wall, from the eastern extremity of which it runs to the junction of the rivers Nonni and Songari in Mandshooria, whence it returns to the northern extremity of Lake Baikal. The whole country encompassed by this line is in possession of the Proper Mongols, with the exception of some plains between the Ektag Altai and Lake Balcah, which are occupied by Kalmuck tribes. There are however Mongols also in other parts of Asia, especially in the country about the sources of the Hoang-ho, and about Lake Kookoonor, and in the western parts of Tibet, where they are called Khor-Katshi Mongols. All the Mongols speak the same language, and admit that they all belong to the same nation, and have a common origin.

The Proper Mongols are divided into three great nations, the Tahakhar, Khalkhas, and Sunnit. The Tahakhar inhabit the best part of Mongolia, being in possession of the tract which skirts the great Chinese Wall on the north, and extends to the Ta-Gobi, a distance of from 150 to 200 miles from the wall. They obtained the full confidence of the court of Peking by yielding to the sway of the Mandshoo, before they had made any considerable progress in the conquest of China. The Khalkha, or Khalkhas Mongols, occupy the northern part of Mongolia, along the southern boundary of Siberia. They voluntarily submitted to the Chinese emperor to avoid destruction in their unsuccessful war with the Oelöth Kalmucks in 1683. The Sunnit occupy the country between the Tahakhar and Khalkhas, or that part of Mongolia through which the Ta-Gobi extends. They are less numerous and powerful than their neighbours, and less esteemed by the Chinese. They submitted to the Mandshoo when the Tahakhar joined them in 1634.

The Mongols however have a literature, which they owe to the Chinese, and which consists chiefly of translations of Chinese books, and a few original historical works, especially the history of their great hero, Gengis Khan.

The whole nation is divided into 26 tribes, called 'aimak.' Each of these divisions has an hereditary prince, except the Khalkhas, who constitute one aimak, but are governed by four hereditary princes, called 'khan.' All four claim a descent from Gengis Khan. Each aimak has its territory, in which it wanders about with its herds. The order of society resembles the feudal system, and the noblemen are called 'taidshia.' The Mandshoo have introduced among them a military division, according to which the whole nation forms 135 banners, each of which is subdivided into regiments and companies. Each Mongol is bound to serve as a horseman from his 18th to his 60th year. The Mongols are governed by the decrees of the Li-fan-yuen, or Tribunal of Foreign Affairs, which has instituted for them a

It afterwards belonged to the Eastern, or Byzantine, emperors till the beginning of the 13th century, when the Franks having conquered Constantinople, the Venetians obtained for their share several islands of Greece and a considerable part of the Peloponnesus, with the towns of Coron, Modon, Argos, Nauplia, Corinth, &c. It was then that they gave the peninsula the name of Morea, from the quantity of mulberries ('more' in Italian) which it produced.

Towards the end of the 15th century the Morea was conquered by the Turks, and the Venetians were expelled from it. In 1684 war having broken out between Venice and the Porte, the Venetians sent an armament, which conquered the peninsula, to which they gave the name of a kingdom, subject to Venice, and its flag was hoisted on the square of St. Mark. In 1715 the Turks, after an arduous struggle, reconquered the Morea. In 1770 an insurrection broke out amongst the Greek inhabitants, but the Porte marched into it a large body of Albanians, who devastated and reduced the country. In 1820-21 the Moreotes joined in the general revolt of the Greeks, and after a long struggle the battle of Navarino (1829) at last delivered the Morea from the Turkish yoke. The Morea forms now an essential part of the kingdom of Greece.

(Coronelli; Leake; Sir William Gell, *Morea*.)

MORECAMBE. [LANCASHIRE.]

MORELIA, or VALLADOLID. [MEXICO.]

MORENA, SIERRA. [ANDALUCIA.]

MORETON BAY. [WALES, NEW SOUTH.]

MORETON HAMPSTEAD. [DEVONSHIRE.]

MORETON-IN-THE-MARSH. [GLOUCESTERSHIRE.]

MOREZ. [JURA, Department of.]

MORGARTEN. [ZUG.]

MORLAIX. [FINISTÈRE.]

MOROCCO. [MAROCCO.]

MORPETH, Northumberland, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of Morpeth, is situated in 55° 10' N. lat., 1° 40' W. long., distant 15 miles N. by W. from Newcastle, 289 miles N.N.W. from London by road, and 320 miles by the Great Northern, and York, Newcastle, and Berwick railways. The population of the municipal borough of Morpeth in 1851 was 4096; that of the parliamentary borough was 10,012. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. For sanitary purposes Morpeth is under the management of a Local Board of Health. The living is a rectory in the archdeaconry of Lindisfarne and diocese of Durham. Morpeth Poor-Law Union contains 72 parishes and townships, with an area of 93,798 acres, and a population in 1851 of 18,126.

The town stands on a sort of peninsula formed by the windings of the Wansbeck. The road from Newcastle enters the town from the south by an elegant bridge of three arches over the river, designed by Telford, and there is a suspension-bridge on the west side. The streets, which are irregularly laid out, are lighted by gas. The church, built in the 14th century, is nearly half a mile from the town, on the side of the river; it consists of a nave and chancel, with a western tower. In the churchyard is an ancient octagonal cross. The Wesleyan Methodists, Presbyterians, Independents, and Roman Catholics have places of worship. The Free Grammar School of Edward VI., founded in 1552, had 80 scholars in 1853. The income from endowment, which was 224*l.* in 1830, is expected to be more than doubled, owing to the termination of the Chancery suit, 'The Attorney-General v. Trevelyan,' which commenced about 150 years ago. There are also National and Infant schools, a mechanics institute and library, a savings bank, and a dispensary. The county jail and house of correction was erected about 30 years since, at a cost of 70,000*l.* The gateway is an imposing mass of building, and contains the chapel, the sessions-house or hall for county business, in which the Easter sessions for the county are held, and other apartments. Near the jail are the remains of Morpeth Castle, a rude and strong building, of which the gate-house and the outer wall, now much shattered, are still standing. The town-hall was erected by Sir John Vanburgh. Morpeth has a good weekly market for live stock on Wednesday. Five fairs are held in the year. Some flannel is made in the town; brewing, malting, tanning, and hat-making are carried on, and there are iron-foundries and corn-mills. Races are held yearly in the first week of September.

MORS. [AALBORG.]

MORTAGNE. [ORNE.]

MORTAIN. [MANCHE.]

MORTARA. [NOVARA.]

MORTEAU. [DOUBA.]

MORTLAKE. [SURREY.]

MORVAN, LE, the name of a hilly region in the centre of France, which forms part of the watershed between the Loire and the Seine. It now forms the south-west of the department of Côte-d'Or, the north-west of Saône-et-Loire, and the east of the department of Nièvre. The Morvan Hills are an offshoot from the Côte-d'Or Mountains; they extend first in a direction of west-north-west from the sources of the Arroux and the Armançon, tributaries respectively of the Loire and the Seine, to beyond the town of Saulieu, and the south-west to the sources of the Yonne and the Vendesne. The heights that form the edge of the two basins to the west of the Yonne are a

continuation of the Morvan Hills, but they are known by no particular name; they run across the department of Nièvre and the south-west of that of Yonne, beyond which they unite with the hills of the Forest of Orleans. The Morvan Hills are of inconsiderable height; they consist for the most part of a table-land of granite or other primitive rocks, traversed by narrow valleys and watered by numerous streams. The region affords in some parts good pasturage; other parts are clothed with wood; the rest is naked and bare: buckwheat, oats, and rye are the only grains raised.

MORWINSTOW. [CORNWALL.]

MOSAISK. [MOSCOW, Government of.]

MOSAMBIQUE. [MOZAMBIQUE.]

MOSCOW (*Moskwa*), one of the eight governments of Great Russia, is situated nearly in the centre of European Russia, between 54° 40' and 56° 30' N. lat., 35° 10' and 38° 40' E. long. It is bounded N.W. by Twer, N.E. by Wladimir, S.E. by Riäsan, S. by Tula, S.W. by Kaluga, and W. by Smolensk. Its area is 12,469 square miles. The population in 1846 was 1,374,700. It is divided into 13 circles.

The face of the country is an undulating plain, here and there broken by groups of low hills, but nowhere presenting any grand scenery: only the environs of the capital have any attractive spots, most of which however owe their beauties to art. The soil is for the most part loam and sand, with some heath and marsh; and on the whole the land is but moderately fertile. Boulders of granite and other kinds of rock are met with in more or less abundance on the surface, or in the beds of clay and sand.

This government is most amply provided with water, there being 109 lakes, none of which however are of any great extent, and 2610 rivers and streams. The principal rivers are—the Wolga, which indeed only just touches the province for a short distance in the north, where it receives the Lama and the Sestria on the right bank; the Oka, which forms the southern boundary; the Moskwa, which gives its name to the government and to the capital; and the Voria and the Khazma in the east, which unite to form a great tributary of the Oka, which it joins on the western border of the government of Niahnei-Novgorod. The Moskwa rises in the east of the government of Smolensk, near 55° 30' N. lat., 35° 15' E. long., and flowing eastward soon enters the government to which it gives name. Hence it pursues the same easterly course past Mosjaik and Zvenigorod to the city of Moscow; on entering which it takes a general south-east course to its junction with the Oka on the southern border of the government of Moscow. The whole length of the Moskwa is about 200 miles. Its principal feeders are the Iskwa, the Buzs, and the Istra on the left, and the Paktera on the right. The river is navigable in the open season, but the navigation is interrupted by a rapid under the bridge of Moscow. By its upper course timber, firewood, &c., are brought down to the capital, to which provisions, &c., are brought up the river from the Volga and the Oka. Moscow has communication with the upper Volga also by means of a canal that unites the Istra to the Sestria. The rivers are in general frozen about the middle of November, and thaw by the end of March. The whole length of the winter, including the less genial days of the autumn and the spring, is reckoned to be five months.

Agriculture is the chief occupation of the inhabitants, and Moscow is one of the best cultivated as well as one of the most populous provinces of the whole empire. As the soil is but moderately fertile, and the capital consumes a vast quantity of corn, the crop is never sufficient, even in good years, for the supply of the inhabitants, and large quantities are therefore imported. Flax, hemp, and hops are cultivated by the farmers for their own use, but the manufacturers must obtain their supplies elsewhere. Horticulture is carried on to a great extent, and the produce is nearly adequate to the consumption; most vegetables flourish, especially those which the Russians prefer, such as turnips, carrots, onions, garlic, cabbages, cucumbers, and gourds; other kinds of garden vegetables are cultivated in the environs of Moscow—the asparagus is celebrated all over the empire for its size and fine flavour. Fruit is scarce, and though apples, pears, and cherries thrive, in fact only apples are attended to. The best sort of apple is of Chinese origin; it is called Naliwy; is transparent, juicy, and pretty well flavoured. There are likewise many plums.

In general there is no want of wood for timber or fuel. The number of cattle is not sufficient for the supply of the province, which requires a great importation, not only of cattle, but of wool, tallow, &c. What the inhabitants chiefly attend to are domestic poultry and calves, for which they are sure of obtaining a good price in the capital. Some attempts have been made of late years to improve the breed of sheep. More attention has been paid to the breed of horses, and there are several considerable studs, some of which belong to the crown. Game is not abundant. Bears and wolves have not yet been quite extirpated in the great forests. Most of the rivers and lakes abound in fish, but are far from yielding sufficient for the consumption of the people. The minerals are freestone, potters'-clay, brick-clay, lime, gypsum, alabaster, and bog-iron.

Manufactures of various kinds are carried on to a great extent, both by the country-people for their own supply as well as for sale, and also in the villages and towns, and especially in the capital. The number of manufactories has increased rapidly in recent times. The

manufactures comprise woollen-cloth, hats, silk, leather, obints and calico, linen, cotton, paper, china, earthenware, &c.; steam-engines and steam-machinery are used to a great extent in the cloth, cotton, and silk factories. There are many distilleries and breweries, and numerous small manufactories; in fact almost every family in the country has some kind of manufacture.

The province has a very extensive inland trade; Moscow, from its wealth and industry, being necessarily one of the greatest emporia in the interior of Russia. Moscow may indeed be called the centre of the internal trade of Russia, as St. Petersburg is of its maritime commerce.

Other towns of this province, are—*Kolomena*, at the junction of the river Kolomenka with the Moskwa, and a little above the junction of the latter with the Oka. The town, which is divided by the Kolomenka into two parts, contains 17 churches, an ecclesiastical seminary, and a population of 10,200 inhabitants, who have manufactures of silk, cotton, linen, woollen-cloths, and leather. There are several tanneries, and malt and brick kilns; above 400,000 poods (36 lbs. each) of tallow are annually melted here. The inhabitants have a very extensive trade in tallow, hides, leather, corn, hemp, oil, hops, and fruits from the Ukraine, all of which find their way to Moscow; and they supply the neighbouring country with colonial produce, wines, and manufactures. The fairs are much frequented.

Serpuchov, on the rivers Nara and Oka, over the latter of which there is a bridge of boats. The citadel, on an eminence, is surrounded by a high wall, now fallen into decay; the town has 16 churches, a lazaretto, and other public buildings, and 6000 inhabitants, who have manufactures of sailcloth, woollens, leather, and paper. They have a good trade in corn, cattle, tallow, hemp, linen, and timber, which go partly to St. Petersburg and partly to Moscow. There are two fairs.

Wereja, on both sides of the Protwa, a feeder of the Oka, which crosses the south-west of the government. The Protwa is crossed by a wooden bridge. The inhabitants of the town, 6000 in number, have a brisk export trade with Moscow, St. Petersburg, Riga, and Königsberg.

Mosatsk, near the right bank of the Moskwa, in the west of the government, and a little east of the village of Borodino, has 4000 inhabitants. The bloody victories obtained by Napoleon I. over the Russians on September 5th and 7th, and called respectively by the French the victories of Borodino and the Moskwa, were fought near this town. After the terrible battle of the 7th, Marshal Ney was saluted by Napoleon—Prince de la Moskwa, and the French marched straight to the city of Moscow.

Dmitrov, in the north-east of the government, on the Sestria, has 3000 inhabitants.

The common roads are excellent. A railway from Moscow to St. Petersburg unites the two capitals of the empire. The navigation of the Oka and the Moskwa is a great advantage to this province.

The inhabitants are all of Russian origin; in the city of Moscow itself indeed there are not only persons from all parts of the Russian empire, but strangers from the remotest countries of Asia and Europe. The Russians are of the Greek religion, of which there are in this province above 1800 churches, under the archbishop of Moscow. The Roman Catholics, Lutherans, and Calvinists have churches in Moscow.

MOSCOW (in Russian, *Moskwa*), formerly the capital of the Russian empire, till Peter the Great in 1703 made St. Petersburg the seat of government, seems to have been founded about A.D. 1147, by the Grand-duke Yury II., or George, surnamed Dolgorucky, or Long-Hand. It was taken and plundered by Tamerlane in the reign of Basil II., and subsequently it was sacked by the Tartars. In 1536 it was nearly destroyed by a fire; again in 1571 the Tartars fired the suburbs, the conflagration spread to the city, a great part of which was reduced to ashes, and about 100,000 persons perished by fire or sword. In 1611 it was taken by the Poles, and a great part of it was destroyed by fire. Lastly in 1812 the inhabitants set fire to their city, after it had been entered by the French under Napoleon I. It has been since rebuilt with little change, except that individual houses are in better taste than in the old city, and gardens are more frequent.

Moscow is situated in 55° 45' 45" N. lat., 37° 33' 8" E. long., in a fertile and richly cultivated country on the banks of the river Moskwa (pronounced Moskva) and of the rivulets Jausa and Neglina (or Neglinnaya), the latter of which is in fact only a brook. The form of the city is a sort of irregular rhomboid, and its girding rampart is about 25½ miles long. In the inclosed space however there is a great number of gardens, besides many fields or parks which are used for promenades, for holding festivals, and for exercising troops; there are likewise 253 ponds or small lakes, on the banks of some of which there are public walks and fine gardens laid out with much taste, and inclosed by walls.

The central part of Moscow, containing the Kremlin and its gardens, east of which is the cathedral of St. Basil and the Kitai-Gorod, or Chinese Town, lies north of the Moskwa, and is surrounded by the Beloi-Gorod, or White Town. Round the Beloi-Gorod runs the inner boulevard, nearly circular in shape, with its two ends resting on the river and with a radius of about a mile. The Zemlianoi-Gorod incloses the preceding parts on the north side of the river, but extends to the

south side, so as to fill up the circle, and is inclosed by a wide circular boulevard concentric with the one just mentioned. Between this exterior boulevard and the ramparts of the city are the Slobodi, or suburbs, which are 85 in number. The finest of the gates of Moscow is the St. Petersburg Gate at the north-west angle of the city, consisting of three arches—a central one of large dimensions spanning the wide carriage-road, and two smaller ones over the footway. The panels are adorned with only a few imperial eagles in bas-relief; on the summit is a colossal figure of Victory in a car drawn by eight furious coursers.

The Moskwa crosses the line of the western wall of the city a little north of the Warsaw Road in an eastern direction, and immediately turning first south and then south-west, again crosses the rampart near the Devitchei Convent. After winding round to the south and east along the base of the Sparrow Hills to the south-west of the city (whence the French obtained their first view of Moscow), the river again enters within the ramparts at the south-western angle near the Kaluga Road, and flowing north-east between the Empress's villa and gardens on the east, the Devitchei Convent and vast barracks on the west, it crosses the exterior boulevards which separate the city from the suburbs. From one extremity of the interior boulevard to the other the river flows eastward along the southern base of the hill on which the Kremlin is built, and then turning nearly south it crosses the ramparts for the last time at the south-eastern angle; the convent of St. Saviour's, the vast powder magazine, and the Semionovskoi Convent lying between its left bank and the eastern wall. The small river Jausa enters the city on the north-east, and joins the Moskwa at the eastern extremity of the inner boulevard after passing the hospital of St. Catharine, the palace of the Empress Elizabeth, the Imperial Palace, the summer gardens, the new and old military hospitals, and the military school.

The view of Moscow at a distance has excited the admiration of all travellers. The countless number of towers, some with cupolas either gilt or painted green, and others rising in the form of minarets, and the many gardens and trees intermixed with the houses, give the city quite an oriental appearance. The number of towers in Moscow is very great, nearly every church having several besides the steeple. The churches have in general a peculiar appearance, being surmounted by several cupolas or small domes, which are painted or gilt and bespangled with stars; on the top is a crescent, with the cross above it. With a general similarity of appearance, the forms of the towers vary considerably, striking the eye by the irregularity of their forms and their gay diversity of colours. It is to those towers in particular that Moscow owes its remarkable appearance. They are all of stone, and most of them situated in open squares, in consequence of which they escaped the fire of 1812. Hence Moscow has lost little or nothing of its original aspect by that fire, especially as the part of the Kremlin which was blown up by order of Napoleon has been rebuilt in the same style. The roofs of the houses are composed of iron plates, painted dark green, so that at a distance they are lost among the tall groups of trees which rise from the gardens. The gilded cupolas are in general relieved by the green background. The best view of the city is from the Ivan Veliki, or great tower of Ivan in the Kremlin, which is in the centre of the city. The extraordinary mixture and contrast of magnificent palaces and petty huts, though still occurring in a few places, no longer strikes the eye as Moscow previous to the fire of 1812; the city is daily losing its Asiatic features, and assuming the appearance of the capitals of Western Europe. Happily for the lover of venerable antiquity, the Kremlin, which suffered comparatively little, notwithstanding the attempts of the French to blow it up, retains unimpaired its ancient irregularity and grandeur.

Moscow contained in 1835 above 10,000 houses, of which more than 2000 were of stone, 7 cathedrals, 21 monasteries, 245 Greek, 2 Roman Catholic, and 3 Protestant, besides 2 English churches, 8 Armenian chapels, and a Turkish mosque.

1. *The Kremlin*.—The Kremlin, which was first built of stone in 1367, in a commanding situation on the left or north bank of the Moskwa, taken as a whole, is a most singular, beautiful, and magnificent object. It is surrounded with walls from 12 to 16 feet thick, and of different heights, 28, 30, 35, 45, and 50 feet, with battlements, embrasures, numerous towers, and five gates. The most important of these gates is the Holy Gate, Spass Vorata, or Gate of the Redeemer, so called from a picture of our Saviour which hangs over it. This gateway is under a tower, and about 20 paces in length. Every one from the emperor to the meanest serf must take off his hat till he has passed through it. The most important parts remaining of the ancient palace of the czars are the Terema, which contains below the throne and audience chambers of the old czars, and above the apartments of the Czarovinas (princesses) and imperial children; and the Granovitaya Palata, a quadrangular building, the second story of which contains the coronation hall of the emperors of Russia. On the ground occupied by the main body of the old Tartar palace stands the Balshoi-Dvorets, or Large Palace, a lofty and imposing structure, erected and inhabited by the emperor Alexander. Adjoining the Granovitaya Palata is Maloi-Dvorets, or Little Palace, erected by the present emperor; it is a neat building, simple in style and interior arrangement. The Kremlin contains many magnificent churches.

The cathedral of the Assumption, founded in 1326, is deemed the most splendid in Moscow. It is by no means a large edifice compared with the cathedrals of other countries, but the interior is adorned with extraordinary profusion and splendour. Many highly venerated relics are preserved in this cathedral. The Russian sovereigns are here crowned and anointed. The cathedral of St.-Michael contains the tombs of the Russian sovereigns, the grand-dukes and czars, from the time that Moscow became the capital till the death of Peter the Great, and, besides those of many male members of the imperial family (the females are deposited elsewhere), that of Peter II. The cathedral of the Annunciation is smaller than the preceding, but built in better taste, and being splendidly ornamented, is a pleasing and magnificent object, forming as it were a wing to the palace. The floor is paved with jaspers, agates, and carnelians of different sizes and shapes. The cathedral of the Transfiguration is a very plain and nearly square edifice, founded in 1328, and rebuilt in 1527. Including the cathedrals, there are 32 churches in the Kremlin.

After the cathedrals, the Ivanovskaya Belfry claims attention for its size, its elegance, and magnificent appearance. The belfry has been entirely rebuilt since 1812 nearly in the same style as before, but it is now more beautiful and splendid. The tower is 269½ feet high to the top of the cross, which is 18 feet 8 inches. Besides many other bells, there is in this belfry the celebrated bell said to be the largest in the world. It was cast in 1736, but fell in consequence of a fire in 1737, and lay sunk by its weight to some depth in the ground till 1837, when the emperor Nicholas had it raised and placed on a pedestal; a piece broken off by the fall is also placed on the pedestal. It weighs 10,000 poods, or 360,000 lbs. English. The bell in the first story of the tower weighs 64 tons, and requires the united strength of three men to toll it. The view from the summit of this tower of Ivan Veliki over the city and its environs is surpassingly fine. The Kremlin contains likewise the imperial museum, the arsenal (which contains a vast collection of French cannon taken on the retreat of Napoleon I. in 1812), the treasury, the immense pile of buildings called the senate, the palace of the patriarchs of Moscow, now called the Synodalni Dom, or House of the Holy Synod, and the Vosnesenskoi nunnery, in the cathedral belonging to which a great number of grand-duchesses and empresses are interred. The Treasury contains the crowns, sceptres, thrones, arms, and drinking-vessels, apparel, and other memorials of the grand-dukes and czars, forming a collection of vast intrinsic value. Outside the Holy Gate of the Kremlin in the Krasnoi-Plotchad (Red Place), between the walls of the Kremlin and those of the Kitai-Gorod, is the cathedral of St.-Basil, a grotesque building, erected by an Italian architect for Ivan the Terrible, and surmounted by above 20 towers and domes of different shapes and sizes, and painted of various colours.

2. The *Kitai-Gorod*, surrounded by a wall with 12 towers and 5 gates, is properly the city. The houses, which are mostly of stone or brick, are built close to each other, contrary to the usual mode. It is the centre of the trade of Moscow; and contains the bazaars, the magazines, and the richest shops. Among the public buildings are the following:—The Pokrovskoi cathedral, built in 1554, was originally so constructed as to have 9 separate churches or chapels, to which 11 more have since been added, so that there are now 21 places of worship joined together, in which divine service may be performed at the same time. The house of the town council, a handsome edifice, was formerly the university. The printing-office of the Holy Synod is a very fine building, in which there are 30 presses for printing ecclesiastical books in Slavonian, and books in Greek, Latin, French, and German, for the spiritual schools under the synod. In the Krasnoi-Plotchad is a splendid monument erected by the emperor Alexander in honour of Minin and Pojaraki, who delivered the country from usurpers and foreign invaders in the 17th century, and placed on the throne Michael Romanof, the first sovereign of the reigning family. This monument consists of colossal bronze statues of the two heroes, 14 feet high, on a pedestal of a single block of red granite, adorned with bas-reliefs. In the Kitai-Gorod, to the north of the cathedral of St.-Basil, are the Gostinnoi-Dvor, or Great Bazaar, and the Riadi. The former is a colossal building three stories high, and three rows of pillars and shops stand one above another, connected by numerous passages and steps. Upwards of 1000 wholesale merchants trade here in the produce of the Baltic, the Black Sea, the Levant, western Europe, Siberia, China, Tartary, &c.; there seems a continual fair all through the year. The Riadi is an open space of ground laid out in narrow streets of shops or booths; the traders are grouped according to their respective callings. It is the noisiest and most bustling place in Moscow. The secondhand markets are numerous; the largest is held along the wall of the Kitai-Gorod. During what is called the winter market, which is held immediately after the frost has set in, vast quantities of perishable provisions—fish from the White Sea and the great northern lakes, frozen oxen and sheep from the Crimea and the shores of the Caspian, deer from Siberia, &c.—are piled in huge heaps in the streets, and a vast traffic is carried on in fresh provisions, for the winter supply of the city itself, and many other towns.

3. The *Beloi-Gorod*, or White Town, the third grand division of the city, forms above two-thirds of a circle, inclosing the Kremlin and

Kitai-Gorod on the north side of the Moakwa River, which forms the southern boundary of these divisions. Besides many fine palaces of the nobility, the Beloi-Gorod contains several remarkable edifices, such as the University, the Medico-Chirurgical Academy, the Foundling Hospital, the Post-Office, College of Foreign Affairs, the residence of the governor-general, the Riding School, the assembly-rooms of the nobility, three monasteries, three nunneries, and numerous churches. The palace of the governor stands in a fine elevated situation, and is a princely edifice of three immense stories, besides the basement, in a simple style of architecture. The internal arrangement, the size and elegance of the apartments, as well as the rich furniture and decorations, correspond with the external magnificence of the building. The University, founded in 1705, suffered severely in consequence of the French invasion, before which it was very flourishing. The fine library and valuable collections of all kinds fell a prey to the flames. The building has since been repaired. The number of professors and teachers in 1846 exceeded 100, and the students numbered above 1000. The university possesses valuable mineralogical, anatomical, and other collections.

The Riding School, or Exercise House, an enormous edifice to the north-west of the Kremlin, was built in 1817. In Russia, where the cold in winter is so severe, and the heat in summer frequently so intense, the inconvenience, and sometimes the impossibility, of training and exercising troops out of doors render such buildings as this absolutely necessary. The government has therefore provided both the capitals, and some of the chief towns, with these edifices. This at Moscow is, we believe, the largest in Russia. It has two fronts, precisely similar, and two similar ends. The length of each front is 560 feet, and the breadth of each end 168 feet; the height is 43 feet. Each front has 32 and each end 8 plain Ionic columns, with fine arched windows between, the frames of which, and the doors of oak, not painted, make an agreeable contrast with the white walls. In this building 2000 infantry and 1000 cavalry may be exercised at the same time. The weight of the roof rests on the walls without horizontal pressure. The Beloi-Gorod contains the only two theatres in Moscow—the French theatre, a small building, and the Imperial theatre, a showy building, with a large and handsomely fitted-up interior. They stand near each other, to the north of the Kotai-Gorod. Nearer the boulevard is the bank. The Foundling Hospital, founded in 1763, is an immense quadrangle four stories high, besides the basement. It is situated on the north bank of the Moakwa, between the east wall of the Kitai-Gorod, and the mouth of the Jausa. It is a simple and uniform edifice of vast extent. The upper part of the building is appropriated to infants and wet-nurses, of each of which there are always 600. The next suite of rooms is occupied by children from 4 to 7 years old. Other floors contain chapels, school-rooms, dining-rooms, kitchen, &c. Besides the children in the house, many others are given out to peasants' wives to nurse. Every child brought to the institution is received; its name, number, and date of admission are entered on the books, a corresponding ticket is tied round the child's neck, and a duplicate is given to the mother, who on presenting it may again receive her child. A small deposit left with the child ensures its being brought up in the house; boys left without a deposit are brought up for the army. All who give proof of good abilities are carefully educated, both boys and girls, for engineers and governesses respectively. Some of the boys are sent to the university. Besides a good education in the Russian language, the girls are taught manual labour, part of the proceeds being applied to the support of the institution, and the remainder laid up for a marriage portion. The main expenses of the establishment are defrayed by a tax on all places of amusement, and the interest of sums borrowed from a bank attached to the hospital. The entire number of children belonging to the house, in and out, amounted to about 25,000 in 1848. Persons of both sexes may return to the hospital should they fall into distress.

The assembly house of the nobility is a large pile of building. The interior is fitted up with great splendour. The grand hall is large enough to contain 2000 persons. It was burnt in 1812, and has since been rebuilt. Several of the private palaces in this part of the town are of vast extent, and a few of them are good specimens of architecture. The College of Mines, the College of Foreign Affairs, containing an immense mass of valuable state papers, and the Post-Office, are more remarkable for their use than for their style of architecture. Several of the churches and monasteries are worthy of notice.

4. The *Zemlianoi-Gorod*, or Earthen Town, was so called from the earthen rampart which formerly surrounded it, and which is now replaced by the boulevard, forming a noble promenade planted with trees. In this division are the depôt of the commissariat, a handsome building, consisting of a large central structure three stories high, adorned with Doric columns, with a balcony at their base, and two wings. The depôt for spirits, which occupies an immense space forming two squares, is chiefly remarkable for its length and its use, it being the depôt for the spirits made at the distilleries belonging to the crown, and from which all Moscow and the neighbourhood are supplied. The Imperial Philanthropic Society, and the Moscow Commercial School (an excellent institution), are plain edifices; the Medico-Chirurgical Academy is a large building three stories high, with a portico of six Doric columns, and has two detached advanced

wings. It possesses a very respectable anatomical museum, and a fine collection of specimens from the three kingdoms of nature. The Zatchateisk Monastery is a great ornament to this part of the city. This monastery derives its name from the church dedicated to the Zatchatiyé, or Conception of St. Ann, a handsome building in the gothic style, the interior of which is very elegant and splendid.

5. The *Slobodi*, or Suburbs, 35 in number, form an irregular polygon, completely surrounding the Zemlianoi-Gorod. Part of the suburbs, like the Zemlianoi-Gorod, consists of a mixture of stone and wooden houses, intermixed with superb mansions and mean hovels; but many of them are like villages, with much uninclosed pasture and waste land. Many of the monasteries and churches in the suburbs are worthy the attention of visitors. A Russian monastery occupies a large piece of ground, surrounded with high walls, which inclose besides the monastery, a principal central church, and three, four, five, six, or even more churches. Galitzin Hospital, to the east of the Empress's villa and gardens, is a very fine building, and a noble institution, founded at the end of the 18th century by Prince Galitzin. Sheremetof's Hospital is an extensive, noble, and magnificent edifice, resembling a fine Grecian temple. The establishment is not merely for the relief of the sick—a large annual sum is assigned for other charitable purposes, such as giving portions to 25 female orphans, allowing pensions to 50 indigent females, &c. In the northern suburbs are the Alexander Hospital, the St. Catharine's Hospital and Institution, the Botanical Garden, and the Sokolniki Field, a vast inclosed space behind the palace of the empress Elizabeth. In the eastern suburbs are the Hospital of St. Catharine, the Imperial Palace, and other buildings mentioned before as lying along the banks of the Jousa and the southern bend of the Moskwa. In the southern suburbs, between the right bank of the Moskwa and the Empress's villa, are the hospital of St. Paul, the great provision stores, the race-course, and the convent of the Donskoi. This convent, like some others in Moscow, is of vast extent, surrounded by walls, which are painted white and red, and surmounted by battlements resembling those of the Kremlin. Within the walls are six churches and chapels, numerous buildings for the monks, gardens, cloisters, courts, groves, and the whole crowned by numerous towers, looks like a little fortress. The Seminoff Monastery, opposite to that of the Donskoi, also resembles a fortress, and its ramparts are really mounted with small guns. From the principal tower of this convent, or from the terrace of its principal church, a very fine view of the Kremlin is obtained. The Devitchei Convent, near the south-east angle of the rampart of the city, is another of these vast structures; its walls are strengthened by 16 towers. The principal church has five smaller ones near it, besides chapels; the churchyard in the inner court of the cloisters is laid out with shrubs and flowers. In the principal church are the tombs of many czarinas and princesses. Some of these monasteries contain good libraries. The Devitchei-Foll, or Maiden's Field, a vast meadow between the convent and the outer boulevard, is the spot on which the czars of Russia entertain their subjects on their coronation: no less than 50,000 persons dined in this field at the coronation of the emperor Nicholas in 1826. In the western suburbs are the Widows' Hospital, in front of which is the Prensenskia Lake, a fine sheet of water; and the great prison, not far from the St. Petersburg Gate. At some short distance outside this gate, on the north-east side of the road to St. Petersburg, are the Petrofakoi Palace and gardens, the great resort of the fashionable world of Moscow in summer. To this palace Napoleon I. retired when Moscow was in a blaze; and here he dictated the bulletin that announced that terrible catastrophe to France. The gardens and grounds of the palace are beautifully laid out, and open to all the public; even the trades-people come here on their holidays, and under the thick shade of trees imbibe vast quantities of tea, the favourite beverage of all true Moscovians. On the Sparrow Hills a large building has been erected as a dépôt for prisoners sentenced to Siberia.

Moscow is the residence of two archbishops, and contains, besides the several government offices and public institutions specified in this article, the most important manufactories in the empire. It is the centre of the whole internal trade, and is the depository of immense quantities of merchandise of every description. The industrial products comprise woollen cloths, cotton manufactures, silks, carpets, jewellery, paper, &c. Steam-engines are used in the factories. Its vast trade is facilitated by water communication along rivers and canals with all the ports and cities of the empire, and by the railway to St. Petersburg. Moscow is also the residence of the great Russian nobles, who live here, especially in the winter. On the whole, Moscow is one of the richest and most magnificent cities in the world, and that in which the national manners and the character of the people have been least changed. The population in winter amounts to 400,000, including about 25,000 soldiers; in summer the number is diminished to about 360,000. [See SUPPLEMENT.]

(Lyll, *History of Moscow*; Hassel; Hörschelmann; Humboldt, Ehrenberg, and Rose; *Handbook for Northern Europe*.)

MOSELLE, RIVER. [MOSELLE, Department of.]

MOSELLE, a department of France, on the north-eastern frontier, lying between 48° 54' and 49° 34' N. lat., 5° 25' and 7° 40' E. long., is bounded N. by Belgium, the grand-duchy of Luxembourg and the Rhenish province of Prussia, E. by Bavaria and the department of

Bas-Rhin, S. by the department of Meurthe, and W. by that of Meuse. Its greatest length from west to east is 102 miles. Its breadth is very irregular, not more than 5 miles a little east of Sarreguemines, 41 miles near the meridian of Sierck; the average is about 25 miles. The area is 2078·3 square miles; the population in 1841 was 440,312; in 1851 it amounted to 459,684, giving 221·71 inhabitants to a square mile, or 47·13 above the average per square mile for the whole of France. The department is formed out of the old district of Measin, French Luxembourg, and a part of Lorraine. It is named from its principal river the Moselle, which crosses it from south to north.

The surface is in general uneven. The hills, which in the east of the department are offshoots from the Vosges Mountains, and in the west from the Ardennes, are of gentle slope, and nowhere exceed 650 feet in height. Their summits are covered with forests containing good ship-timber, and their sides are planted with fruit trees, or laid out in vineyards. There are no plains properly so called in the department, unless that term be applied to the plateaus formed by the upper surface of some of the highlands. The river valleys are all narrow; the finest of them is that watered by the Moselle, which for beauty of scenery and richness of soil is seldom paralleled, especially that part of it that extends from Metz, where the inclosing hills take a wider sweep from the river bank, to Sierck, where they again mutually approach.

The principal river is the *Moselle*, which rises in the south-eastern angle of the department of Vosges, and running nearly north-west, passes Remiremont, Épinal, and Charmes. A few miles below this last town it enters the department of Meurthe, which it traverses in the same direction as far as Toul, whence it flows north-east to its junction with the Meurthe, about 8 miles north of Nancy; from this point its course is nearly due north past Pont-à-Mousson, below which it enters the department of Moselle, where it passes Metz, Thionville, and Sierck, near the Prussian frontier. The Moselle, on passing out of France, forms for above 20 miles the boundary between Rhenish Prussia and Dutch-Luxembourg, then taking a decided north-eastern course through Rhenish Prussia, it passes Trèves, and after many windings through vine-clad hills enters the Rhine at Coblenz. The Moselle has a length of 320 miles, of which 182 are in France; it is available for floating timber almost from its source to its junction with the Meurthe, whence to its mouth, a distance of 210 miles, it is navigable; 72 miles of this navigation are in France. Steamers ply up and down the stream between Metz and Trèves, Trèves and Coblenz: the up-navigation is very tedious, owing to the rapidity of the current. The basin of this river is, with the exception mentioned in the last paragraph, very narrow; and the scenery is very beautiful. The river is subject to inundations, which sometimes cause great ravages. Timber, building-stone, iron, firewood, coal, slates, corn, wine, oak-staves, planks, charcoal, &c., are the articles chiefly carried on its waters. The principal feeders of the Moselle on the right bank are—the Valogne, the Meurthe, the Seille, and the Sarre; on the left bank the Madon, the Math, the Orne, the Sure, the Kill, and the Elz. The north-west of the department is drained by the Chiers, a feeder of the Meuse. The eastern districts are drained by the Sarre (which crosses the narrowest portion of the department) and by the Nied, a feeder of the Sarre, which is formed by the junction near Boulay of the Nied-Française and the Nied-Allemanda. All these rivers occasionally overflow their banks.

The valleys and hill-sides of the department are covered in general with a rich soil, and are carefully cultivated so as to yield great quantities of wheat, rye, and oats, of which a considerable surplus over the home consumption is sold for exportation in the great corn-market of Metz. Other crops raised are vetches, millet, peas, beans, and lentils. Improved methods and implements of agriculture are being adopted, but slowly. The vine is cultivated; but, with the exception of the white wines made near Metz, which are of good quality, the wines of the department are not so good as they might be. Wine merchants, settled at Metz, purchase Moselle wine, and manufacture from it what they call champagne wine for the German and Russian markets. Gardening is carried on extensively, and brought to considerable perfection; melons are abundant; pears, peaches, and other fruits are grown in large quantities, and exported in the form of dry, liquid, and crystallised conserves from Metz, where preserved fruits form an important article of commerce. Flax is extensively grown both for the sake of the fibre and of the seed, which is pressed for oil; rape and turnips are also grown. The forests consist of oak, beech, hazel, &c.; they abound in game, including in this term, roebucks, wild boars, wolves, foxes, and wild cats. Bees are very numerous, and much honey is gathered. Horses are of inferior breed; oxen and cows are lean; butter is scarce; cheese bad; sheep are small in size and coarse of fleece. The common fresh-water fish abound in the Moselle and the Sarre.

A portion of the department which projects eastward of Sarreguemines to the Bavarian frontier, forms an exception to the general fertility of the soil. Here the potato is almost the only plant that succeeds; the natural pastures are good, but these are frequently covered with sand and stones, swept down by torrents from the mountain sides.

The department is traversed by 12 state, 12 departmental, and 45 parish roads. A railway, which leaves the Paris-Strasbourg line at

Nancy, runs up the valley of the Moselle to Metz, and then crossing the department to Forbach, where it passes the frontier, crosses part of the Prussian and Bavarian territories to Spire, Mannheim, and Mayence on the Rhine.

The climate of the department is on the whole mild; in the north-western and the eastern districts however, which are respectively connected with the Ardennes Hills and the Vosges Mountains, the air is sharp, and the winters sometimes long and rigorous.

The offshoots of the Vosges in this department consist of the formations which overlie the primitive rocks to the new red-sandstone inclusive. The rest of the department is occupied by the formations which intervene between the red-sandstone and the chalk. Several iron-mines are worked, and the ore is smelted and made into malleable iron in 19 furnaces and forges. Lead and copper are found, but no mines are worked. Building-stone, quartz, gypsum, crucible and potters' earth are quarried. Marl is found in great masses in the north and north-west of the department, and is extensively used in manure. Plaster-of-Paris is also much used as a top-dressing for meadow-land. Fossils abound in the strata of the hills, which are generally calcareous, except in the vicinity of the Vosges; among other fossils, bones of the elephant and rhinoceros have been found.

The industrial products consist of sheet- and bar-iron, block-tin, nails, glass, unbleached- and table-linen, embroidered muslin, canvass, paper, beer, tobacco, oil, starch, room-paper, beet-root sugar, tiles, pipes, pottery, leather, hosiery, and common woollen and cotton stuffs. These articles, together with timber and the products previously mentioned, support an active commerce. About 90 fairs are held during the year.

The department contains 1,326,927 acres. Of the whole area 751,012 acres are under the plough; 112,677 acres are grass-land; 851,216 acres are covered with woods and forests; 29,456 acres are laid out in gardens, orchards, and plantations; 16,287 acres consist of heath and moor-land; 30,227 acres are occupied as roads, streets, squares, &c.; and 7759 acres with rivers, canals, and ponds.

The department is divided into 4 arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Metz	9	210	169,472
2. Thionville	5	118	91,708
3. Briey	5	120	67,481
4. Sarreguemines	8	128	131,023
Total	27	571	459,684

1. Of the first arrondissement and of the whole department the chief town is Metz. *Boulay*, a well-built little town, with a handsome square and a large richly-decorated church, is situated on the slope and at the foot of a hill between the Nied and the Katsbach, feeders of the Sarre, and has 2670 inhabitants, who manufacture broadcloth, blankets, glue, ivory black, saddle-trees, hardware, foil blades, cotton-twist, and leather.

2. In the second arrondissement the chief town, *Thionville*, surrounded with ramparts and entered by three gates, stands 17 miles N. from Metz on the Moselle (which is here crossed by a covered bridge), and has a tribunal of first instance, a college, and 5500 inhabitants in the commune. The town stands on a level ground, and has wide but irregular streets, with solidly built houses, some of which date from the 16th century. The *Place-d'Armes*, or drilling-ground, is a handsome square, surrounded on three sides by barracks, and on the fourth by a large riding-school. Among the most remarkable buildings are—the parish church, the corn-market, the theatre, the hospital, and the town-house, near which there is a good botanical garden. Hosiery is the chief manufacture of the town; in the environs there are numerous spirit-distilleries, iron-foundries, glass-works, tan-yards, and breweries; there is also a good trade in corn, hemp, and flax. *Bousonville*, very prettily situated E. of Thionville, on the Nied, has a population of 2160. *Sierck*, a walled town, defended by a castle, is situated at the foot and on the slope of a steep hill, on the right bank of the Moselle, near the Dutch and Prussian frontiers, and has 2189 inhabitants, who manufacture eau-de-cologne, glue, and leather, and have a good trade in wine, timber, hides, ribands, and hardware.

3. In the third arrondissement the chief town, *Briey*, a small place of about 2000 inhabitants, and the seat of a tribunal of first instance, is situated in the west of the department, on a small stream that runs into the Orne. *Longuey*, in the north of the department near the Belgian frontier, 22 miles N. from Briey, is a fortified town, built on a hill, not far from the left bank of the Chiers, and has a population of 4197, who manufacture calico, table-covers, lace, pottery, beer, and leather. The upper town, which is the fortified part, is well-built, and contains a good town-house, a handsome church, an hospital, and several deep wells, which supply it with water. The lower town is built below the southern escarpment, and contains several old monasterial buildings, the dark appearance of which forms a striking contrast with the handsome country houses that stud both banks of the Chiers.

4. In the fourth arrondissement the chief town *Sarreguemines*, or

Saar-Guemend, is built in a pretty situation at the confluence of the Saare and the Bèlise, 42 miles E. from Metz, near the Bavarian frontier, and has a tribunal of first instance, a college, a custom-house, and 4917 inhabitants. The most notable buildings are—the old capuchin convent, which now serves as a residence for the sub-prefect, as a court-house, and college lecture-rooms; and a prison. This town is the centre of a great tobacco manufacture, which is carried on in the adjacent villages; other industrial products are earthenware, glue, silk, velvet, and plush. The trade in corn, canvass, fruits, timber, &c., is considerable. *St-Avoid*, a station on the railway to Metz, 20 miles W. from Sarreguemines, stands in a hilly country on the Roselle, and has 3408 inhabitants. It is a pretty little town, and has dyehouses, tile-works, tan-yards, and manufactures of swanakin and Prussian blue. *Bitche*, a small fortified town, which commands the defile of the Vosges Mountains between Weissenbourg and Sarreguemines, stands 16 miles E. from Sarreguemines, and has 3911 inhabitants. The town is well-built in shape of a half-moon. The citadel, built on an isolated rock near the centre of the town, is considered a masterpiece in the art of fortification. In the environs of Bitche there are glass-works, the products of which are in great request. *Forbach*, 12 miles N.W. from Sarreguemines, 43 miles by railway E. by N. from Metz, stands in a hilly and woody country, near the Prussian frontier, and has 4288 inhabitants, who manufacture pipes, iron chains, soap, leather, and glass. The town, which was formerly defended by a strong castle, now in ruins, is ill-built, with narrow, crooked, and steep streets. It has a custom-house, and is one of the principal outlets between France and Germany in this part. *Sarreguibe*, situated in a fine grazing country, 10 miles S. by W. from Sarreguemines, at the confluence of the Sarre and the Albe, has 3434 inhabitants, who manufacture household linen, straw-hats, tobacco, and steel.

The department forms the see of the Bishop of Metz; is included in the jurisdiction of the High Court of Metz, and within the limits of the University-Academy of Nancy, and belongs to the 5th Military Division, of which Metz is head-quarters. It returns 3 members to the Legislative Assembly of the French empire. Besides the colleges in the four chief towns of arrondissements there are at Metz a school of artillery, an endowed college, a normal school, an ecclesiastical seminary, and a preparatory ecclesiastical college. The Calvinists have a consistorial church at Metz, and three meeting-houses elsewhere in the department. The Jews also have a consistorial synagogue at Metz, and a central rabbinical school.

(*Dictionnaire de la France; Annuaire pour l'An 1853; Official Papers.*)

MOSQUITO KINGDOM, Central America, an independent Indian kingdom, which occupies the tract of country known as the Mosquito Coast, extending along the shore of the Caribbean Sea from the mouth of the river San Juan de Nicaragua, 10° 55' N. lat., 83° 47' W. long., to Cape Camaron, 15° 57' N. lat., 85° W. long. It is bounded N. and E. by the Caribbean Sea, S. by the republic of Costa Rica, W. by that of Nicaragua, and N.W. by that of Honduras. The boundaries between this kingdom and the neighbouring republics are not very clearly defined; but the area is roughly estimated at 20,000 square miles: the population is said not to exceed 6000 or 7000.

The northern extremity of the coast is hilly. Mount Poyas, the termination of the mountain chain which stretches through Honduras, at the boundary of the two states, is above 3000 feet high; but from this point the land rapidly descends to the south, and the remainder of the shore is low. Along the northern part of this low line of coast, from Governor's Point to the Patook River, is a series of cays, from 10 to 35 miles from the shore, known as the Mosquito Cays; and along the southern part of the coast are numerous other cays, lying closer to the shore. They are dangerous to inexperienced navigators, but shelter that narrow part of the sea which lies between them and the mainland from the oceanic swell. Along the low coast the country is a level plain, slightly elevated above the sea, but on proceeding farther inland it rises in terraces, and here the plain is frequently interrupted by depressions and by elevated tracts which are connected with the mountain ranges. The terraces are furrowed by valleys scooped out by the currents of the rivers. The lower portions of the country are savannahs, without trees and frequently without bushes, but where the country rises and forms hills it is overgrown with trees. In the vicinity of the sea the soil of the savannahs is light. The whole country, as far as it is known, presents a continual alternation of wooded lands and prairies.

The Mosquito coast is drained by numerous rivers. Many of them are navigable to a considerable distance from their mouths, but the navigation is frequently impeded by the trees which are brought down during the rains. Most of the embouchures of the rivers form harbours, which however are only accessible to small vessels. The Rio Escondido, or Blewfields River, rises in Nicaragua and falls into Blewfields Lagune (12° N. lat.) after a course of considerably more than 100 miles. Wanks, or Segovia, River also rises in Nicaragua, where it passes near the town of Matagalpa and Segovia, and falls into the sea near the Bay of Cape Gracias a Dios after a course of 250 miles. It is navigable for boats throughout Mosquito. The San Juan issues from the Lake of Nicaragua, and at its mouth is Greytown: it is navigable throughout. [NICARAGUA.] The Patook and the Pinto, in the northern part of the state, are both of considerable size and

length, and, though obstructed by rapids, they are navigable by barges. There are several other rivers in the kingdom, but none of much consequence.

The lagunes are a peculiar feature of this country. They are not shallow and stagnant collections of water, but deep lakes, connected with the sea by one or more straits, by which the tide enters them. They generally receive one stream, frequently several, and always have therefore a current. Near the entrance of the lagunes the water is brackish, but in the interior it is quite sweet. The most extensive, from south to north, are—Blewfields Lagune, into which the Blewfields River falls, 25 miles long, and Pearl Key Lagune, which is 20 miles long; and, beyond Cape Gracias a Dios, Carataaka Lagune, which is much the largest, being 50 miles long and nearly 20 miles across.

The climate somewhat resembles that of Jamaica. The wet seasons extend from November to February, and from the middle of June to the end of July, the dry seasons being the intermediate periods. On the coast the rains are heavy, but very short; they are however attended with heavy thunder-storms. In the coldest months (from September to February) the temperature varies between 66° and 70°, but descends occasionally to 62°, and even to 60°. In summer the thermometer ranges between 75° and 84°, sometimes rising to 86°. The country is said to be healthy.

Vegetation is as vigorous as in any country between the tropics. The natural productions, vegetable and animal, are similar to those of other parts of Central America. Maize, sugar, cotton, cacao, indigo, and other tropical productions, are capable of being grown with great success. In the interior are immense forests of fine timber, but log-wood and sarsaparilla are the chief articles brought down to the coast. Tortoiseshell of fine quality is obtained along the coast.

The majority of the inhabitants do not materially differ from the other savage tribes of America. All the tribes, though they speak different dialects, distinguish themselves from other nations by the name of Miskitos, which the Europeans have changed into Mosquitos. The power of the king is absolute.

The commerce of the Mosquito coast is carried on by a few English and American families which are settled there. There are several Indian villages, at some of which are European residents; but the only towns are—Blewfields, the capital, on the west bank of Blewfields Lagune; and Greytown, the chief or only trading town of the state, situated at the mouth of the San Juan, and formerly known as San Juan di Nicaragua. Greytown, as noticed below, was destroyed, July 12, 1854, by an American sloop-of-war; it has since been to a great extent rebuilt, but it will probably be some time before it recovers its former prosperity.

The first settlement of Englishmen on this coast dates from 1730, when some families settled at Cape Gracias a Dios on Black River and at the mouth of Blewfield's River. In 1813, when the States of Central America acquired their independence, that of Nicaragua claimed the Mosquito coast as a portion of its territories, but these claims were rejected by England, and the King of the Mosquitos, an Indian prince, was guaranteed by Great Britain the sovereignty of the Mosquito coast. This English protectorate was protested against by the United States, who refused to acknowledge the sovereignty of the King of Mosquito, and in 1850 a treaty was concluded between England and the United States, by which the British protectorate was abandoned, the King of Mosquito being thrown on his own resources; while the two powers agreed to co-operate in the construction of a neutral and secure line of communication by way of the San Juan River and Lake Nicaragua between the Atlantic and Pacific Oceans, open on equal terms to all countries, and in establishing a free port for all nations at each extremity of the line. An American company was formed for constructing a canal and working the line by steam-boats; and a body of mercantile men, chiefly Americans with some British, settled in the old Spanish town of San Juan de Nicaragua at the mouth of the San Juan River, which they declared a free port under the title of Greytown. This town was within the Mosquito kingdom, and the merchants acknowledged themselves subject to the king; but as Nicaragua also claimed the town, and there was no attempt at the exercise of real sovereignty by either power, the inhabitants organised a local government, and the town appeared to be steadily growing in size and prosperity. In the beginning of 1854 the town was the chief commercial port on the new route, and contained under 1000 inhabitants, who are rather curiously described in the message of the President of the United States, as "a heterogeneous assemblage gathered from various countries, and composed for the most part of blacks and persons of mixed blood, and of mischievous and dangerous propensities." Unfortunately differences sprung up between the authorities of the town and the Transit Company. The American Consul to Central America supported the company, and when the 'mayor' of Greytown attempted to arrest the captain of one of the company's steamboats who had murdered a townsman, the consul interfered to rescue him. In doing so he received a blow from one of the crowd; and for this insult the American government sent a vessel of war to demand an apology and reparation. The commander of the Cyane, the ship sent on this mission, gave notice that unless ample apology was offered and the sum of 24,000 dollars immediately paid, he should at once bombard the town. The commander of an English war schooner protested against the bombard-

ment; and the European and American inhabitants took refuge on board the British schooner, while the Negroes and Indians fled into the interior. The bombardment then proceeded, and every house and warehouse in the town with their contents were entirely destroyed, a body of men having been landed to burn such as had escaped the cannonade. This proceeding excited great indignation in the United States as well as in Europe, and was formally complained of by some of the European powers; but the American government have accepted the responsibility of it, and justified the conduct of Captain Hollins, who had been supposed to have exceeded his instructions.

MOSS. [AGGERHUUZ.]

MOSTAH. [BOSNIA.]

MOSUL, a town of Mesopotamia, capital of a pashalic, is situated on the right bank of the Tigris, opposite the ruins of Nineveh, at a distance of about 220 miles N.N.W. from Baghdad, and has about 40,000 inhabitants, chiefly Arabs, Turks, and Kurds, with a considerable number also of Catholic, Syrian, Chaldean, and Nestorian Christians and Jews. Caravans trade between Mosul and Diarbekr, Baghdad and Aleppo. Indian goods are forwarded to Tocat in Asia Minor, whence copper is received in return. The chief manufacture is that of coarse cotton-cloths, dyed blue, and used by the lower order of people. According to Marco Polo, the muslins took their name from Mosul, where they were first manufactured. Gall-nuts from Kurdistan and copper are exported to Baghdad in return for Indian goods, which are sent to Syria, Kurdistan, Armenia, and Asia Minor. The Catholic or Latin bishop of Diarbekr (or of Chaldea), resides here. The town is surrounded by a wall, and is further defended by a castle built on an island in the river; the streets are narrow and unpaved. There are several bazaars, numerous coffee-houses and baths, 10 or 12 Christian churches, and about 30 mosques. A bridge of boats connects Mosul with the eastern bank of the Tigris.

MOTALA, RIVER. [SWEDEN.]

MOTCOMBE. [DORSETSHIRE.]

MOTRICO. [BASQUE PROVINCES.]

MOTRIL. [GRANADA.]

MOTTE-DU-CAIRE, LA. [ALPES, BASSES.]

MOULINS, a town in France, capital of the department of Allier; the seat of tribunals of first instance and of commerce, of a primary normal school, an endowed college, and a gratuitous school of design; is situated on the right bank of the Allier, here traversed by a handsome stone bridge of thirteen arches, 160 miles in a straight line, 213 miles by railway through Orleans and Vierzon, S.S.E. from Paris, in 46° 33' 59" N. lat., 3° 20' 9" E. long., at an elevation of 744 feet above the level of the sea; and had 15,398 inhabitants in the commune at the census of 1851. It is said to have derived its name from the number of mills driven by the Allier at this point. It existed in the 13th century. Archambaud VIII. exempted the townsmen from a certain tax in consideration of an annual rent of 200 livres. Robert, son of St. Louis, founded an hospital in Moulins in 1269. Its prosperity dates from 1363, the year in which the Duke of Bourbon returned from England, and built on the north side of the town the castle of Moulins, in which he took up his residence. The town was then small and surrounded with ditches, the sites of which are now occupied by the Cours, or interior promenades of the town. From this time till the flight of the constable of Bourbon in the early part of the 16th century, Moulins was the chief town of Bourbonnaise, and its castle the residence of Bourbon princes. The marriage of Antoine de Bourbon with Jeanne d'Albret was celebrated in the castle of Moulins, October 20th, 1548. The castle was destroyed by fire in 1755; the only part of it now remaining is a square tower (called Mal-Coiffée, erected in 1327) which is used as a prison, and a small wing occupied by the gendarmerie.

Moulins stands in a fertile plain in a well wooded and very delightful country. It is a neat and well-built town; the streets, clean and well paved, are not remarkable for great width or regularity. The houses are constructed with brick. The squares, of which the finest are the Place d'Allier and the Place de la Bibliothèque, are adorned with fountains. Besides the Cours already mentioned there are several handsome public walks; the principal one is the Allée de Bercé, which is perfectly level, 1100 yards long, and shaded by lofty trees. The chief buildings are the town-hall, the court-house, both of which are modern, and the church of the Convent of Visitation, which contains the tomb of Henri de Montmorency, who was beheaded under Louis XIII. at Toulouse; the convent itself is now occupied as a college. Under the choir of the church of Notre-Dame (which dates from 1336) are buried several members of the house of Bourbon. In the interior of the church is a stone monument, on which a dead body is sculptured with remarkable truth and effect. The clock-tower is ancient and of great height, the hours are struck by colossal figures moved by machinery. The barracks, at the end of the bridge in the suburbs of La Madeleine, the public library of 16,000 volumes and some valuable manuscripts, the general hospital, and the waterworks deserve mention. The industrial products of Moulins comprise oatmeal, silk and cotton hosiery, blankets, coverlets, cotton and woollen yarn, marquetry, leather, and ropes. There is a considerable trade in corn, wine, iron, wood, coals, salt, cattle, and pigs. Ten yearly fairs are held. Moulins gives title to a bishop, whose see is the department of Allier. Marshal de Villars (1653) and Fitz-James, duke of Berwick

(1670), were born here. Sterne has immortalised Moulins by his story of Marin. The Loire steamers ascend the Allier as far as Moulins.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

MOULMEIN (*Maulmain*, or *Moelmyn*), a town and port in the Tenasserim Provinces, which form a part of the British possessions on the eastern side of the Bay of Bengal. Moulmein is situated near the Gulf of Martaban, at the confluence of the rivers Saluen, Attayen, and Gyeng, in 16° 30' N. lat., 97° 44' E. long.: the three rivers when united are called the Moulmein River. It is 10 miles S. by E. from Martaban, and 30 miles N. by E. from Amherst. [AMHERST.] Moulmein has a good harbour, which admits vessels of 600 or 800 tons. Being favourably situated for commerce, and free from duties of import and export, it has drawn away much of the commerce which belonged to Martaban, and has in a great measure superseded Amherst. The population is estimated at upwards of 10,000. The exports are teak-timber, rice, tobacco, ivory, stick-lac, cocoa-nuts, and live stock. The imports are cotton goods and other manufactures.

MOULTAN. [HINDUSTAN.]

MOULTON. [LINCOLNSHIRE.]

MOUNT-BELLEW, Galway, Ireland, a small market-town, the seat of a Poor-Law Union, is situated in 53° 27' N. lat., 8° 23' W. long., 15½ miles E.S.E. from Tuam by road, and 109½ miles from Dublin. The population in 1851 was 329. Mount-Bellew Poor-Law Union comprises 14 electoral divisions, with an area of 102,383 acres, and a population in 1851 of 22,790. The town contains a monastery with a chapel attached, an Endowed school, and a school conducted by the monks. Petty sessions are held monthly, and fairs four times a year. A market is held every Tuesday.

MOUNT CARMEL. [CARMEL; ILLINOIS.]

MOUNT CHARLES. [DONEGAL.]

MOUNT SORREL. [LEICESTERSHIRE.]

MOUNTMELLICK, Queen's County, Ireland, a market and post-town, and the seat of a Poor-Law Union, is situated on the Oweness, a tributary of the Barrow, in 53° 7' N. lat., 7° 20' W. long., distant by road 6 miles N. by W. from Maryborough, and 52½ miles W.S.W. from Dublin. The population in 1851 was 3657, besides 1600 in the workhouse. Mountmellick Poor-Law Union comprises 43 electoral divisions, with an area of 200,633 acres, and a population in 1851 of 50,185. In the town are places of worship for Episcopalians, Roman Catholics, Presbyterians, Wesleyan Methodists, and Quakers; two National schools, and a Free school supported by the Quakers. There are also a court-house, a fever hospital, dispensary, and Union workhouse. A branch of the Grand Canal terminates at the town. Tanning and soap-making are carried on. There are a woollen factory, a foundry, and a machine manufactory in the place. The Irish Beet-Sugar Company have works for making sugar. Quarter and petty sessions are held in the town. There are two weekly markets and fairs eight times a year.

MOUNTNESSING. [ESSEX.]

MOUNT'S BAY [CORNWALL.]

MOURA. [ALEMTEJO.]

MOURÃO. [ALEMTEJO.]

MOURZUK. [FREZZAN.]

MOUSTIERS. [ALPES, BASSES.]

MOVILLE. [DONEGAL.]

MOY. [AISNE.]

MOZAMBIQUE CHANNEL divides the island of Madagascar from the continent of Africa, washing the western shores of the island and the coast of Mozambique. Opposite the town its width is 250 miles. The length of the channel, between 12° and 25° 45' S. lat., may be about 1000 miles. Towards its northern extremity are the Comoro Islands. Along the coast of Mozambique are extensive shoals with several low coral islands, and along the Madagascar shore several rocky islands, but only a few small islands occur in the middle of the channel. The shores of the Mozambique coast are all low. The depth of water is very considerable. This channel to the south of Sofala is under the dominion of the south-eastern trade-wind; to the north it is subject to the monsoons. According to the monsoons (south-east from April to November, north-east for the rest of the year), vessels going to and coming from India frequently pass through the Mozambique Channel. The black whale, which yields the spermaceti, is very abundant in these seas. Water-spouts are of frequent occurrence.

MOZAMBIQUE COAST, a portion of the eastern coast of Africa which is situated between Cape Delgado (10° 41' S. lat., 40° 34' E. long.), and the northern mouth of the river Zambesi (17° 30' S. lat., 33° E. long.) The Portuguese have had settlements on this coast for more than three centuries, yet the country is very little known, with the exception of the coast-line. The Portuguese have several forts along the coast, but their authority extends only a short way inland. The interior is inhabited by a powerful and brave nation, the Makawas, who maintain commercial intercourse with the Portuguese.

The low narrow beach is generally lined by a sandy shore from 12 to 15 feet high, and covered with bushes. This strip of elevated ground seems to be of moderate width, and behind it extends a plain dotted with clumps of trees on some elevated mounds. This plain is a morass of great extent and considerable depth, and is impassable, being covered with grass nearly 6 feet above the water. Between it and the sand-hills is a narrow strip of dry land covered with jungle,

the haunt of elephants, hippopotami, deer, lions, and tigers. Along the course of the numerous rivers the country is higher and drier; it is also generally covered with forests, whilst along the sea-shore trees are scarce. About 30 miles from the coast the banks of the rivers are high and the country cultivated, though still intersected with extensive swamps. The mountains and hills which constitute the eastern border of the table-land of southern Africa occur on the banks of the Zambesi River, about 180 miles from the sea.

The sea along the shores of this country is considered very dangerous to navigators, and many vessels are lost. For a space of 10 to 20 miles it is lined by shoals, on which rise several small coral islands, some bare, others well-wooded. The channel between these islands and the continent has generally deep water. The sea east of the shoals is nearly everywhere unfathomable. The most remarkable of these islands are Fogo, Mafamede, and St. Antony, all of which are situated south of Mozambique: they are uninhabited. Towards Cape Delgado are the *Querimba Islands*, which are of various sizes, but all low and formed of coral, with long flat reefs extending seaward, and rising abruptly from an immense depth. Between these islands there is good and secure anchoring ground. The islands are inhabited by Portuguese settlers who have slaves to till the ground. The largest of the islands is called Querimba; it stands in about 12° 20' S. lat., 40° 58' E. long., and is about 5 miles long. There are several well-built farmhouses on it, and a church near the centre of the island.

The year is divided into the rainy and dry seasons. The rains commence in November and continue to the end of March. The country along the rivers is then overflowed to a distance of several miles. The heat in summer being very great, the numerous swamps render nearly the whole coast unhealthy. The country is rich in productions. The grains which are cultivated are rice, millet, maize, and wheat; the most common vegetables are cabbage, lettuce, spinach, peas and beans of different kinds, tomatoes, pumpkins, and cucumbers. The fruits are cocoa-nuts, mangoes, oranges, limes, acajoa-apples, custard-apples, pineapples, guavas, bananas, and plantains. Different kinds of pimento are also cultivated. Fish and turtle abound on all the coral-banks and islands. Cattle, sheep, and especially goats, are numerous. The exports are ivory, the tusks of the hippopotamus, gold-dust, columbo-root, gums, and some amber. Formerly a great number of slaves were exported.

The settlements which the Portuguese still maintain on the eastern coast of Africa do not extend so far as Cape Delgado. The river Mozimba separates them in this direction from the territories partially subject to the Imam of Muscat. The most northern is *Ibo* (12° 20' S. lat., 40° 30' E. long.), the harbour of which is formed by Querimba Island. It is strongly fortified, but does not appear to be a place of trade. Farther south is *Pomba*, which has one of the finest harbours on the coast, the entrance being a channel between two rocky points, one mile and three-quarters across; but the basin into which it opens is 9 miles long by 6 miles broad, and has sufficient water for the largest ships. This place has some trade. Near 15° S. lat. are three excellent and spacious harbours—Port Conducia, Port Mozambique, and Port Mokamba, but only the second is used for commercial purposes.

The most southern Portuguese settlement on this coast is *Quilimane*, built on the northern bank of the northern, or Quilimane arm of the Zambesi, in 17° 51' 8" S. lat., 37° 1' E. long. It is about 12 miles from the sea. The river at its entrance is a mile broad, and immediately increases in width considerably. The place contains only a few brick houses for the Europeans and their descendants, and a great number of huts for the slaves. The trade in slaves was considerable till very recently. Besides rice, it exports ivory and some gold and silver. There are extensive coal-fields in the captaincy of Quilimane, but no mines are worked. The principal Portuguese settlement on the Zambesi is *Sena*, or *Senna* (near 17° S. lat., 37° E. long.), to which place goods are sent up the river in boats from Quilimane, bringing down gold dust, elephants' teeth, wax, hides, rhinoceroses, horses, &c., to be shipped to Mozambique. The African tribes of the interior trade with Sena. Sena is 110 miles W. from Quilimane, like which town it is the head of a captaincy, and consists of a few brick houses and churches, a redoubt, and a large number of huts. About 100 miles N.W. from Sena and also on the Zambesi is *Tette*, a large well-built town, which stands on a healthy site on the right bank of the river. Tette gives name to one of the captaincies into which the Portuguese government of Mozambique is divided, but it is very questionable whether the Portuguese have any authority so far inland.

Two decrees were issued by the Portuguese government in June 1854, ordering the establishment of custom-houses and fiscal ports at Mozambique, and some other settlements along this coast.

MOZAMBIQUE, a fortified sea-port on the east coast of Africa, is the capital of the Portuguese territories along that coast. It is situated in 15° 2' S. lat., 40° 43' E. long., on a deep inlet of the sea, 5 miles broad and 6 miles long, which receives the waters of three considerable rivers. At the entrance of the harbour are three small islands, which render the anchorage perfectly safe. Of these islands that of Mozambique, on which the city stands, is formed of coral, is very low and narrow, and scarcely one mile and a half long. It is situated nearly in the centre of the entrance of the inlet. The other two islands, San George to the northward and Sant' Iago to the

southward, lie opposite to one another, nearly 3 miles outside that of Mozambique; they are of coral, covered with vegetation, but without inhabitants.

The north-eastern extremity of the island is occupied by the strong fort of San Sebastião. There are also two other small forts. The streets of the city are narrow, but the houses are generally lofty and well constructed. Nearly in the middle of the city is a large square, at the eastern extremity of which is a long and commodious stone wharf, built on arches, stretching out from the shore almost to low-water mark, and affording at all times an excellent landing for boats. On the three other sides of the square are the palace of the governor, the custom-house, and the main-guard. The city covers half the island; to the south of it is the Black Town, composed of small bamboo-huts, and inhabited by coloured people.

The population, amounting to about 6000, consists of Portuguese, Canareans, or Creoles, Banyans from Hindustan, free-coloured people, and slaves. The commerce of Mozambique has greatly decreased: it formerly traded largely with India, and was notorious as a slave-port. In addition to slaves, only a small quantity of ivory, gold-dust, and a few articles of smaller value were sent abroad. Rice and other provisions are imported from Madagascar and the neighbouring Arab settlements. The Portuguese have gardens for growing vegetables on the mainland. Good drinking-water is scarce; there is only one well on the island.

Mozambique was first visited by Vasco de Gama in 1498. It was taken in 1506 by Tristan da Cunha and Albuquerque, and became the centre of the Portuguese possessions, and the seat of a viceroy. Whilst the Portuguese remained in possession of their extensive conquests in India, Mozambique and the other settlements on this coast were in a flourishing state, but they began to decline in the 17th century, and have continued to decline ever since. The governor of Mozambique has still the supreme authority over all the Portuguese settlements from Cape Delgado to Dalagoa Bay.

MUGRON. [LANDES.]

MÜHLHAUSEN. [ERFURT.]

MÜHLHEIM. [DUSSELDORF.]

MUIRKIRK. [AYRSHIRE.]

MULA. [MURCIA.]

MÜLHAUSEN, a large manufacturing town in the French department of Haut-Rhin, which, with the communes of Illzach and Modentheim, though entirely surrounded by France, was a member of the Swiss Confederation till 1793, when it voted its annexation to France, with which it was incorporated by treaty in 1798. The town is situated on the Ill, a feeder of the Rhine, in 47° 45' N. lat., 7° 21' E. long., at a distance by railway of 27 miles S. from Colmar, 18 miles N.W. from Basel; and has a tribunal of commerce, a bank, a council of Prud'Hommes, a college, and 20,587 inhabitants. Mühlhausen is built on an island formed by the Ill, which is here crossed by several bridges. The town forms an irregular oval; the streets are tolerably broad and well paved, and the houses well built. There are a Catholic and a Protestant church, a town-hall, a synagogue, an hospital, several squares, and a college. Mühlhausen has obtained deserved celebrity for its printed cottons, for the manufacture of which there are several important establishments. The other manufactures are cotton and woollen-yarn, muslin, silk, woollen-cloth, hosiery, straw-hats, morocco leather, soap, damask, linen thread, &c. There are dye-houses, tanneries, metal-foundries, and large establishments for the manufacture of steam-machinery, which is extensively used in the great industrial establishments of the town. There is also a considerable commerce in corn, wine, brandy, groceries, hardware, iron, &c. The canal which unites the Rhône to the Rhine passes by the town. A railroad, 13 miles in length, runs westward from Mühlhausen to the busy little manufacturing town of Thann. [RHIN, HAUT.]

MULL. [ARGYLSHIRE.]

MULLINGAR, Ireland, the chief town of the county of Westmeath and the seat of a Poor-Law Union, is situated on the Royal Canal, in 53° 32' N. lat., 7° 18' W. long., distant 50 miles W.N.W. from Dublin by road, and by the Midland Great Western railway. The population in 1851 was 4789, besides 2023 in the workhouse, infirmary, and jail. Mullingar Poor-Law Union comprises 48 electoral divisions, with an area of 208,401 acres, and a population in 1841 of 62,094; in 1851 of 51,221. The town obtained certain privileges by royal letter from Elizabeth. In the war of the revolution Mullingar was fortified and made a principal rendezvous of the army of King William. It is watered by the Brosna, a tributary of the Shannon. The parish church, erected in 1813, is a handsome building with a tower and spire. The Roman Catholic chapel is the cathedral for the diocese of Meath. There are a small Presbyterian meeting-house, a Wesleyan chapel, a Diocesan school, National schools, and a nunnery which was built about 40 years since on the site of an ancient Dominican friary. In Mullingar are the county court-house and jail, the county infirmary, the Union workhouse, and a large infantry barrack. The assizes for the county are held in Mullingar, also quarter and petty sessions. Thursday is the market-day. Fairs are held on April 6th, July 4th, August 29th, and November 11th and 12th.

MULWIA. [MABOCOO.]

MÜNDEEN. [HILDESHHEIM.]

MUNDLESIR. [HINDUSTAN.]

GEOG. DIV. VOL. III.

MUNEEPOOR, a principality of India east of the Ganges, is bounded E. by Birma, and W. by the British province of Cachar. The boundaries N. and S. are mountainous regions, and imperfectly defined. The territory is comprehended between 24° and 25° 15' N. lat., 93° and 95° E. long. The greatest length west to east is 130 miles, the greatest breadth north to south is 85 miles. The area is 7584 square miles. The population, according to the latest estimate, is 75,840.

The valley of Muneepoor, which constitutes the principal and by far the most important part of the principality, is 2500 feet above the level of the sea. It consists of a fertile tract on either side of the Imphan Toorel River. An extensive and elevated range of mountains bounds the valley on the west side. On the east it is bounded by the Muring range. On the north and south boundaries of the valley are the projecting ends of numerous ridges which issue from two extensive mountain tracts. The principal river of the vale of Muneepoor is the Imphan Toorel, which rises with two principal branches in the mountain region lying north of the vale; the eastern is called the Eeril River, and the western the Khongba Rivér. The two join about 24° 40' N. lat., and the united river afterwards receives the Thobal, the Myetha, and the Korotub. The Imphan Toorel, after a course of 300 miles, interrupted by many falls and rapids, joins the Ningtha, a tributary of the Irawaddy.

The Barak, or Soormah River, traverses the mountainous district west of the vale of Muneepoor, and has a course of more than 180 miles through Muneepoor, but its stream is too rapid for navigation. At the mouth of the Jeere River it becomes navigable for boats of moderate burden. The Barak joins the Brahmaputra near the village of Sunerampoor, in Bengal. The climate of the vale of Muneepoor is modified by its elevation above the sea, and by the mountains which surround it. In December and January the thermometer at noon varies between 56° and 58° Fahr. In June it generally attains a height of from 80° to 85°. The agricultural produce consists chiefly of rice, which forms the staple article of food, and the crops are everywhere very abundant. Tobacco, sugar-cane, indigo, mustard, different kinds of sesamum, and opium are also cultivated, and cotton in the valleys of the mountainous districts. European vegetables are now much cultivated. There are extensive forests in the mountainous districts. Cedar of gigantic size, fir, and pine, occupy the highest portions of the range; oak of every size occurs on the several hills and mountains, and is employed as fuel and building material.

The animals employed in agriculture are buffaloes and cattle, more especially the former. The cattle are superior to those of Bengal. The horses are small in size, rarely exceeding 13 hands high, but they are hardy, vigorous, and highly valued. Goats and sheep are only reared on the slopes of the mountains. Elephants, deer, wild hogs, wild dogs, and tigers are met with. There are many varieties of birds. Iron is common in many parts of Muneepoor, especially in the hills near Langthabal. There are many rich salt-springs.

Muneepoor valley contains many villages, which are mostly on the banks of the tributaries of the Imphan Toorel. The city of Muneepoor is situated a short distance from the western bank of the Khongba, in 24° 48' N. lat., 94° 7' E. long. It was destroyed in the war with the Birmanese, previously to 1826, and has not, as far as we know, been rebuilt. The Raja fixed his residence in the village of Langthabal.

The Muneepoorers, or inhabitants of the valley, appear to be the descendants of a Mongol colony, which in ancient times penetrated into this country: they rather resemble the Chinese and Birmanese than the inhabitants of Bengal, being taller, stronger, and possessing more vigour of mind than the latter. They have made considerable progress in the arts of civilisation. They make several kinds of cotton-cloth and muslins, and their silk fabrics are remarkable for strength and the brilliancy of their colours, especially a kind of large scarfs, which sometimes are very richly embroidered, and then exported to Ava. The language of the Muneepoorers is very different from that of Bengal, but the Bengalee is generally understood. Brahmanism seems to be the prevailing religion.

The principality of Muneepoor has been under the protection of the British since the peace of Yandaboo with the Birmanese in 1826. A British political agent resides at the place where the Raja holds his court. Gambhir Sing, the raja who first placed himself under the protection of the British, died in 1832, and was succeeded by his son.

MUNICH (*München*), the capital of the kingdom of Bavaria, and perhaps the handsomest city in Germany, is situated on the left bank of the Isar, in 48° 8' 19" N. lat., 11° 35' 15" E. long., at an elevation of about 1700 feet above the sea, and had, with its suburbs, a population of 127,385 in December 1852; in 1815 the population, including the suburbs, was only 60,215. Of the population the great majority are Catholics. The city stands in a plain bounded to the eastward by low hills; portions of it still bear traces of antiquity; but its extent has been nearly doubled in the present century by the erection of new quarters and suburbs. It has several broad straight streets, with lofty houses, in a good style, and some very handsome squares. The Max-Joseph Platz is adorned with a colossal bronze statue of King Maximilian. In the centre of the old town is the Haupt-Platz, on which the numerous streets abut, several of which contain a great number of fine buildings. The Au suburb lies to the eastward of the Isar, and is connected with the old city by two bridges. A railway 40 miles in length connects the city with Augsburg, and opens

to it the railway systems of west and north Germany. The terminus is outside the Karls-Thor, on the west of the city, near the botanic garden. A railway is in course of construction in an east-south-east direction from Munich to Salzburg. The city is connected by electro-telegraphic wires with all the chief towns in Europe.

Munich, till the end of the 18th century, was merely a second-rate German capital. It was surrounded with ramparts and a ditch, which were removed in 1791; but several of the old castellated gate-entrances have been preserved. The houses in the old town are built in a quaint picturesque style, irregular in size and form, crowded with windows, and ornamented with scroll-work or rude frescoes. The roofs are high, and perforated with three or four tiers of lights. In the great market-place called Schrammen-Platz the characteristics of the house architecture of old Munich may still be seen in all their perfection. The new parts of the city extend round the old town in all directions.

Munich has numerous scientific and literary institutions, most of which were improved or founded by Maximilian Joseph I. and the ex-king Ludwig; to the latter it is chiefly indebted for its magnificent buildings and inestimable treasures of ancient and modern art. The Royal Academy of Sciences was founded in 1759 by the elector Maximilian Joseph III.; in 1807 it received from King Maximilian I. a new constitution and ample endowment, and was reorganised in 1827. A general conservator has under his care the public library of 400,000 volumes and 22,000 manuscripts, the museum of natural history, the Brazilian Museum (composed of the collections formed by Spix and Martius), the scientific collections, the botanic garden, the cabinet of medals, the cabinet of antiquities, the chemical laboratory, the observatory at Bogenhausen, &c. There are three gymnasia for the higher branches of education, a royal academy of arts, a military academy, veterinary and medico-clinical schools, a training school, a central polytechnic school, and many others. The University, founded in 1472 at Ingolstadt, was transferred in 1800 to Landsbut, and in 1827 to Munich. It has 58 ordinary and 10 extraordinary professors, and in 1850 there were 1884 students. The university is well furnished with all the necessary requisites, and has a library of 150,000 volumes. The charitable institutions are numerous—the general hospital, for 600 patients; St. Joseph's hospital, for 260 patients; the asylum for the blind and for deaf mutes; the military lazaretto; the poorhouse; the lunatic asylum; the lying-in hospital; and many others. The house of correction is considered as a model of its kind. It contains a manufactory of woollen-cloths.

The manufactures of Munich comprise linen, woollen-cloth, calicoes, damask, silk, ribands, household furniture, piano-fortes, playing-cards, articles of gold and silver, bronze- and iron-works, coaches, and mathematical, surgical, optical, and astronomical instruments. Fraunhofer's manufactory of astronomical and optical instruments has become celebrated throughout Europe. There are likewise manufactories of leather, snuff, and paper (the latter, established in 1347, is probably the oldest in Germany), extensive breweries, sugar-refineries, and distilleries. The presence of the numerous public establishments and government offices, the expenditure of the court, and of the numerous land-owners who reside in the capital, contribute still more to its prosperity than its manufactures. Lithography was invented at Munich by Sennefelder.

The environs of the city are very pleasant, and contain numerous places of public resort and amusement, which are very much frequented: some of them are noticed below. In the vicinity are the royal country-seats of Nymphenburg and Schleissheim, both of which contain fine picture-galleries. The inhabitants of Munich are very fond of amusement: in the summer they enjoy the open air in the country, and in the winter, besides the carnival, frequent concerts and balls. There are likewise three theatres. Though Munich is so far south the climate is by no means mild, in consequence of its elevation and the vicinity of the mountains of the Tyrol. The changes of temperature are frequently sudden.

For its celebrity as a seat of the fine arts Munich is mainly indebted to the ex-king Ludwig I. The number of public buildings erected in his reign is astonishing, when the limited resources of such a small kingdom as Bavaria are taken into the account. Neither is it merely as buildings—as works of architecture alone—that these additions to the capital are worthy monuments of art; for painting and sculpture, fresco, and in some instances polychromy also, have been unsparingly employed to embellish them. Very little more than a mere enumeration of the chief edifices of Munich can be here given: to describe them would require a volume. To begin with the older ecclesiastical structures, the most ancient is St. Peter's, which dates from the 13th century, and contains a gothic altar-piece of carved stone in three compartments, the uppermost representing Christ in Majesty, the middle the Last Judgment, and the lowest the Crucifixion. The Cathedral, or Frauen-kirche, which was begun by Duke Sigmund in 1468, and completed 20 years afterwards, is in the gothic style, constructed of red brick. The towers are capped with small domes, and are 386 feet in height. The length of the edifice is 321 feet, the breadth 122 feet, and the height to the summit of the vaulting of the nave 110 feet. The choir contains a mausoleum to the memory of the emperor Louis IV., a splendid work of art, which has hardly any superior of its kind throughout Europe. It is of black marble and bronze, and was executed from the designs of Candido, who also

Painted the principal altar-piece. The next building in point of antiquity is St. Salvator's, now the Greek church, erected in 1494; after which, according to the succession of dates, comes St. Michael's, or the Jesuits church, which dates from 1583, and is built in the Italian style. It is cruciform, and 280 feet in length. The interior is very handsome and remarkable for its width of roof unsupported by pillars. The church of St. Cajetan, a work of the 17th century, and of the Italian style also, is 220 feet in length, by 120 feet in its greatest width, being in the form of a cross, and it has a central dome raised on Corinthian columns. The beautiful façade is of later date than the rest (1767): it was executed after the designs of Couvillers, a Frenchman. The interior resembles St. Peter's at Rome in miniature. The burial vaults of the royal family of Bavaria are under this church. The interior contains Thorwaldsen's magnificent monument to Eugene Beauharnais, in which, besides a colossal figure of the ex-viceroy of Italy, there are two beautiful geni, and a female representing the Muse of History, while a portal of Grecian design forms a rich architectural background to the whole composition. Trinity church, formerly that of the Carmelite nuns, was begun in 1704, and is a rotunda with a cupola on 18 Corinthian columns. The façade is of the Ionic order.

Of the modern churches the Ludwigs-Kirche, the Pfarr-Kirche, the Basilica of St. Bonifacius, and the Allerheiligen-Kapelle are pre-eminently deserving of notice.

The Ludwigs-Kirche, which is in the round-arch style, is no less remarkable for the beauty of its execution than the richness of its design. The front, somewhat more than 100 feet to the summit of the gable, has two towers 220 feet high, which give the façade five compartments, the centre one, or that corresponding with the nave within, being an open vestibule, with arches resting upon delicately sculptured columns. Immediately over this porch are five niches with colossal statues of Christ and the four Evangelists, and crowned with arches decorated with arabesques. Above these is a large rose window, and then the gable ornamented with foliage and open work, with a cross on its summit, and colossal statues of St. Peter and St. Paul at its angles, which, as well as those in the niches, were modelled by Schwanthaler. The nave is 246 feet long by 43 feet wide, and upwards of 80 feet high. The tribunal at the end of the choir and the extremities of the transept are decorated with noble frescoes. The subject in the tribunal is the Last Judgment by Cornelius, allowed to be one of the greatest efforts of art in the present century. This fresco is 64 feet high.

The Pfarr-Kirche, or parish church of St. Maria Hilf, in the Au suburb, the first stone of which was laid Nov. 28, 1831, is a noble architectural work in the pointed gothic style with high lancet windows. The building, which is quite insulated, has three portals in its west front, and above the middle one a large rose window. The tower is upwards of 250 feet high, and the upper part of it consists of ornamental open work. Within it is divided into a nave and aisles, the former of which is 80 feet high. Independently of its architecture, this church deserves notice on account of its 19 splendid painted windows, representing incidents in the life of the Blessed Virgin, designed by first-rate artists, and executed in the Royal Porcelain manufactory of Munich. Ohlmüller was the architect of the building.

The Basilica of St. Bonifacius attached to the Benedictine convent, was commenced in 1835, and completed in 10 years. It is in the Byzantine style, 250 feet long and 120 feet wide. The walls are of red brick. The interior is divided within into a nave and double aisles on each side by 72 monolithic columns of Tyrolese marble disposed in four rows. Of the nave, the width is 51 feet and the height 70 feet; of the aisles, the width 15 feet and the height 40 feet. The pavement is of marble mosaic, and the roof of open timber work, the beams of which are not only carved, but richly decorated with painting and gilding, and the ceiling between them azure, with gold stars. The walls of the interior are decorated with magnificent frescoes, the upper series between the round-headed windows representing scenes in the lives of German saints and martyrs, the lower series subjects from the history of St. Bonifacius, designed and painted by Heas and his pupils. In the rear of this magnificent church (the front of which, towards the Karls-Strasse, has a portico of eight Corinthian columns with three bronze doors) is a theological seminary, directly facing the Glyptothek, to which it forms a corresponding piece of architecture, on the south side of the Königs-Platz. The Allerheiligen-Kapelle is noticed farther on.

The Alte-Residenz, or Old Palace, is a vast pile, said to have been erected from the designs of Vasari, by Maximilian I., at the close of the 16th century. The west front is about 550 feet in length, and has two noble Doric portals, ornamented with bronze statues. Within are four courts, adorned with rich fountains and bronze figures. The most remarkable part of the Old Palace is the Reiche-Kapelle (Rich Chapel), the floor of which is of jasper, porphyry, and amethyst; the walls of Italian mosaic, and the altar of solid silver: in short, such is its marvellous gorgeousness that this single apartment is said to have cost Maximilian I. several millions of florins. In this chapel is preserved the portable altar at which Mary Queen of Scots prayed before her execution. In an apartment of the old palace called the Schatz-Kammer, or Treasury, the regalia and royal jewels of Bavaria are kept.

Vast as the Old Palace was left by Maximilian, it has been greatly

extended by two others, namely, the Neue-Residenz (New Palace), or Königsbau, and the Festbau, which may be considered as forming together with it one enormous mass of building, extending from the façade of the post-office on the south side of the Max-Joseph's Platz, to the old picture-gallery on the north side of the Hof-Garten and the end of Ludwig-Strasse.

The Königsbau begun in 1826, from the designs of Von Klenze, adjoins the Old Palace on the south, and forms the north side of the Max-Joseph's Platz, the east and south sides of which are occupied by the theatre and post-office respectively; while the centre is adorned with the splendid bronze monument of King Maximilian Joseph, a sitting colossal figure (modelled by Rauch) on a double pedestal, whose sides are covered with reliefs, and the lower one has the figure of a lion partly projecting from it at each angle. The façade of the Königsbau is 406 feet in length. In style and design the building presents a copy of the Pitti Palace at Florence. The ground-floor and that above it have each 28 arches in one continued line, of which the centre ones below are larger than the others, and form open entrances to the loggia or carriage vestibule. The third story rises above the rest of the elevation, it being only 11 windows in length, and has a balustraded terrace on each side of it, forming the flat roof above the remainder of the façade. If it be said in depreciation of this noble and imposing structure that the plan is not original, it may be safely affirmed that the interior is unequalled in its magnificent decorations; the refined taste of King Ludwig, and the frescoes, paintings, and sculptures of Schnorr, Zimmermann, Kaulbach, Schwanthaler, and other artists have contributed an ensemble of internal ornamentation unsurpassed out of the Vatican. The ground-floor contains the state apartments, the walls of which are covered with frescoes by Schnorr, the subjects being taken from the *Nibelungenlied*. The apartments on the first floor are occupied by the king and queen. The king's rooms are painted (both ceilings and walls) in encaustic, with subjects taken from the Greek poets, the friezes by Schwanthaler, representing scenes portrayed by Pindar. The subjects represented in the Queen's rooms are taken from the German poets. The floors all through the palace are formed with different coloured woods laid in patterns. The apartments on the second floor are used for court entertainments, among which is a ball-room, 62 feet long by 37 feet wide, and 27 feet high, with semi-circular ends, and adjoining it a Blumensaal, or Hall of Flowers, 68 feet long by 36 feet wide, opening to the terrace over the east end of the building.

The Festbau, also by Von Klenze, incloses the Old Palace on the north, as the Königsbau does on the south. It has a façade towards the Hofgarten (along the south side of which it extends about 800 feet in length) in the Roman style, with an Ionic colonnade in the centre, upon which are a series of allegorical figures by Schwanthaler. It contains state drawing-rooms, throne-room, banquetting-room, ball-room, several halls and apartments for the crown princes of Bavaria. The throne-room is adorned with colossal statues of electors and princes of Bavaria in bronze gilt. The ball-room is decorated with reliefs and paintings, representing Greek dances; the banquetting-room with battle scenes by Hess and Adam; the Hall of Beauties with statues of modern female beauties; and the three halls that precede the throne-room with large pictures descriptive of events in the lives of Charlemagne, Barbarossa, and Rudolf of Hapsburg, by Schnorr.

The Hofgarten is a planted square of about 1100 feet from east to west, and 700 feet from north to south. On the west side of it is the bazaar; on the east side a barrack; and on the north the old picture-gallery. The west side of the Hofgarten is lined throughout its whole extent by arcades, beneath which are cafés, shops, &c.; while the rest of the arcade which surrounds the square is decorated with a series of frescoes representing events in the annals of Bavaria, and with landscapes of remarkable places in Greece, Italy, Sicily, &c. These last are illustrated by verses ascribed to the pen of King Ludwig. The principal front of the bazaar, another of Von Klenze's productions, faces the Odeon-Platz, of which it forms the east side. It is in a simple but tasteful style of Italian architecture, with enriched panels between the larger arches of the ground-floor, and grouped windows above, consisting of lesser arches, whose archivolts rest upon Corinthian pilasters.

Along the north side of the Hofgarten extends the old Picture Gallery, arranged in a suite of rooms over another lengthened arcade. It is now appropriated to extensive collections of carvings in ivory, &c. All the choicest pictures are deposited in the Pinakothek, as also are the last of those from Schleissheim and the other royal collections, the total number of which is not less than 9000. The abundance of works of art in Munich is quite prodigious, and that not in painting alone, but in sculpture, as is testified by the collections in the Glyptothek.

The Glyptothek, or Sculpture Gallery, was erected by Von Klenze for King Ludwig. It is in the Greek style of architecture. The building is beautiful, standing with its south or principal front towards a large open space called the Königs-Platz, near the Basilica of St. Bonifacius in the north-west of the city. It is not more than about 220 feet square in plan, with a court in the centre. The façade has an Ionic portico, raised on three very deep gradini, or flights of steps, continued as a base along the whole front, like those in some of the ancient Greek temples. Eight columns are placed in front and the others

behind, in such manner as to form a second range of four columns and four antæ. It may be described technically therefore as consisting of an Ionic octastyle projecting before a tetrastyle in antis. The pediment is not filled with sculpture in relief, but recessed or hollowed so as to admit detached figures or statues (as in the temple of Ægina), exhibiting the various operations of the plastic arts, modelling, sculpture, carving, &c. The figures were executed by Schwanthaler, Haller, and others, but the composition was designed by Wagner. The interior is divided into a series of rooms, of which the two rotundas at the angles of the Königs-Platz are lighted from above, through lanterns and domes; the others by large semicircular or lunette windows, above their cornices, and towards the inner court. The first rooms, beginning with those on the left hand, or west side of the vestibule, are appropriated to Egyptian antiquities and other works of early art; to these succeed the Ægineten-Saal, or Hall of Ægina Marbles, the Apollo-Saal, the Bacchiden-Saal, and the Niobiden-Saal, which last is at the west angle of the north front, and is lighted by one of the two windows on that side of the building. The space between that and the corresponding angle is occupied by what are called the Fest-Saale, two large apartments whose walls are entirely covered with frescoes by Cornelius and his pupils. At the north-east is the Heroen-Saal, from which there is a descent into the Roman hall or gallery, the most spacious of all, and which exceeds the other sculpture-rooms in the splendour of its architecture. An ascent of steps at the farther end leads up into the Saal der Farbigen Bildwerke, or Hall of Coloured Sculptures, the rotunda at the south-east angle of the front, adjoining which is the hall of modern sculpture, containing Canova's Paris and Venus, and Thorwaldsen's Adonis. Near the Glyptothek is a temple used for the exhibition of modern works of art: it is proposed to unite the two structures by a propylæum.

The Pinakothek, another, and in some respects the best, of Von Klenze's works, is a much more extensive edifice than the Glyptothek. It stands in an open situation at no very great distance north-east from the Glyptothek, and in the immediate vicinity of the spacious infantry barracks. The first stone was laid April 7 (Raphael's birthday), 1826, by King Ludwig, and the building was completed in about ten years. Although each side of the building (which in plan resembles two Ts [—] joined), presents an architectural façade of uniform character, that facing the south may be considered the principal one. The lower portion consists of a very lofty ground-floor, with a series of arched windows within square-headed framings, surmounted by cornices, and resting upon a podium, formed by two courses of large rustics. In the centre of that side are eleven such windows on each side of the entrance porch, which consists of four Ionic columns, whose entablature supports a balcony in front of the three central arcades or windows of the loggia above. Along the upper floor the same order is continued throughout in half-columns against the piers of the arches between them, forming a long arcade or corridor, divided into 25 loggie or compartments. This order is crowned by a bold cantilever cornice and antefixe, terminating the elevation; for the attic does not rise immediately over the order, but is set back as far as the hinder wall of the loggia. On the lower floor, at the west end of the building, are a library, and rooms for collections of prints and drawings. The rest consists of rooms required for officers of the establishment. The larger rooms or halls in the centre are lighted from above; the height to the top of their lanterns is rather more than 50 feet. This height contributes greatly to architectural importance, and affords ample space for decoration above the cornice of the rooms, it also causes the light to fall upon the upper part of the walls themselves, so that the tops of the pictures have the light full upon them. Not only the ceiling but all the decorations of the rooms may be pronounced magnificent, and both the floors and the lower parts of the walls, are of Bavarian marble. The number of paintings is limited to 1500, consisting of the choicest works of the great masters, taken from all the collections belonging to the royal galleries of Bavaria. They are arranged in schools—Italian, French and Spanish, Dutch, Flemish, and German—in the large central halls before described, and in 25 adjoining small cabinets on the first floor. The halls communicate on one side with these cabinets and on the other with the loggie which anywhere else would be considered a museum and gallery of itself, forming a line of 400 feet in extent, decorated throughout with arabesques on its walls, with historical frescoes in the lunettes facing the arches, and with subjects in each of the small cupolas covering the 25 compartments of this long corridor. These frescoes, which have all some reference to the history of art, were designed by Cornelius and executed by Zimmermann and others. The north and south façades of the Pinakothek are also externally adorned with frescoes illustrative of the progress of art in Bavaria: between each window are colossal full-length portraits of Thorwaldsen, Von Klenze, Cornelius, Ohmüller, Hess, Gärtner, Schnorr, H. Hess, Rottmann, Ziebland, Schwanthaler, Schorn, Kaulbach, and Schrandolph.

The Allerheiligen-Kapelle (All Saints' Chapel), on the east side of the Residenz, another work of Von Klenze, was also begun in 1826. In its architectural character it does not resemble any other portion of the palace, being in the Byzantine or Lombardic style. It may be described as about 70 feet wide and as many high, exclusive of the lower portion on each side, covered with a half-gable, and whereby the entire width is increased to about 100 feet. Slender pilaster shaft

whose carved caps do not reach quite up to the corbelling of the gable, divide the façade into three compartments, the middle and widest of which contains a rich portal, with receding columns and arches, with a bas-relief in the lunette over the square-headed door, and a statue on each side of the canopy which crowns this entrance. Above it is a large rose window; and in each of the other compartments are two round-headed windows, one above the other. The body of the chapel is 105 feet in length within, exclusive of the apsis at its western extremity, which is elevated about 3 feet above the rest of the pavement, and gives about 20 feet more. This space consists of two square compartments of 30 feet, covered each by pendentives and a dome, and united by an intermediate narrower space. On each side these compartments have below three circular-headed arches on columns, opening into side aisles; and above as many windows of the same form, not immediately over the arches, but at the back of the upper recesses that cover the aisles below. Consequently the width in the upper part of the building is, in appearance at least, greatly extended. It is difficult to convey a distinct notion of the profuse and gorgeous yet solemn decorations of the whole interior: the pavements, walls, arches, pendentives, domes—all is embellishment; and all that is not marble or mosaic is painting and gold. The columns are of red Salzburg marble, with white bases and gilded capitals; the soles, or bottom of the walls, is also of red marble throughout; and the upper part to the height of the upper aisles is encrusted with different coloured marbles or scagliola. All the rest is entirely covered with fresco painting, upon a gold ground. The subjects were designed, and executed by Hess and his pupils; those of the first compartment and its cupola are symbolical of the events of the Old Testament; those of the other, of the New, while those introduced in the large intervening arch refer to the connection between the two. Many of the figures are colossal; those for instance, of the Redeemer and of the Deity behind the principal altar, which may be considered as the focus where the power of art is concentrated, the subjects here being illustrations of the Seven Sacraments. The building was consecrated and opened for service November 1, 1837.

On the south side of this magnificent chapel is what was formerly the Hof, or Court Theatre, but it is not now made use of as such, the larger and adjoining building on the south being now the principal theatre. This structure, which has a fine octastyle Corinthian portico painted in polychrome towards the Max-Joseph's Platz, was originally erected by Karl Fischer, and rebuilt according to the first design, after being burnt down in 1823. On the south side of the same square is the new façade of what was formerly the Döring Palace, but is now converted into the post-office. The length is 290 feet, the whole of which, exclusive of 32 feet at each side, is occupied by an open loggia of 13 arches, resting upon Doric columns, with as many windows above them, besides two in each of the end compartments, that is, one on the ground-floor and one above it. The whole is crowned by a cornice, with an enriched band or narrow frieze beneath it, the pattern of which is white upon a red ground; for this building also exhibits, to a certain extent, the application of polychromy. On the west side of the Odeon-Platz are the Odeon and Leuchtenberg Palace, whose opposite fronts towards the street that runs between them present two handsome and uniform façades in the Italian style, of two stories above the ground-floor, of 11 windows in each, and with a small Doric portico, or entrance porch, of 4 columns. The large concert- or ball-room, on the principal floor of the Odeon, is 124 feet by 71 feet, and 50 feet high. West of the Odeon is the Wittelsbacher-Platz, in which is a bronze statue of the elector Maximilian I., cast from the Turkish cannon taken in the Greek war, after a model by Thorwaldsen.

Northward from the Odeon-Platz runs the Ludwigs-Strasse, by far the handsomest and most regular street in Munich, having on its east side the Kriegs-Ministerium, the public library, and Ludwigs-Kirche; on its western side the Maximilian Palace, Blind Institute, &c.; it widens out at its northern end in a spacious quadrangle, on one side of which stretches the solemn white mass of the university buildings; on the other the pale stone-coloured, severe-looking Jesuits College; and terminates in the magnificent triumphal arch of the Sieges-Thor. The Maximilian Palace is a large insulated structure in the Italian style, of about 200 by 300 feet. The façade towards the Ludwigs-Strasse (206 feet) has three large arched doors in the centre, between four insulated Doric columns supporting a balcony, in front of the three centre windows above. On each side of this portal are five windows, which are round-headed within square dressings. Those of both the upper floors are square-headed, the first with pediments, the second without.

The next building, almost immediately opposite the preceding, is the Kriegs-Ministerium, or war-office, and is the work of the same architect (Von Klenze). The façade, 248 feet in length, is also in the Florentine style, and consists of a centre having seven large arcades, filled-in with door and windows on the ground-floor, and two stories above it, with two wings or lateral divisions, five windows in width, and a story lower. The spandrels of the seven arcades of the ground-floor are filled up with military trophies and armour, which mass of sculpture gives unusual richness and character to the whole. The building stands at the angle of the Schonfelds-Strasse, towards which street its south side presents a far more extensive and varied façade

(363 feet), uniform as to general style, but different as to composition, it being divided into a centre and two advanced wings, connected on each side by four arcades with windows in them, similar to those of the other front.

Immediately to the north of the Kriegs-Ministerium is the new public library and archive, whose lofty façade (495 feet in length) is a compound of the Florentine and Lombardic styles. The lower floor forms a massive rusticated basement, 44 feet high, with three portals in its centre. Each of the upper floors has 25 arched windows, and the whole is crowned with a cornice of very peculiar design. The library is capable of containing 2,000,000 of volumes; the number at present in it is variously estimated at 400,000 and 540,000 volumes; the number of manuscripts amounts to 22,000.

Nearly opposite the Ludwigs-Kirche are the Blind Institute and what is called the Damenstift (Ladies' College), two more of those extensive masses of building which give so much grandeur to this street. The former of these is upwards of 220 feet and the other 400 feet in length; both are by Gärtner, and both somewhat similar in style to the Public Library. The same may be said of the university buildings, at the northern extremity of this noble street, where they form a large quadrangle, into which the street itself runs. The Sieges-Thor (Gate of Victory), at the north end of the Ludwigs-Strasse, is a triumphal arch designed by Gärtner in imitation of the Arch of Constantine in Rome, and dedicated to the Bavarian army. It is built of Regensburg stone, and embellished with medallions and bas-reliefs executed in Carrara marble. The masonry for solidity and beauty is unsurpassed in Europe. The six medallions are symbolical of the Bavarian provinces; the bas-reliefs represent battles, sieges, and the passage of a river. Four Winged Victories in Carrara marble, and of the noblest forms and proportions, rise on either side of the gate before the pediment, which is supported by four Corinthian pilasters. Two Flying Victories, with wreaths and palms, are sculptured over the central arch. The whole is surmounted by a figure of Bavaria seated in a triumphal car drawn by four lions. This gate was opened on October 15, 1850.

The Isar-Thor, one of the old gate-entrances of the city, has been restored and decorated with a fine fresco, representing the return of Lewis the Bavarian after his victory at Mühlhof. In the Schranren-Platz, in the old town, stands a pillar to commemorate the victory of the Bavarians and Austrians over the Elector Palatine, near Prag. A bronze obelisk, 100 feet high, is erected in the circus called Carolinen-Platz, between the Botanic Garden and the Pinakothek, in memory of the 30,000 Bavarians who fell in the Russian campaign of 1812.

Among the other public buildings of Munich must be mentioned—the General Hospital (Krankenhaus), which stands in extensive grounds to the south-west of the town, outside the Sendlinger Gate; the Isar Bridge; the Synagogue; the General Prison, in the Au suburb; the Riding School, cavalry and infantry barracks; the Royal Porcelain manufactory, in the Kaufinger-Gasse, where the painting of glass is carried on extensively, &c. &c.

It remains to mention the spacious Friedhof, or public cemetery, which lies a little east of the Krankenhaus; the Theresien-Wiese, to the south-west of the town, and the beautiful park to the north-east of the city, and called the English Garden. The English Garden, situated to the north-east of the city, is laid out with plantations, intersected by streams of water, and embellished with statues and various ornamental buildings, the most remarkable of which is the circular monopteros of twelve Ionic columns, erected in 1833, as a monumental temple in honour of the elector Karl Theodore, the founder of the garden; it is remarkable as exhibiting the first modern application of polychromy, the capitals of the columns and the mouldings of the entablature being enriched with various colours painted in encaustic. The Friedhof has at its southern extremity an extensive range of building, consisting of a chapel and range of arcades, disposed in the form of a crescent about 550 feet in diameter. In the Theresien-Wiese (Theresian Meadow) a kind of people's festival is held, commencing on the first Sunday in October. There is a cattle show; and there are pony races, athletic games, and rifle-shooting matches; the king attends and gives prizes to the successful competitors. A high sloping natural bank, which runs along one side of the meadow, is cut into steps like a Roman amphitheatre, for the convenience of spectators, and commands the whole varied scene, to which the villages far and near send bands of peasants in native costume and headed by their respective banners.

On the natural terrace just mentioned, which rises above the plain on which the city stands, is the Ruhmes-Halle (Hall of Fame), a beautiful doric structure of white marble, adorned with emblematic friezes by Schwanthaler. It was designed by Von Klenze; busts of all the great men that Bavaria has produced are to be arranged along its walls. Right in front of this beautiful temple, and dwarfing it into insignificance by her gigantic proportions, rises Schwanthaler's colossal statue of Bavaria, with a majestic lion by her side, and holding out the wreath, or crown, of reward to any who may be worthy to enter the temple. The statue, which represents a Titanic virgin of calm majestic beauty, is 54 feet high, and stands on a granite pedestal 30 feet high. It is cast from Turkish cannon sunk at the battle of Navarino, and brought up by Greek divers. A winding staircase ascends the interior to a chamber in the head, large enough to contain

28 persons. In the bust of the figure are 20 tons of bronze. The statue was cast at the bronze foundry of Stiglmayer in the Nymphenburg road, about a mile from the city, between 1844 and 1848, by Ferdinand Miller, Stiglmayer's nephew. The statue was unveiled during the people's festival of October 1850, in the presence of the ex-king Ludwig, his two sons, the kings of Bavaria and Greece, the king of Saxony, and a vast concourse of people.

MUNSTER, one of the four provinces into which Ireland is divided. It comprehends the southern part of the island, and is bounded N. by the province of Connaught, E. by the province of Leinster, S. and W. by the Atlantic Ocean. It lies between 51° 25' and 53° 12' N. lat., and 6° 56' and 10° 32' W. long.

The general character of the surface is mountainous. Along the coast are the excellent harbours of Waterford, Dungarvan, Youghal, Cork, Kinsale, and Tralee, which are generally formed by the estuaries of rivers. Next to the Shannon the chief rivers are the Suir, the Blackwater, the Lee, and the Bandon, all of which, except the Suir, in the upper part of its course, have a general direction from west to east. The principal lakes are those of Killarney, which are much resorted to for the picturesque beauties of the surrounding scenery. The bogs are neither so numerous nor so extensive as in most other parts of Ireland. The province is divided into the six counties of CLARE, CORK, KERRY, LIMERICK, TIPPERARY, and WATERFORD, to the separate articles on which we refer for further information. For ecclesiastical purposes Munster is nearly coincident with the archiepiscopal province of Cashel, which by the Act 3 and 4 Wil IV. cap. 37, was united to that of Dublin. It contains the united dioceses of Cashel, Emly, Waterford, and Lismore; Cork and Ross; Cloyne, Limerick, Ardfer, and Aghadoe; with Killaloe and Kilfenora of the united dioceses of Killaloe, Kilfenora, Clonfert, and Kilmacduagh.

The chief Anglo-Norman families who settled in Munster were the Fitz-Thomases, earls of Desmond; the Butlers, earls of Ormond; the Geraldines, Barrys, Roches, and Cogan. South Munster was divided into counties in the reign of Henry VIII. Thomond (Clare County) was made shire-ground with Connaught in the 11th year of Elizabeth's reign. It was added to Munster in 1601, but continued till 1792 in the Connaught circuit. During the rebellions of the time of Elizabeth, Munster was governed by a President under the Lord Deputy of Ireland.

The population of the counties and cities in Munster province at the four decennial periods of 1821, 1831, 1841, and 1851, with the area of each, will be found in the article IRELAND.

MUNSTER, NEW. [ZEALAND, NEW.]

MUNSTER, the most north-western of the three governments into which the Prussian province of Westphalia is divided, is bounded N. by Hanover, E. by Minden, S. by Arensburg and the Rhein-provins, and W. by the Netherlands. Its area is 2797 square miles, and the population in 1846 was 421,044, about 9-10ths of whom are Catholics. The government presents a surface diversified by mountains, hills, and plains; the northern part is drained by the Ems, and the southern districts by the Lippe, a feeder of the Rhine. The Teutoburgerwald range runs north-west across the territory of Münster, forming part of the watershed between the Ems and the Weser. The country is not very productive in corn; flax and hemp are the chief products. Linen is the staple manufacture. Swine are very numerous. This government comprises a large portion of the former prince-bishopric of Münster, of which Hanover and Oldenburg got the rest. A railway runs south from the city of Münster, and joins the Cologne-Minden line at Hamm.

Münster, the capital of Westphalia, and of the government of Münster, situated on the river Ahe, in 51° 58' N. lat., 7° 36' E. long., in a flat country, about 200 feet above the level of the sea, is a tolerably well built commercial and manufacturing town, with about 21,000 inhabitants. The streets are broad; the houses lofty, but neither uniformly nor regularly built. The fortifications were dismantled in 1765 but the ramparts remain, which are planted with lime-trees and form a fine promenade round the town. Of the public buildings the most worthy of notice are—the cathedral, which contains the tomb of Bishop Galen who recovered the city from the Anabaptists; the church of St. Lambert, built in the finest gothic style; the palace of the bishop, which occupies the site of the old citadel; the senate-house; and the mansions of several of the nobility. John of Leyden with a few adherents threw himself, in 1536, into Münster, which he resolutely defended against the bishop. The town however was taken by storm and John and two of his followers were put to a violent death, and their remains were exposed on the tower of St. Lambert's church in iron baskets which still hang there. The town has a Catholic ecclesiastical college, which has faculties of theology and philosophy; a Catholic gymnasium with 21 professors and 625 pupils (in 1850), and a library of about 80,000 volumes; surgical and veterinary schools, a botanical garden, a school for deaf-mutes; and manufactures of woollen-cloths, leather, starch, &c. The city is the seat of all the great offices of the province of Westphalia. The trade in linens, woollens, yarn, Rhenish wine, hams, &c., is very considerable. Münster is celebrated on account of the peace concluded in it October 24, 1648, which put an end to the Thirty Years War. It was founded at the end of the 6th century and called Meiland and about a century after Miningerode. In 972 it was taken by Charle-

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Bocholt, on the Aa, about 45 miles W. from Münster, has a castle, belonging to the princes of Salm-Salm, manufactures of woollens, cotton, silk, hosiery, spirits, soap, and a population of 4800. There are extensive iron-works in the vicinity of the town. At Anholt, a small town near Bocholt, is the principal residence of the prince of Salm-Salm. [ANHOLT.] Borcken, S.W. of Münster, on the Aa, has 3000 inhabitants, who manufacture linen, broadcloth, serge, and chicory. Kösfeld, 20 miles W. from Münster, on the Berkel, is surrounded by old fortifications, and defended by a castle; the manufactures are linen and woollen cloth. It has a population of 3500, and a Catholic gymnasium with 12 teachers and 150 scholars (in 1850). Kösfeld is the residence of the Horstmar branch of the house of Salm. Recklinghausen, formerly the capital of a circle, is situated on the Lippe, about 30 miles S.W. from Münster, on the slope of the Hard Mountain, and has an old ducal residence, two churches, an asylum for females of noble birth, some linen manufactures, steel-works, and about 3000 inhabitants. There is a Catholic gymnasium in the town, which had 10 teachers and 130 students in 1850. Recklinghausen was formerly the capital of a small sovereign county, 301 square miles in extent, which belonged to the Duke of Arenberg; the duke is still the proprietor but the sovereignty vests in the king of Prussia. Steinfurt, N.W. of Münster, a residence of the princes of Bentheim, has a population of 2700, who manufacture linen and leather. Warendorf, E. of Münster, on the Ems, has a gymnasium, a mad-house, several bleach-works, an important linen market, and 4200 inhabitants, who manufacture linen and broadcloth.

MUNONIO-ELF. [BOTENIA.]

MUR. [CÔTES-DU-NORD.]

MUR-DE-BARREZ. [AVEYRON.]

MURAT. [CANTAL.]

MURCIA, an ancient province of Spain, formerly a kingdom, is bounded S. by the Mediterranean Sea and the province of Granada, N. and N.W. by Castilla la Nueva, E. and N.E. by the Mediterranean Sea and the province of Valencia, W. by the province of Jaen, and S.W. by the province of Granada. It is situated between 37° 23' and 39° 16' N. lat., 40' and 3° 8' W. long. The greatest length from north to south is about 130 miles, the greatest width from east to west is about 110 miles. The area is 7877 square miles. The population in 1849 was 595,531. It is divided into the two following modern provinces:—

Provinces.	Area in Square Miles.	Population in 1849.
Murcia	7,877	400,000
Albacete		195,531
Total	7,877	595,531

Surface.—The form of Murcia is very irregular, and the boundaries are for the most part conventional. Only at the extreme western angle the Rio Guadarmena forms a natural line of separation between Murcia and the provinces of La Mancha and Jaen. The modern province of Albacete comprises the interior or north-western part of the old province; the modern province of Murcia comprises the south-eastern portion, or that next the coast, the line of division between the two being formed by the summit level of the Sierra de Sagra extended along the line of the sierras of Jumella, Yecla, and Villena.

The coast from the boundary of Granada as far as Cartagena presents a series of steep and elevated cliffs; eastward from that part to the Cabo de Palos the coast is low and sandy, the cape itself being the termination of a ridge of hills from the interior; northward of the Cabo de Palos is a shallow land-locked sea-lagune called the Encañizada de Murcia. The Sierra de Sagra, interrupted by the valley of the Rio Mundo, may be said to extend under different names from south-west to north-east through the centre of the province, forming a natural line of division between the two modern provinces. The Sierra de Alcaraz crosses the western corner of the province, extends through a part of La Mancha, and again enters Murcia near Chinchilla, filling up the north-western angle. The Sierra de Segura crosses the province between the Sierra de Alcaraz and the Sierra de Sagra; all these mountain ridges being in fact offsets from the eastern end of the great chain of the Sierra Morena. Another series of mountains extends from the province of Granada, south of the town of Lorca, to Cartagena, and this series includes the great mining district of Murcia. Other mountain groups cross the province in various directions, separated from each other by extensive valleys and a few level tracts. The only plain of considerable extent lies between Cartagena and Orihuela, and this plain is divided into two portions by a chain of sandstone hills on the southern side of the Sangonera. The Sierra de Segura is a mass of gray and white limestone, and most of the other mountain ranges belong to the same formation. Trachyte and other volcanic rocks occur at Almazarron; and here and in the mountains south of Lorca the mining operations are chiefly carried on. Porphyry, greenstone, primary slates, fine

whose carved caps do not reach quite up to the corbelling of the gable, divide the façade into three compartments, the middle and widest of which contains a rich portal, with receding columns and arches, with a bas-relief in the lunette over the square-headed door, and a statue on each side of the canopy which crowns this entrance. Above it is a large rose window; and in each of the other compartments are two round-headed windows, one above the other. The body of the chapel is 105 feet in length within, exclusive of the apsis at its western extremity, which is elevated about 3 feet above the rest of the pavement, and gives about 20 feet more. This space consists of two square compartments of 30 feet, covered each by pendentives and a dome, and united by an intermediate narrower space. On each side these compartments have below three circular-headed arches on columns, opening into side aisles; and above as many windows of the same form, not immediately over the arches, but at the back of the upper recesses that cover the aisles below. Consequently the width in the upper part of the building is, in appearance at least, greatly extended. It is difficult to convey a distinct notion of the profuse and gorgeous yet solemn decorations of the whole interior: the pavements, walls, arches, pendentives, domes—all is embellishment; and all that is not marble or mosaic is painting and gold. The columns are of red Salzburg marble, with white bases and gilded capitals; the soles, or bottom of the walls, is also of red marble throughout; and the upper part to the height of the upper aisles is encrusted with different coloured marbles or scagliola. All the rest is entirely covered with fresco painting, upon a gold ground. The subjects were designed, and executed by Hess and his pupils; those of the first compartment and its cupola are symbolical of the events of the Old Testament; those of the other, of the New, while those introduced in the large intervening arch refer to the connection between the two. Many of the figures are colossal; those for instance, of the Redeemer and of the Deity behind the principal altar, which may be considered as the focus where the power of art is concentrated, the subjects here being illustrations of the Seven Sacraments. The building was consecrated and opened for service November 1, 1837.

On the south side of this magnificent chapel is what was formerly the Hof, or Court Theatre, but it is not now made use of as such, the larger and adjoining building on the south being now the principal theatre. This structure, which has a fine octastyle Corinthian portico painted in polychrome towards the Max-Joseph's Platz, was originally erected by Karl Fischer, and rebuilt according to the first design, after being burnt down in 1823. On the south side of the same square is the new façade of what was formerly the Döring Palace, but is now converted into the post-office. The length is 290 feet, the whole of which, exclusive of 32 feet at each side, is occupied by an open loggia of 13 arches, resting upon Doric columns, with as many windows above them, besides two in each of the end compartments, that is, one on the ground-floor and one above it. The whole is crowned by a cornice, with an enriched band or narrow frieze beneath it, the pattern of which is white upon a red ground; for this building also exhibits, to a certain extent, the application of polychromy. On the west side of the Odeon-Platz are the Odeon and Leuchtenberg Palace, whose opposite fronts towards the street that runs between them present two handsome and uniform façades in the Italian style, of two stories above the ground-floor, of 11 windows in each, and with a small Doric portico, or entrance porch, of 4 columns. The large concert- or ball-room, on the principal floor of the Odeon, is 124 feet by 71 feet, and 50 feet high. West of the Odeon is the Wittelsbacher-Platz, in which is a bronze statue of the elector Maximilian I., cast from the Turkish cannon taken in the Greek war, after a model by Thorwaldsen.

Northward from the Odeon-Platz runs the Ludwigs-Strasse, by far the handsomest and most regular street in Munich, having on its east side the Kriegs-Ministerium, the public library, and Ludwigs-Kirche; on its western side the Maximilian Palace, Blind Institute, &c.; it widens out at its northern end in a spacious quadrangle, on one side of which stretches the solemn white mass of the university buildings; on the other the pale stone-coloured, severe-looking Jesuits College; and terminates in the magnificent triumphal arch of the Sieges-Thor. The Maximilian Palace is a large insulated structure in the Italian style, of about 200 by 300 feet. The façade towards the Ludwigs-Strasse (208 feet) has three large arched doors in the centre, between four insulated Doric columns supporting a balcony, in front of the three centre windows above. On each side of this portal are five windows, which are round-headed within square dressings. Those of both the upper floors are square-headed, the first with pediments, the second without.

The next building, almost immediately opposite the preceding, is the Kriegs-Ministerium, or war-office, and is the work of the same architect (Von Klense). The façade, 248 feet in length, is also in the Florentine style, and consists of a centre having seven large arcades, filled-in with door and windows on the ground-floor, and two stories above it, with two wings or lateral divisions, five windows in width, and a story lower. The spandrels of the seven arcades of the ground-floor are filled up with military trophies and armour, which mass of sculpture gives unusual richness and character to the whole. The building stands at the angle of the Schonfelds-Strasse, towards which street its south side presents a far more extensive and varied façade

(363 feet), uniform as to general style, but different as to composition, it being divided into a centre and two advanced wings, connected on each side by four arcades with windows in them, similar to those of the other front.

Immediately to the north of the Kriegs-Ministerium is the new public library and archive, whose lofty façade (495 feet in length) is a compound of the Florentine and Lombardic styles. The lower floor forms a massive rusticated basement, 44 feet high, with three portals in its centre. Each of the upper floors has 25 arched windows, and the whole is crowned with a cornice of very peculiar design. The library is capable of containing 2,000,000 of volumes; the number at present in it is variously estimated at 400,000 and 540,000 volumes; the number of manuscripts amounts to 22,000.

Nearly opposite the Ludwigs-Kirche are the Blind Institute and what is called the Damenstift (Ladies' College), two more of those extensive masses of building which give so much grandeur to this street. The former of these is upwards of 220 feet and the other 400 feet in length; both are by Gärtner, and both somewhat similar in style to the Public Library. The same may be said of the university buildings, at the northern extremity of this noble street, where they form a large quadrangle, into which the street itself runs. The Sieges-Thor (Gate of Victory), at the north end of the Ludwigs-Strasse, is a triumphal arch designed by Gärtner in imitation of the Arch of Constantine in Rome, and dedicated to the Bavarian army. It is built of Regensburg stone, and embellished with medallions and bas-reliefs executed in Carrara marble. The masonry for solidity and beauty is unsurpassed in Europe. The six medallions are symbolical of the Bavarian provinces; the bas-reliefs represent battles, sieges, and the passage of a river. Four Winged Victories in Carrara marble, and of the noblest forms and proportions, rise on either side of the gate before the pediment, which is supported by four Corinthian pilasters. Two Flying Victories, with wreaths and palms, are sculptured over the central arch. The whole is surmounted by a figure of Bavaria seated in a triumphal car drawn by four lions. This gate was opened on October 15, 1850.

The Isar-Thor, one of the old gate-entrances of the city, has been restored and decorated with a fine fresco, representing the return of Lewis the Bavarian after his victory at Mühlthorf. In the Schranzen-Platz, in the old town, stands a pillar to commemorate the victory of the Bavarians and Austrians over the Elector Palatine, near Prag. A bronze obelisk, 100 feet high, is erected in the circus called Carolinen-Platz, between the Botanic Garden and the Pinakothek, in memory of the 30,000 Bavarians who fell in the Russian campaign of 1812.

Among the other public buildings of Munich must be mentioned—the General Hospital (Krankenhaus), which stands in extensive grounds to the south-west of the town, outside the Sendlinger Gate; the Isar Bridge; the Synagogue; the General Prison, in the Au suburb; the Riding School, cavalry and infantry barracks; the Royal Porcelain manufactory, in the Kaufinger-Gasse, where the painting of glass is carried on extensively, &c. &c.

It remains to mention the spacious Friedhof, or public cemetery, which lies a little east of the Krankenhaus; the Theresien-Wiese, to the south-west of the town, and the beautiful park to the north-east of the city, and called the English Garden. The English Garden, situated to the north-east of the city, is laid out with plantations, intersected by streams of water, and embellished with statues and various ornamental buildings, the most remarkable of which is the circular monoperos of twelve Ionic columns, erected in 1833, as a monumental temple in honour of the elector Karl Theodore, the founder of the garden; it is remarkable as exhibiting the first modern application of polychromy, the capitals of the columns and the mouldings of the entablature being enriched with various colours painted in encaustic. The Friedhof has at its southern extremity an extensive range of building, consisting of a chapel and range of arcades, disposed in the form of a crescent about 550 feet in diameter. In the Theresien-Wiese (Theresian Meadow) a kind of people's festival is held, commencing on the first Sunday in October. There is a cattle show; and there are pony races, athletic games, and rifle-shooting matches; the king attends and gives prizes to the successful competitors. A high sloping natural bank, which runs along one side of the meadow, is cut into steps like a Roman amphitheatre, for the convenience of spectators, and commands the whole varied scene, to which the villages far and near send bands of peasants in native costume and headed by their respective banners.

On the natural terrace just mentioned, which rises above the plain on which the city stands, is the Ruhmes-Halle (Hall of Fame), a beautiful doric structure of white marble, adorned with emblematic friezes by Schwanthaler. It was designed by Von Klense; busts of all the great men that Bavaria has produced are to be arranged along its walls. Right in front of this beautiful temple, and dwarfing it into insignificance by her gigantic proportions, rises Schwanthaler's colossal statue of Bavaria, with a majestic lion by her side, and holding out the wreath, or crown, of reward to any who may be worthy to enter the temple. The statue, which represents a Titanic virgin of calm majestic beauty, is 54 feet high, and stands on a granite pedestal 30 feet high. It is cast from Turkish cannon sunk at the battle of Navarino, and brought up by Greek divers. A winding staircase ascends the interior to a chamber in the head, large enough to contain

28 persons. In the bust of the figure are 20 tons of bronze. The statue was cast at the bronze foundry of Stiglmayer in the Nymphenburg road, about a mile from the city, between 1844 and 1848, by Ferdinand Miller, Stiglmayer's nephew. The statue was unveiled during the people's festival of October 1850, in the presence of the ex-king Ludwig, his two sons, the kings of Bavaria and Greece, the king of Saxony, and a vast concourse of people.

MUNSTER, one of the four provinces into which Ireland is divided. It comprehends the southern part of the island, and is bounded N. by the province of Connaught, E. by the province of Leinster, S. and W. by the Atlantic Ocean. It lies between 51° 25' and 53° 12' N. lat., and 6° 56' and 10° 32' W. long.

The general character of the surface is mountainous. Along the coast are the excellent harbours of Waterford, Dungarvan, Youghal, Cork, Kinsale, and Tralee, which are generally formed by the estuaries of rivers. Next to the Shannon the chief rivers are the Suir, the Blackwater, the Lee, and the Bandon, all of which, except the Suir, in the upper part of its course, have a general direction from west to east. The principal lakes are those of Killarney, which are much resorted to for the picturesque beauties of the surrounding scenery. The bogs are neither so numerous nor so extensive as in most other parts of Ireland. The province is divided into the six counties of CLARE, CORK, KERRY, LIMERICK, TIPPERARY, and WATERFORD, to the separate articles on which we refer for further information. For ecclesiastical purposes Munster is nearly coincident with the archiepiscopal province of Cashel, which by the Act 3 and 4 Wil. IV. cap. 37, was united to that of Dublin. It contains the united dioceses of Cashel, Emly, Waterford, and Lismore; Cork and Ross; Cloyne, Limerick, Ardfer, and Aghadoe; with Killaloe and Kilfenora of the united dioceses of Killaloe, Kilfenora, Clonfert, and Kilmacduagh.

The chief Anglo-Norman families who settled in Munster were the Fitz-Thomases, earls of Desmond; the Butlers, earls of Ormond; the Geraldines, Barrys, Roches, and Crogans. South Munster was divided into counties in the reign of Henry VIII. Thomond (Clare County) was made shire-ground with Connaught in the 11th year of Elizabeth's reign. It was added to Munster in 1601, but continued till 1792 in the Connaught circuit. During the rebellions of the time of Elizabeth, Munster was governed by a President under the Lord Deputy of Ireland.

The population of the counties and cities in Munster province at the four decennial periods of 1821, 1831, 1841, and 1851, with the area of each, will be found in the article IRELAND.

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MUONIO-ELF. [BOTHNIA.]

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Northward from the Odeon-Platz runs the Ludwigs-Strasse, by far the handsomest and most regular street in Munich, having on its east side the Kriegs-Ministerium, the public library, and Ludwigs-Kirche; on its western side the Maximilian Palace, Blind Institute, &c.; it widens out at its northern end in a spacious quadrangle, on one side of which stretches the solemn white mass of the university buildings; on the other the pale stone-coloured, severe-looking Jesuits College; and terminates in the magnificent triumphal arch of the Sieges-Thor. The Maximilian Palace is a large insulated structure in the Italian style, of about 200 by 300 feet. The façade towards the Ludwigs-Strasse (206 feet) has three large arched doors in the centre, between four insulated Doric columns supporting a balcony, in front of the three centre windows above. On each side of this portal are five windows, which are round-headed within square dressings. Those of both the upper floors are square-headed, the first with pediments, the second without.

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It remains to mention the spacious Friedhof, or public cemetery, which lies a little east of the Krankenhaus; the Theresien-Wiese, to the south-west of the town, and the beautiful park to the north-east of the city, and called the English Garden. The English Garden, situated to the north-east of the city, is laid out with plantations, intersected by streams of water, and embellished with statues and various ornamental buildings, the most remarkable of which is the circular monoperos of twelve Ionic columns, erected in 1833, as a monumental temple in honour of the elector Karl Theodore, the founder of the garden; it is remarkable as exhibiting the first modern application of polychromy, the capitals of the columns and the mouldings of the entablature being enriched with various colours painted in encaustic. The Friedhof has at its southern extremity an extensive range of building, consisting of a chapel and range of arcades, disposed in the form of a crescent about 550 feet in diameter. In the Theresien-Wiese (Theresian Meadow) a kind of people's festival is held, commencing on the first Sunday in October. There is a cattle show, and there are pony races, athletic games, and rifle-shooting matches; the king attends and gives prizes to the successful competitors. A high sloping natural bank, which runs along one side of the meadow, is cut into steps like a Roman amphitheatre, for the convenience of spectators, and commands the whole varied scene, to which the villages far and near send bands of peasants in native costume and headed by their respective banners.

On the natural terrace just mentioned, which rises above the plain on which the city stands, is the Ruhmes-Halle (Hall of Fame), a beautiful doric structure of white marble, adorned with emblematic friezes by Schwanthaler. It was designed by Von Klense; busts of all the great men that Bavaria has produced are to be arranged along its walls. Right in front of this beautiful temple, and dwarfing it into insignificance by her gigantic proportions, rises Schwanthaler's colossal statue of Bavaria, with a majestic lion by her side, and holding out the wreath, or crown, of reward to any who may be worthy to enter the temple. The statue, which represents a Titanio virgin of calm majestic beauty, is 54 feet high, and stands on a granite pedestal 30 feet high. It is cast from Turkish cannon sunk at the battle of Navarino, and brought up by Greek divers. A winding staircase ascends the interior to a chamber in the head, large enough to contain

23 persons. In the bust of the figure are 20 tons of bronze. The statue was cast at the bronze foundry of Stiglmayer in the Nymphenburg road, about a mile from the city, between 1844 and 1848, by Ferdinand Miller, Stiglmayer's nephew. The statue was unveiled during the people's festival of October 1850, in the presence of the ex-king Ludwig, his two sons, the kings of Bavaria and Greece, the king of Saxony, and a vast concourse of people.

MUNSTER, one of the four provinces into which Ireland is divided. It comprehends the southern part of the island, and is bounded N. by the province of Connaught, E. by the province of Leinster, S. and W. by the Atlantic Ocean. It lies between 51° 25' and 53° 12' N. lat., and 6° 56' and 10° 32' W. long.

The general character of the surface is mountainous. Along the coast are the excellent harbours of Waterford, Dungarvan, Youghal, Cork, Kinsale, and Tralee, which are generally formed by the estuaries of rivers. Next to the Shannon the chief rivers are the Suir, the Blackwater, the Lee, and the Bandon, all of which, except the Suir, in the upper part of its course, have a general direction from west to east. The principal lakes are those of Killarney, which are much resorted to for the picturesque beauties of the surrounding scenery. The bogs are neither so numerous nor so extensive as in most other parts of Ireland. The province is divided into the six counties of CLARE, CORK, KERRY, LIMERICK, TIPPERRARY, and WATERFORD, to the separate articles on which we refer for further information. For ecclesiastical purposes Munster is nearly coincident with the archiepiscopal province of Cashel, which by the Act 3 and 4 Wil. IV. cap. 37, was united to that of Dublin. It contains the united dioceses of Cashel, Emlly, Waterford, and Lisimore; Cork and Ross; Cloyne, Limerick, Ardferit, and Aghadoc; with Killaloe and Kilfenora of the united dioceses of Killaloe, Kilfenora, Clonfert, and Kilmaeduaugh.

The chief Anglo-Norman families who settled in Munster were the Fitz-Thomases, earls of Desmond; the Butlers, earls of Ormond; the Geraldines, Barrys, Roches, and Crogans. South Munster was divided into counties in the reign of Henry VIII. Thomond (Clare County) was made shire-ground with Connaught in the 11th year of Elizabeth's reign. It was added to Munster in 1601, but continued till 1792 in the Connaught circuit. During the rebellions of the time of Elizabeth, Munster was governed by a President under the Lord Deputy of Ireland.

The population of the counties and cities in Munster province at the four decennial periods of 1821, 1831, 1841, and 1851, with the area of each, will be found in the article IRELAND.

MUNSTER, NEW. [ZEALAND, NEW.]

MUNSTER, the most north-western of the three governments into which the Prussian province of Westphalia is divided, is bounded N. by Hanover, E. by Minden, S. by Arensburg and the Rhein-provins, and W. by the Netherlands. Its area is 2797 square miles, and the population in 1846 was 421,044, about 9-10ths of whom are Catholics. The government presents a surface diversified by mountains, hills, and plains; the northern part is drained by the Ems, and the southern districts by the Lippe, a feeder of the Rhine. The Teutoburgerwald range runs north-west across the territory of Münster, forming part of the watershed between the Ems and the Weser. The country is not very productive in corn; flax and hemp are the chief products. Linen is the staple manufacture. Swine are very numerous. This government comprises a large portion of the former prince-bishopric of Münster, of which Hanover and Oldenburg got the rest. A railway runs south from the city of Münster, and joins the Cologne-Minden line at Hamm.

Münster, the capital of Westphalia, and of the government of Münster, situated on the river Ahe, in 51° 53' N. lat., 7° 36' E. long., in a flat country, about 200 feet above the level of the sea, is a tolerably well built commercial and manufacturing town, with about 21,000 inhabitants. The streets are broad; the houses lofty, but neither uniformly nor regularly built. The fortifications were dismantled in 1765 but the ramparts remain, which are planted with lime-trees and form a fine promenade round the town. Of the public buildings the most worthy of notice are—the cathedral, which contains the tomb of Bishop Galen who recovered the city from the Anabaptists; the church of St.-Lambert, built in the finest gothic style; the palace of the bishop, which occupies the site of the old citadel; the senate-house; and the mansions of several of the nobility. John of Leyden with a few adherents threw himself, in 1536, into Münster, which he resolutely defended against the bishop. The town however was taken by storm and John and two of his followers were put to a violent death, and their remains were exposed on the tower of St.-Lambert's church in iron baskets which still hang there. The town has a Catholic ecclesiastical college, which has faculties of theology and philosophy; a Catholic gymnasium with 21 professors and 625 pupils (in 1850), and a library of about 30,000 volumes; surgical and veterinary schools, a botanical garden, a school for deaf-mutes; and manufactures of woollen-cloths, leather, starch, &c. The city is the seat of all the great offices of the province of Westphalia. The trade in linens, woollens, yarn, Rhenish wine, hams, &c., is very considerable. Münster is celebrated on account of the peace concluded in it October 24, 1648, which put an end to the Thirty Years War. It was founded at the end of the 6th century and called Meiland and about a century after Miningerode. In 972 it was taken by Charle-

magne, in whose time the bishopric was founded and a monastery built, whence the name of Münster is derived. A navigable canal connects Münster with the Ems; and a railroad 21 miles in length unites it to the Hamm station on the Köln-Minden line.

Bocholt, on the Aa, about 45 miles W. from Münster, has a castle, belonging to the princes of Salm-Salm, manufactures of woollens, cotton, silk, hosiery, spirits, soap, and a population of 4300. There are extensive iron-works in the vicinity of the town. At Anholt, a small town near Bocholt, is the principal residence of the prince of Salm-Salm. [ANHOLT.] Borcken, S.W. of Münster, on the Aa, has 3000 inhabitants, who manufacture linen, broadcloth, serge, and chicory. Kösfeld, 20 miles W. from Münster, on the Berkel, is surrounded by old fortifications, and defended by a castle; the manufactures are linen and woollen cloth. It has a population of 3500, and a Catholic gymnasium with 12 teachers and 150 scholars (in 1850). Kösfeld is the residence of the Horstmar branch of the house of Salm. Recklinghausen, formerly the capital of a circle, is situated on the Lippe, about 30 miles S.W. from Münster, on the slope of the Hard Mountain, and has an old ducal residence, two churches, an asylum for females of noble birth, some linen manufactures, steel-works, and about 3000 inhabitants. There is a Catholic gymnasium in the town, which had 10 teachers and 130 students in 1850. Recklinghausen was formerly the capital of a small sovereign county, 301 square miles in extent, which belonged to the Duke of Arenberg; the duke is still the proprietor but the sovereignty vests in the king of Prussia. Steinfurt, N.W. of Münster, a residence of the princes of Bentheim, has a population of 2700, who manufacture linen and leather. Warendorf, E. of Münster, on the Ems, has a gymnasium, a mad-house, several bleach-works, an important linen market, and 4200 inhabitants, who manufacture linen and broadcloth.

MUONIO-ELF. [BOTHNIA.]

MUR. [CÔTES-DU-NORD.]

MUR-DE-BARREZ. [AVEYRON.]

MURAT. [CANTAL.]

MURCIA, an ancient province of Spain, formerly a kingdom, is bounded S. by the Mediterranean Sea and the province of Granada, N. and N.W. by Castilla la Nueva, E. and N.E. by the Mediterranean Sea and the province of Valencia, W. by the province of Jaen, and S.W. by the province of Granada. It is situated between 37° 23' and 39° 16' N. lat., 40' and 3° 8' W. long. The greatest length from north to south is about 130 miles, the greatest width from east to west is about 110 miles. The area is 7877 square miles. The population in 1849 was 595,531. It is divided into the two following modern provinces:—

Provinces.	Area in Square Miles.	Population in 1849.
Murcia }	7,877	400,000
Albacete }		195,531
Total	7,877	595,531

Surface.—The form of Murcia is very irregular, and the boundaries are for the most part conventional. Only at the extreme western angle the Rio Guadarmena forms a natural line of separation between Murcia and the provinces of La Mancha and Jaen. The modern province of Albacete comprises the interior or north-western part of the old province; the modern province of Murcia comprises the south-eastern portion, or that next the coast, the line of division between the two being formed by the summit level of the Sierra de Sagra extended along the line of the sierras of Jumella, Yecla, and Villena.

The coast from the boundary of Granada as far as Cartagena presents a series of steep and elevated cliffs; eastward from that port to the Cabo de Palos the coast is low and sandy, the cape itself being the termination of a ridge of hills from the interior; northward of the Cabo de Palos is a shallow land-locked sea-lagune called the Encañizada de Murcia. The Sierra de Sagra, interrupted by the valley of the Rio Mundo, may be said to extend under different names from south-west to north-east through the centre of the province, forming a natural line of division between the two modern provinces. The Sierra de Alcaraz crosses the western corner of the province, extends through a part of La Mancha, and again enters Murcia near Chinchilla, filling up the north-western angle. The Sierra de Segura crosses the province between the Sierra de Alcaraz and the Sierra de Sagra; all these mountain ridges being in fact offsets from the eastern end of the great chain of the Sierra Morena. Another series of mountains extends from the province of Granada, south of the town of Lorca, to Cartagena, and this series includes the great mining district of Murcia. Other mountain groups cross the province in various directions, separated from each other by extensive valleys and a few level tracts. The only plain of considerable extent lies between Cartagena and Orihuela, and this plain is divided into two portions by a chain of sandstone hills on the southern side of the Sangonera. The Sierra de Segura is a mass of gray and white limestone, and most of the other mountain ranges belong to the same formation. Trachyte and other volcanic rocks occur at Almazarron; and here and in the mountains south of Lorca the mining operations are chiefly carried on. Porphyry, greenstone, primary alates, fine

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The Isar-Thor, one of the old gate-entrances of the city, has been restored and decorated with a fine fresco, representing the return of Lewis the Bavarian after his victory at Mühlhof. In the Schranzen-Platz, in the old town, stands a pillar to commemorate the victory of the Bavarians and Austrians over the Elector Palatine, near Prag. A bronze obelisk, 100 feet high, is erected in the circus called Carolinen-Platz, between the Botanic Garden and the Pinakothek, in memory of the 30,000 Bavarians who fell in the Russian campaign of 1812.

Among the other public buildings of Munich must be mentioned—the General Hospital (Krankenhaus), which stands in extensive grounds to the south-west of the town, outside the Sendlinger Gate; the Isar Bridge; the Synagogue; the General Prison, in the Au suburb; the Riding School, cavalry and infantry barracks; the Royal Porcelain manufactory, in the Kaufinger-Gasse, where the painting of glass is carried on extensively, &c. &c.

It remains to mention the spacious Friedhof, or public cemetery, which lies a little east of the Krankenhaus; the Theresien-Wiese, to the south-west of the town, and the beautiful park to the north-east of the city, and called the English Garden. The English Garden, situated to the north-east of the city, is laid out with plantations, intersected by streams of water, and embellished with statues and various ornamental buildings, the most remarkable of which is the circular monopteros of twelve Ionic columns, erected in 1833, as a monumental temple in honour of the elector Karl Theodore, the founder of the garden; it is remarkable as exhibiting the first modern application of polychromy, the capitals of the columns and the mouldings of the entablature being enriched with various colours painted in encaustic. The Friedhof has at its southern extremity an extensive range of building, consisting of a chapel and range of arcades, disposed in the form of a crescent about 550 feet in diameter. In the Theresien-Wiese (Theresian Meadow) a kind of people's festival is held, commencing on the first Sunday in October. There is a cattle show, and there are pony races, athletic games, and rifle-shooting matches; the king attends and gives prizes to the successful competitors. A high sloping natural bank, which runs along one side of the meadow, is cut into steps like a Roman amphitheatre, for the convenience of spectators, and commands the whole varied scene, to which the villages far and near send bands of peasants in native costume and headed by their respective banners.

On the natural terrace just mentioned, which rises above the plain on which the city stands, is the Ruhmes-Halle (Hall of Fame), a beautiful doric structure of white marble, adorned with emblematic friezes by Schwanthaler. It was designed by Von Klenze; busts of all the great men that Bavaria has produced are to be arranged along its walls. Right in front of this beautiful temple, and dwarfing it into insignificance by her gigantic proportions, rises Schwanthaler's colossal statue of Bavaria, with a majestic lion by her side, and holding out the wreath, or crown, of reward to any who may be worthy to enter the temple. The statue, which represents a Titanic virgin of calm majestic beauty, is 54 feet high, and stands on a granite pedestal 30 feet high. It is cast from Turkish cannon sunk at the battle of Navarino, and brought up by Greek divers. A winding staircase ascends the interior to a chamber in the head, large enough to contain

28 persons. In the bust of the figure are 20 tons of bronze. The statue was cast at the bronze foundry of Stiglmayer in the Nymphenburg road, about a mile from the city, between 1844 and 1848, by Ferdinand Miller, Stiglmayer's nephew. The statue was unveiled during the people's festival of October 1850, in the presence of the ex-king Ludwig, his two sons, the kings of Bavaria and Greece, the king of Saxony, and a vast concourse of people.

MUNSTER, one of the four provinces into which Ireland is divided. It comprehends the southern part of the island, and is bounded N. by the province of Connaught, E. by the province of Leinster, S. and W. by the Atlantic Ocean. It lies between 51° 25' and 53° 12' N. lat., and 6° 56' and 10° 32' W. long.

The general character of the surface is mountainous. Along the coast are the excellent harbours of Waterford, Dungarvan, Youghal, Cork, Kinsale, and Tralee, which are generally formed by the estuaries of rivers. Next to the Shannon the chief rivers are the Suir, the Blackwater, the Lee, and the Bandon, all of which, except the Suir, in the upper part of its course, have a general direction from west to east. The principal lakes are those of Killarney, which are much resorted to for the picturesque beauties of the surrounding scenery. The bogs are neither so numerous nor so extensive as in most other parts of Ireland. The province is divided into the six counties of CLARE, CORK, KERRY, LIMERICK, TIPPERRARY, and WATERFORD, to the separate articles on which we refer for further information. For ecclesiastical purposes Munster is nearly coincident with the archiepiscopal province of Cashel, which by the Act 3 and 4 Wil. IV. cap. 37, was united to that of Dublin. It contains the united dioceses of Cashel, Emlly, Waterford, and Lisimore; Cork and Ross; Cloyne, Limerick, Ardferit, and Aghadoe; with Killaloe and Kilfenora of the united dioceses of Killaloe, Kilfenora, Clonfert, and Kilmaeduaigh.

The chief Anglo-Norman families who settled in Munster were the Fitz-Thomases, earls of Desmond; the Butlers, earls of Ormond; the Geraldines, Barrys, Roches, and Cogan. South Munster was divided into counties in the reign of Henry VIII. Thomond (Clare County) was made shire-ground with Connaught in the 11th year of Elizabeth's reign. It was added to Munster in 1601, but continued till 1792 in the Connaught circuit. During the rebellions of the time of Elizabeth, Munster was governed by a President under the Lord Deputy of Ireland.

The population of the counties and cities in Munster province at the four decennial periods of 1821, 1831, 1841, and 1851, with the area of each, will be found in the article IRELAND.

MUNSTER, NEW. [ZEALAND, NEW.]

MUNSTER, the most north-western of the three governments into which the Prussian province of Westphalia is divided, is bounded N. by Hanover, E. by Minden, S. by Arensburg and the Rhein-provins, and W. by the Netherlands. Its area is 2797 square miles, and the population in 1846 was 421,044, about 9-10ths of whom are Catholics. The government presents a surface diversified by mountains, hills, and plains; the northern part is drained by the Ems, and the southern districts by the Lippe, a feeder of the Rhine. The Teutoburgerwald range runs north-west across the territory of Münster, forming part of the watershed between the Ems and the Weser. The country is not very productive in corn; flax and hemp are the chief products. Linen is the staple manufacture. Swine are very numerous. This government comprises a large portion of the former prince-bishopric of Münster, of which Hanover and Oldenburg got the rest. A railway runs south from the city of Münster, and joins the Cologne-Minden line at Hamm.

Münster, the capital of Westphalia, and of the government of Münster, situated on the river Ahe, in 51° 58' N. lat., 7° 36' E. long., in a flat country, about 200 feet above the level of the sea, is a tolerably well built commercial and manufacturing town, with about 21,000 inhabitants. The streets are broad; the houses lofty, but neither uniformly nor regularly built. The fortifications were dismantled in 1765 but the ramparts remain, which are planted with lime-trees and form a fine promenade round the town. Of the public buildings the most worthy of notice are—the cathedral, which contains the tomb of Bishop Galen who recovered the city from the Anabaptists; the church of St. Lambert, built in the finest gothic style; the palace of the bishop, which occupies the site of the old citadel; the senate-house; and the mansions of several of the nobility. John of Leyden with a few adherents threw himself, in 1536, into Münster, which he resolutely defended against the bishop. The town however was taken by storm and John and two of his followers were put to a violent death, and their remains were exposed on the tower of St. Lambert's church in iron baskets which still hang there. The town has a Catholic ecclesiastical college, which has faculties of theology and philosophy; a Catholic gymnasium with 21 professors and 625 pupils (in 1850), and a library of about 30,000 volumes; surgical and veterinary schools, a botanical garden, a school for deaf-mutes; and manufactures of woollen-cloths, leather, starch, &c. The city is the seat of all the great offices of the province of Westphalia. The trade in linens, woollens, yarn, Rhenish wine, hams, &c., is very considerable. Münster is celebrated on account of the peace concluded in it October 24, 1648, which put an end to the Thirty Years War. It was founded at the end of the 6th century and called Meiland and about a century after Miningerode. In 972 it was taken by Charle-

magne, in whose time the bishopric was founded and a monastery built, whence the name of Münster is derived. A navigable canal connects Münster with the Ems; and a railroad 21 miles in length unites it to the Hamm station on the Köln-Minden line.

Bocholt, on the Aa, about 45 miles W. from Münster, has a castle, belonging to the princes of Salm-Salm, manufactures of woollens, cotton, silk, hosiery, spirits, soap, and a population of 4800. There are extensive iron-works in the vicinity of the town. At Anholt, a small town near Bocholt, is the principal residence of the prince of Salm-Salm. [ANHOLT.] Borken, S.W. of Münster, on the Aa, has 3000 inhabitants, who manufacture linen, broadcloth, serge, and chicory. Kösfeld, 20 miles W. from Münster, on the Berkel, is surrounded by old fortifications, and defended by a castle; the manufactures are linen and woollen cloth. It has a population of 3500, and a Catholic gymnasium with 12 teachers and 150 scholars (in 1850). Kösfeld is the residence of the Horstmar branch of the house of Salm. Recklinghausen, formerly the capital of a circle, is situated on the Lippe, about 30 miles S.W. from Münster, on the slope of the Hard Mountain, and has an old ducal residence, two churches, an asylum for females of noble birth, some linen manufactures, steel-works, and about 3000 inhabitants. There is a Catholic gymnasium in the town, which had 10 teachers and 130 students in 1850. Recklinghausen was formerly the capital of a small sovereign county, 301 square miles in extent, which belonged to the Duke of Arenberg; the duke is still the proprietor but the sovereignty vests in the king of Prussia. Steinfurt, N.W. of Münster, a residence of the princes of Bentheim, has a population of 2700, who manufacture linen and leather. Warendorf, E. of Münster, on the Ems, has a gymnasium, a mad-house, several bleach-works, an important linen market, and 4200 inhabitants, who manufacture linen and broadcloth.

MUONIO-ELF. [BOHNSIA.]

MUR. [CÔTES-DU-NORD.]

MUR-DE-BARREZ. [AVEYRON.]

MURAT. [CANTAL.]

MURCIA, an ancient province of Spain, formerly a kingdom, is bounded S. by the Mediterranean Sea and the province of Granada, N. and N.W. by Castilla la Nueva, E. and N.E. by the Mediterranean Sea and the province of Valencia, W. by the province of Jaen, and S.W. by the province of Granada. It is situated between 37° 23' and 39° 16' N. lat., 40' and 3° 8' W. long. The greatest length from north to south is about 130 miles, the greatest width from east to west is about 110 miles. The area is 7877 square miles. The population in 1849 was 595,531. It is divided into the two following modern provinces:—

Provinces.	Area in Square Miles.	Population in 1849.
Murcia	7,877	400,000
Albacete		195,531
Total	7,877	595,531

Surface.—The form of Murcia is very irregular, and the boundaries are for the most part conventional. Only at the extreme western angle the Rio Guadarmena forms a natural line of separation between Murcia and the provinces of La Mancha and Jaen. The modern province of Albacete comprises the interior or north-western part of the old province; the modern province of Murcia comprises the south-eastern portion, or that next the coast, the line of division between the two being formed by the summit level of the Sierra de Sagra extended along the line of the sierras of Jumella, Yecla, and Villena.

The coast from the boundary of Granada as far as Cartagena presents a series of steep and elevated cliffs; eastward from that port to the Cabo de Palos the coast is low and sandy, the cape itself being the termination of a ridge of hills from the interior; northward of the Cabo de Palos is a shallow land-locked sea-lagune called the Encañizada de Murcia. The Sierra de Sagra, interrupted by the valley of the Rio Mundo, may be said to extend under different names from south-west to north-east through the centre of the province, forming a natural line of division between the two modern provinces. The Sierra de Alcaraz crosses the western corner of the province, extends through a part of La Mancha, and again enters Murcia near Chinchilla, filling up the north-western angle. The Sierra de Segura crosses the province between the Sierra de Alcaraz and the Sierra de Sagra; all these mountain ridges being in fact offsets from the eastern end of the great chain of the Sierra Morena. Another series of mountains extends from the province of Granada, south of the town of Lorca, to Cartagena, and this series includes the great mining district of Murcia. Other mountain groups cross the province in various directions, separated from each other by extensive valleys and a few level tracts. The only plain of considerable extent lies between Cartagena and Orihuela, and this plain is divided into two portions by a chain of sandstone hills on the southern side of the Sangonera. The Sierra de Segura is a mass of gray and white limestone, and most of the other mountain ranges belong to the same formation. Trachyte and other volcanic rocks occur at Almazarron; and here and in the mountains south of Lorca the mining operations are chiefly carried on. Porphyry, greenstone, primary slates, fine

marbles, rock-crystal, and gypsum, are found in various parts of the province.

Rivers.—There is only one river-system in Murcia, that of the Río Segura and its affluents. The Segura rises at the southern end of the Sierra de Segura, and has a northern course for about 50 miles, and in this part of its course receives the Taivilla on the eastern bank. It then turns to the east, and having received the Mundo from La Mancha, takes a southern course, receiving on its western bank the Moratara, the Caravara, and the Quipar. It then takes an eastern course, passes by the city of Murcia, below which it receives the Sangonera from the south, and soon afterwards enters the province of Valencia, where it falls into the sea below the Albufera de Elche.

Climate, Soil, and Productions.—The climate of Murcia is varied. Storms are not unfrequent in the spring; the summers are temperate on the sea-coast and among the mountains, but intensely hot in the plains, the mercury often rising above 100° Fahr. in the shade; the autumns are delightful, and the winters are so mild that ice and snow are almost unknown. Clouds and fogs are rare, and the sky is almost always blue and bright; but on the other hand rain very seldom falls.

Except in the vicinity of the Río Segura and its tributaries, the soil is generally parched for want of water, and in many parts is almost a desert; but in the river-valleys and wherever irrigation can be abundantly supplied, the fertility is excessive, especially of those districts which are called Huertas, or gardens. A large portion of the vale of Murcia is of this character. This portion is about 16 miles long, extending south-west and north-east from the city of Murcia, and 7 or 8 miles wide, is watered by the Sangonera and the Segura, and bounded by mountain ranges on both sides. It is divided into fields by embankments about two feet high, to assist the process of irrigation, and by rows of mulberry-trees and various kinds of shrubs. The whole of the vale may be seen from the top of the tower of the cathedral of Murcia, whence it presents the appearance of a garden extending as far as the eye can reach, luxuriantly green even in winter, and producing wheat, flax, pulse, and vegetables, interspersed with fig-trees, orange-trees, and stately palms. The vale of Lorca is comparatively small, but is rendered very fertile by an artificial system of irrigation supplied from a vast reservoir of water called the Pantano de Lorca. This reservoir was formed by damming back a stream which ran through a narrow gorge between mountains, and afterwards fall into the Sangonera. A dyke of stone was constructed of enormous height and thickness, and thus a deep lake was formed. The dyke was finished in 1789. It was quite filled with water in February 1802, but on the 2nd of April it gave way, doing a vast amount of damage throughout the whole extent of the vales of Lorca and Murcia. It has since been repaired, and the water is distributed in such quantities as are required.

The vegetable productions are wheat, barley, rye, rice, maize, flax, vegetables, and fruit of superior quality, particularly oranges, lemons, melons, and pomegranates. The most common trees are the mulberry, the olive, and the carob; evergreen and other oaks are in some parts numerous. The pines on the Sierra de Segura form the largest forest in the south of Spain. The oleander, cistus, and other odoriferous shrubs, grow wild, and the prickly pear and American aloe flourish luxuriantly. Barilla is made on the sea-coast. Rich wines, oil, and silk are produced in considerable quantities. The esparto-rush grows spontaneously in the uncultivated districts, and is worked up into baskets, mats, ropes, and other useful articles. The farming stock are principally sheep and goats, horned cattle being rare. The pigs are very large and well fattened; they are fed on the acorn of the ilex-oak and other produce of the forests. Game is abundant. Wolves, foxes, and wild boars inhabit the mountains.

The minerals are lead, silver, sulphur, and nitre. The lead and silver-mines are mostly near the coast, between Cartagena and the province of Granada.

The articles exported from the province of Murcia mostly pass through the port of Cartagena. They consist of wheat, barley, maize, oil, barilla, red pepper, esparto-rush, and raw and manufactured silk. The imports are salt-fish, sugar, cocoa, coffee, rice, iron, and contraband articles of hardware, linens, woollens, earthenware, and tobacco.

Of manufactures there are very few, and of none enough to supply the consumption of the province. The silk-manufacture, once large, has now almost ceased. It is chiefly the product of hand-labour, and cannot compete with the silk goods of Valencia, which are mostly produced by machinery. Good wines are made; but the manufactures of brandy, coarse linen, hemp, flax, cutlery, and gunpowder, are inferior in quality and not considerable in quantity.

Towns.—The city of Murcia is the capital of the ancient province as well as of the modern. [MURCIA.] *Albacete*, 85 miles N.N.W. from Murcia, is the capital of the modern province of Albacete. From its central position, whence roads branch to Murcia, Valencia, and Madrid, it is a place of great traffic. It stands in an extensive plain, which is irrigated by a canal, and produces large quantities of corn and saffron. The town is famous for its cutlery, coarse indeed, but such as satisfies the Spaniard, especially the long pointed two-edged púñal, or dagger-knife. The population is about 13,000. *Alhama*, 23 miles S.W. from Murcia, is frequented for its warm baths. There is a Moorish castle in ruins. The population is about 7000. *Almanza*, 38 miles E. by S.

from Albacete, is a well-built and tolerably flourishing town. The vega, or plain, is irrigated by means of the Pantano of Alfera, a fine reservoir of water, and the produce is abundant. The population is about 7000. *Caravaca*, 45 miles W. by N. from Murcia, is a considerable town at the base of the south-eastern side of the Sierra de Segura, and on the northern bank of the Río Caravaca. It contains a ruined Moorish castle, a college, and some conventual buildings. The population is about 10,000. *Cartagena* is the chief port of the province. [CARTAGENA.] *Chinchilla*, 11 miles S.E. from Albacete, is surrounded by ancient walls, and has an old castle. There are manufactures of coarse cloth. The population in 1845 was 12,609. *Cieza* (*Zieza*), 27 miles N.W. from Murcia, is situated near the north bank of the Segura. It has manufactures of coarse cloth, and in 1845 contained a population of 6917. *Hellin*, 52 miles N.W. from Murcia, is situated in a hilly district not far from the eastern bank of the Mundo. It is tolerably well built; most of the houses are painted, and the streets are well paved. It contains a fine old parish church, and there are remains of a Roman fortress. The population in 1845 was 9814. *Jumilla*, 40 miles N.N.W. from Murcia, stands at the foot of a hill which is crowned by an old fortress. It is a bishop's see, is tolerably well built, and has manufactures of fire-arms, earthenware, and tiles. The population in 1845 was 7862. *Lorca*, 45 miles S.W. from Murcia, is situated on the south bank of the Sangonera, in a beautiful and highly-cultivated vale, with mountains on both sides. The streets of the old part of the town are irregular, steep, and narrow, but clean; the new part has wider streets more regularly laid out. The castle on the Monte de Oro was formerly very strong, and is still a fine specimen of a fortress of the middle ages. The long lines of walls are the work of the Moors. The town contains a collegiate church, a gothic church, a bishop's palace, a college, and two hospitals. There are manufactures of linen-cloth, saltpetre, and thread. The population in 1845 was 40,469. *Mula*, 25 miles W. from Murcia, is resorted to for the warm mineral baths in the neighbourhood. It has some manufactures of pottery, and contains a population of about 6500. *Segura de la Sierra*, 95 miles W.N.W. from Murcia, is situated between the Río Guadalimar and the Sierra de Segura. The population is about 2500, who are mostly employed in the lead-silver- and copper-mines in the vicinity. *Totana*, 30 miles S.W. from Murcia, is one of the head-quarters of the gipsies of Murcia. It contains a fine fountain supplied by an aqueduct, and has some manufactures of linen, earthenware, brandy, and saltpetre. The population in 1845 was 8500. *Villena*, 50 miles N.N.E. from Murcia, stands near the foot of Monte San Cristoval, which is crowned with a castle now in ruins. It contains a town-hall, palace, hospital, barracks, and brandy distilleries. The streets of the town are narrow and winding, but it has an extensive modern suburb of better architecture. The population in 1845 was 8224. *Yecla*, 48 miles N. from Murcia, stands at the foot of the Cerro de Calvario, which is crowned by a ruined Moorish castle. It has distilleries of brandy, and contains a population of 9400.

History.—Murcia was the part of Spain first colonised by the Carthaginians, who, about B.C. 202, founded New Carthage, now Cartagena. [CARTAGENA.] It passed, with the rest of the peninsula, under the dominion of the Romans and Goths. From the Goths it was conquered in 552 by Justinian, emperor of the East, and it remained in the hands of the Greeks till 624, when it was recovered by the Gothic king Suintilla. In 712 it was conquered by Abdalaziz, son of Musa, the Arab invader of Spain. It continued subject to the khalifs of Cordova till 1144, when, after the breaking up of that khalifate, it fell under the dominion of the kings of Granada; but in 1221 was re-annexed to Cordova. In 1239 it was raised into a distinct kingdom by Hudiel, who the following year submitted to Ferdinand the Saint, king of Castilla, consenting to pay tribute on condition of being allowed to retain the crown for life. In 1264 he endeavoured to regain his independence, but was conquered and dethroned in 1266 by Alonso X. of Castilla and James I. of Aragon. Murcia ever afterwards continued in the possession of the Christians.

(Mados, *Diccionario Geografico de España*; Laborde, *Itinéraire Descriptif de l'Espagne*; Townsend, *Journey through Spain*; Cook, *Sketches in Spain*; Ford, *Handbook of Spain*; Inglis, *Spain in 1830*; Hoskins, *Spain as it is*, 1851; Mariana, *Historia General de España*; Conde, *Los Arabes en España*.)

MURCIA, a city of Spain, capital of the ancient kingdom and province of Murcia, and of the modern province of the same name, is situated in 38° 2' N. lat., 1° 14' W. long., 230 miles S.E. from Madrid. The population in 1845 was 48,488. It stands on the northern or left bank of the Segura, a little above the junction of the Sangonera. The beautiful garden-like vale is described under the province. The approach to the city from Lorca is by a wide avenue four miles long, bordered with trees, and terminated by two lofty towers of one of the churches. A fine bridge, built in 1720, crosses the Segura, and connects the city with a suburb on the right bank of the river.

Murcia is the see of a bishop, suffragan to the archbishop of Toledo. The city was built by the Moors out of materials of the Roman Murcia. It was formerly walled, but is now open. The streets are generally narrow, but clean, and here and there small squares and gardens filled with palms, cypresses, and orange- and lemon-trees, promote the ventilation and gratify the eye. The houses also, being painted in various colours, mostly blue, pink, and yellow, add to the picturesque effect.

The houses are generally low and flat-roofed; those of the principal square, or plaza, have highly-wrought-iron balconies, and in this plaza is the episcopal palace, also painted. The cathedral was begun in 1353, and received additions and alterations in 1521 and subsequently. The architecture is consequently of mixed styles of gothic. The belfry-tower was begun in 1522 and completed in 1766. It is of a square form, rises in diminishing stages, and is crowned by a dome. It is 10 feet higher than the tower of the cathedral of Sevilla; and, like that tower, is ascended by an inclined plane 320 paces in length and gradually increasing in steepness as far as the top of the first stage, where there is a gallery with a balustrade. A narrow staircase of 40 steps conducts thence to the belfry, and there are 70 steps more to the highest gallery, whence the view is truly magnificent, embracing not only the Huerta of Murcia, but the whole extent of the vale, a distance of about 30 miles. The interior of the cathedral contains some gothic chapels of delicate workmanship. There are no pictures; they were carried off by the French. There are ten other churches, several colleges, a town-hall, a plaza de toros, an hospital, a botanic garden, and two or three public libraries. It had upwards of 20 conventual buildings, which since the suppression have been taken down or converted to secular uses. The promenades are the Alameda del Carmen and the Arsenal.

The trade and manufactures of the city are inconsiderable. There are oil-mills, white-lead works, potteries, and tanneries. The government manufactories of nitre and gunpowder are nearly inactive. The esparto-rush is wrought into baskets, mats, cordage, and sandals. Some silk thread is spun, and small quantities of silk fabrics woven. There are also a few establishments for the manufacture of coarse linen-cloth. Fruits are exported.

(Ford, *Handbook of Spain*; Inglis, *Spain in 1830*; Hoskins, *Spain as it is*, 1851.)

MURET. [GARONNE, HAUTE.]

MURO. [BASILICATA.]

MURRAY, RIVER. [AUSTRALIA; SOUTH AUSTRALIA.]

MURRUMBIDGEE. [AUSTRALIA.]

MURVIEDRO. [VALENCIA.]

MUSCAT, or MASCATE, a sea-port town on the east coast of Arabia, in the province of Oman, is situated on a peninsula which is joined to the island of Muscat by a reef of rocks, in 23° 48' N. lat., 58° 40' E. long., and has about 60,000 inhabitants. High lands to the south and west, and the island towards the east shelter the harbour, the entrance to which is from the northward, and protected by forts on each side; within there is room enough for a large fleet to moor in 4 or 5 fathoms water. A fort close to the town, and two other forts on the western side of the harbour command the whole of the port. The town is surrounded with walls and otherwise strongly fortified. The houses are only one story high, with the exception of some handsome stone buildings erected by the Portuguese. There are also some houses built in the Persian style, and an aqueduct.

Muscat is a great commercial entrepôt, and has a very active trade. A large number of ships belong to it, and trade to British India, Sumatra, the Malay Peninsula, the Red Sea, and eastern coast of Africa, the Comoro Isles, and Madagascar. Indeed wherever Arab traders are met with, between Africa and China, they may be set down as belonging to Muscat. The port is resorted to by ships from every part of Persia and Arabia. British and French merchantmen trading to the Persian Gulf stop at Muscat to sell and purchase goods. Besides its maritime commerce, Muscat carries on an extensive trade with the Arab tribes of the interior. The principal articles of the commerce of Muscat are—asafoetida, almonds, raisins, pistachio nuts, combrine aloes, gum ammoniac, sulphur, gum copal, and saltpetre. Other articles are frankincense, pearls, gall-nuts, coffee, cocoa-nut-oil, galbanum, hides, cotton-wool, mother-of-pearl, gum, bees'-wax, raw-silk, indigo, tortoise-shell, rhinoceros-horns, pepper, cochineal, cinnamon, sugar, rice, sandal-wood, dates, saffron, wheat, horses, salt, dried-fish, &c. Most of these articles are imported in Arab vessels from Persia, Zanzibar, Africa, and Western Arabia, and are exported to India, the Mauritius, Bourbon, Calcutta, Bombay, America, France, Zanzibar, &c. The tissues imported at Muscat are British and American long-cloths, British calico-prints, India shawls, Chinese silks, &c. The country near the town is barren, but provisions, fruits, vegetables, and fresh-fish are abundant in the markets. Bullocks, sheep, and fowls are to be had at a reasonable price. The annual imports into Muscat are probably under-estimated at a million sterling. Imports pay a duty of 5 per cent. if coming from Arabia, America, or Great Britain; 4 per cent. if coming from Bourbon. No duties are charged on exports. There is a large town called *Muttra*, 8 miles to the westward, nearly as large as Muscat. There is a good road between the two places. At *Muttra* vessels can be hauled ashore. In the interior there is another large town called *Rostak*.

Muscat was a place of considerable trade before the arrival of the Portuguese in the Indian Ocean, and it was then subject to Ormuz. Albuquerque took it in 1507, but had immediately to put down a bloody insurrection of the Arabs. On the destruction of Ormuz Muscat became the principal centre of trade in this part of the East, and yielded enormous profits to the Portuguese, who held the town till 1648. During this interval they built the fortifications and greatly improved the city, having erected a handsome church, a college,

and many other public structures, besides many superb stone houses. After being gorged with wealth the Portuguese treated the natives so badly and put so many restrictions on their commerce, that they took up arms and drove the Portuguese to their ships. Many unsuccessful attempts were made by the Portuguese to recover the town.

Left to themselves, the Arabs of Muscat—expert seamen, skilled in the use of fire-arms—soon raised a maritime force which overawed not only the neighbouring coasts, but also the European powers in India. By 1694 they had made themselves masters of several places in the Persian Gulf, and were threatening Gombroon; and the British government, acting upon the report of their resident at that place, proposed to send out an armament to clear the Indian seas, and “to root out that nest of pirates the Mascate Arabs.” In 1707 the Arabs obtained permission to build ships at the ports of Pegu from the king of that country; and their fleets, comprising ships of from 30 to 50 guns, annoyed trade in the Indian Ocean, and frequently made descents on the towns along the Malabar coast. With the Persians they were almost continually at war, although Persian traders were always permitted to trade at Muscat or any of its dependencies; all Persian ships of war were considered fair game. Since the beginning of the present century they have laid aside their piratical practices, and have confined themselves principally to commerce; and during the rule of the present Imam the territorial dominions, naval power, and commercial importance of Muscat have increased so vastly as to entitle him to be numbered among the great powers of the world. He has commercial treaties with Great Britain and the United States, and has opened intercourse with several European powers.

The Imam of Muscat claims as his possessions in Asia all the south-east coast of Arabia from the frontier of the British settlement of Aden to Ras-el-Had; all the territory of Oman along the east coast of Arabia, the sea-coast and islands in the Persian Gulf, including the Bahrein Islands and the pearl-fishery contiguous to them; and the coast of the Mukran. In Africa he claims sovereignty over all the coast from Cape Delgado to Cape Gardafui, including the ports of Mungallow, Lindi, Quiloah, Melinda, Lamoo, Brava, Magadoxa, &c.; and the valuable islands of Mafca, Zanzibar, Remba, Socotra, &c. Only a small part of this immense territory is garrisoned by his troops, but all, or nearly all, of it is tributary to him. He rules with patriarchal and despotic sway, but it is said in a just and liberal spirit. His government is strict and to Europeans courteous. A foreigner may walk the streets of Muscat at any hour of the night unmolested. Goods are piled up in the streets exposed night and day, and pilfering is never attempted.

The Imam derives his revenue, which is more than adequate to his expenditure, chiefly from commerce, in which he employs a great number of merchant vessels; from import dues on foreign merchandise; and from tribute money or the equivalent presents made him by princes under his sway. His naval force, more efficient than that of all the native emperors and princes from the Cape of Good Hope to Japan, numbered in 1837 15 vessels, carrying from 6 to 74 guns; 50 baghelas (one-masted vessels of 200 to 300 tons), carrying 8 to 18 guns; and 10 halits (one-masted vessels of 100 to 200 tons) carrying 4 to 6 guns. The number of vessels belonging to the port of Muscat at the same time, was estimated at 2000 of all sizes, a very large proportion of these being small craft. He has intelligent officers and abundance of sailors; but he keeps only a small number of regular troops as he can have any number of Bedouins, whenever he wants them, merely for the clothing and maintenance. His naval force however is sufficient to enable him to maintain his power against all native pretensions over all the territories he claims as his own. [See SUPPLEMENT.]

MUSCATINE. [IOWA.]

MUSKERRY MOUNTAINS. [CORK.]

MUSKINGUM. [MISSISSIPPI, RIVER.]

MUSSELBURGH. [EDINBURGSHIRE.]

MUSSIDAN. [DORDOGNE.]

MUSSY-L'ÉVÊQUE. [AUBE.]

MUSTIGANNIM. [ALGÉRIE.]

MUTFORD and LOTHINGLAND, a hundred in the county of Suffolk which has been constituted a Poor-Law Union. It is bounded N. and W. by Norfolk, E. by the North Sea, and S. by the hundreds of Blything and Wangford, and comprises 26 parishes and hamlets, with an area of 83,315 acres, and a population in 1851 of 16,164. Mutford and Lothingland Poor-Law Union comprises 24 parishes and townships, with an area of 32,732 acres, and a population in 1851 of 19,854.

MUTTRA. [HINDUSTAN; MUSCAT.]

MYCENÆ, an ancient town and state in the north of the Peloponnesus, founded, it is said, by Perseus, and which in the time of its king Agamemnon was the most powerful state of Greece, ruling over the greater part of the Peloponnesus, and many islands. The small kingdom of Argos was then subject to Mycenæ. But after the death of Agamemnon and the extinction of the dynasty of Atreus, Argos gained the ascendancy over Mycenæ, which however protected by Sparta still maintained a sort of independence. During the Persian war, Argos did not send any assistance to the Northern Greeks, but the contingent from Mycenæ was present at Thermopylæ. This added to the grudge which Argos bore against Mycenæ for its pride of

antiquity and independence, and after the end of the Persian campaign, while Sparta was distracted by intestine commotion and afflicted by the consequences of an earthquake, the Argives, being joined by the people of Tegea and Cleonæ, attacked Mycenæ, which they took after a stout resistance, and razed to the ground, B.C. 468. Part of the inhabitants were made slaves; the rest emigrated to Ceryneia, Cleonæ, and some even to Macedonia. (Diodorus, xi.; Herodotus; Pausanias.) Mycenæ never rose from its ruins, but these ruins still are of considerable magnitude, and very remarkable. In the time of Pausanias (ii. ch. 15, 16) they consisted of a great part of the walls, with the gate of the Lions, said to be the work of the Cyclopes; the fountain called Perseis; and the subterraneous buildings of Atreus and his sons, in which their treasures were deposited. There were likewise to be seen the tombs of Atreus, Agamemnon, of his charioteer Eurymedon, of Electra, and others. "But Clytemnestra and Ægisthus," adds Pausanias, "were interred at a little distance from the walls, being thought unworthy of burial where Agamemnon lay and those who were slain together with him."

According to Leake, Mycenæ was built upon a rugged height in a recess between two commanding summits of the range of mountains which border the eastern side of the Argolic plain, about 7 miles N. by E. from Argos. The Acropolis, the entire circuit of which is still seen, the ruined walls being in some places from 15 to 20 feet high, resembled many other fortresses in Greece, being built on the summit of a steep hill between two torrents. Its length is about 400 yards, and its breadth about 200 yards. The ground rises considerably within the inclosure; on the summit are the openings of subterraneous cisterns or granaries built of large irregular stones lined with plaster. It has a great gate at the north-west angle, and a postern towards the north-east. The door-case is formed of two massive upright blocks of stone, covered with another which is 15 feet long, 4 feet wide, and 6 feet 7 inches high. Upon this stands a triangular stone of green basalt 12 feet long, 10 feet high, and 2 feet thick, upon the face of which are represented in bas-relief two lions standing on their hind legs, one on each side of a round pillar or altar, upon which they rest their fore paws. Below the Acropolis, in the direction of the modern village of Kharvati, are the Spiliæ, or subterraneous chambers, known in the time of Pausanias by the name of the Treasury of Atreus. The largest of these chambers, which is of a conical form, is about 50 feet in diameter at the base. The door-ways are ornamented with half-columns of a style resembling the Tuscan. With the exception of some later reparations, easily distinguished from the oldest part, which is of the kind called Cyclopean, everything left at Mycenæ dates from the heroic

ages. Notwithstanding this remote antiquity, Mycenæ has undergone less change than any place in Greece since the time of Pausanias.

(Leake, *Travels in the Morea*.)

MY'CONOS, MICONI, one of the Cyclades, is situated east of Delos, from which it is separated by a narrow channel. It is about 10 miles in length, and 6 miles in its greatest breadth. The island is mountainous, and not very fertile: it produces some corn, wine, and cotton, but is deficient in wood. It exports wine, figs, and hides. The population is about 6000. On the west side of the island is the chief town, also called Mycone, which has a harbour and about 5000 inhabitants, who are by repute good sailors. The island belongs to the kingdom of Greece, and is included with the other Cyclades in the name of Syra. Myconos and Tinos form the see of a Roman Catholic bishop.

MYGDONIA. [MACEDONIA.]

MYRTOAN SEA. [ÆGEAN SEA.]

MYSIA, an ancient province in the north-west of Asia Minor, was bounded N. by the Propontis, W. by the Hellespont and the Ægean Sea, S. by Lydia, from which it was divided by the mountains which separate the valley of the Caicus from that of the Hermus, and E. by the Rhyndacus, which divided it from Bithynia. On the south-east the high land forming the interior of Mysia joins the central table-land of Phrygia towards the town of Azani. Herodotus (vii. 74-75) says that the Mysians were a Lydian colony. Strabo (xii.) says that "the Mysians of Asia were considered to be Lydians by some, and Thracians by others." This may mean that Thracian immigrations became mixed with the previous inhabitants of Lydian race. Repeated Thracian immigrations are mentioned as having taken place before and after the Trojan war. Then came the Æolians, who occupied the maritime coast from the Hermus to the Æsepus, and built their cities there. Geographers distinguished Æolia and Troas from Mysia. [TROAS; ÆOLIANS.]

Mysia became subject to the Lydian monarchy, after the fall of which it formed part of one of the satrapies of the Persian empire that included also Lydia. It was afterwards in succession under the Macedonians, the kings of Pergamus, and the Romans. Under the Romans it formed part of the province of Asia. Its principal towns were ABYDOS, CYZICUS, PERGAMUS, LAMPACUS, ADAMYTTIUM, and MILETOPOLIS, near the lake of the same name. The principal rivers of Mysia were the Caicus in the south and the Æsepus in the north; the smaller ones were the Evenus and the Granicus. [ANATOLIA.]

(Leake, *Asia Minor*; Fellows, *Journal*.)

MYSORE. [HINDUSTAN.]

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NAARDEN. [HOLLAND.]

NAAS, Kildare county, Ireland, a market and assize town, and the seat of a Poor-Law Union, is situated on the Dublin and Limerick road, in 53° 13' N. lat., 6° 40' W. long., distant 20½ miles S.W. from Dublin by road. The population in 1851 was 3132. Naas Poor-Law Union comprises 38 electoral divisions, with an area of 216,622 acres, and a population in 1851 of 44,863.

Naas was in early times a seat of the kings of Leinster. In 1419 a parliament was held in it. The town obtained charters from Henry V., Elizabeth, and James I. It returned two members to the Irish Parliament, but was disfranchised at the Union. Naas is pleasantly situated in a fertile and improved district. It consists of a street extending along the Dublin road, with several branches on each side. In the main street is the parish church, an old building in the early English style, enlarged in 1822, and again a few years back. There are a large Roman Catholic chapel, with a nunnery adjacent; an Independent chapel; a diocesan school; and several schools partially endowed. The town also contains a market-house, a county court-house and jail, a large infantry barrack, a fever hospital, dispensary, and Union work-house. There are the remains of an Augustinian monastery in the town; and a rath or high conical mound on which the states of Leinster are said to have held their assemblies. A branch of the Grand Canal passes near the town. Quarter and petty sessions are held. The market-days are Monday, Thursday, and Saturday. Fairs are held 12 times a year.

NABLOUS. [SYRIA.]

NAGASAKI. [JAPAN.]

NAGORE. [CARNATIC.]

NAGPOOR. [HINDUSTAN.]

NAILSWORTH. [GLOUCESTERSHIRE.]

NAIRN, the county town of Nairnshire, Scotland, a royal and parliamentary burgh and market-town, is situated on the left bank of the river Nairn, near its confluence with the Moray Frith, in 57° 35' N. lat., 3° 52' W. long., distant 15½ miles N.E. from Inverness, 198 miles N. from Edinburgh, and 86 miles N.W. from Aberdeen. The population of the parliamentary burgh in 1851 was 2977; that of the royal burgh was 3401. The town is governed by a provost, 3 bailies, and 13 councillors; and, with Inverness, Forres, and Fortrose, returns one member to the Imperial Parliament. The town is lighted

with gas and paved. By means of a breakwater recently erected the harbour has a depth of water of about 12 feet at high tide. Belonging to the port are 13 vessels, of an aggregate burden of about 1000 tons. There are about 70 herring boats, giving employment to many of the inhabitants. The public buildings consist of the town- and court-house and the jail; the hospital is a neat building of Italian design. Besides the Established church, there are a Free church, and chapels for Episcopalians, United Presbyterians and Independents. Rose's Academical Institution was endowed by a townsman, the late Captain Rose, R.N. There are also several other schools, and a savings bank. A corn-market is held every alternate Thursday. On the south side of the town, on the bank of the river, in the Constabulary Garden, are a few remains of Cawdor Castle, of which the Thanes of Cawdor were hereditary constables till 1747.

NAIRNSHIRE, a small maritime county in the north-east of Scotland, bounded N. by the Moray Frith, E. and S. by Elginshire, and W. by Inverness-shire, lies between 57° 20' and 57° 40' N. lat., 3° 40' and 4° 6' W. long., and extends from north to south about 22 miles, and from east to west about 10 miles. Its area is 215 square miles, or 137,500 acres, of which little more than one-fourth part is in cultivation: the rest consisting principally of waste, moor ground, wood, lake, and moss. The population in 1851 was 9956. The county unites with Elginshire in returning one member to the Imperial Parliament.

Coast-line, Surface, Hydrography, Communications.—The line of sea-coast extends about 10 miles. To the eastward are the Mavistoe sand-hills, whence it is supposed the great sand floods were blown which buried a great portion of the land to the eastward about two centuries ago. The westward part of the sea-shore is low and bare; near the coast runs a raised beach or terrace bank, composed of sand, gravel, and boulders, with shells occasionally mixed. The surface is of a varied character. The upper districts are hilly, the lower an undulating plain, from 1 to 5 miles broad, and characterised by a light and gravelly soil, with some deposits of clay and protruding rock. This portion is occupied by cultivated fields of wheat and the usual cereals; grains; potatoes are grown plentifully. The upper parts of the county abound with thriving plantations of Scotch fir, larch, and hardwood. The Nairn and Findhorn are the only rivers belonging in part to this county. The Nairn rises in Strathnairn, in Inverness-shire; in Nairnshire it is joined by the picturesque burn of Cawdor. Its course

is in a north-easterly direction, through the richest part of the county; from its source to its fall into the Moray Frith is only 35 miles; trout and salmon are taken in it. The Findhorn is described in ELGINSHIRE. The lochs of Bellivat, in the parish of Ardsalach, and Loch Lee, in Auldearn, are the resort of wild fowl.

The leading lines of turnpike-road are those from Nairn to Forres, to Inverness, to Fort George, Campbeltown, and The Ferry; and to Grantown. Within the last 25 years good cross roads have been constructed in every direction over the county, and there is now constant steam communication between Nairn and Edinburgh, Aberdeen, Cromarty, and Inverness.

Geology, &c.—Nairnshire may be divided into the hilly regions of primitive rock, comprehending granite, gneiss, mica-slate, primary limestone, hornblende, quartz, &c., and the low undulating country comprehending old red-sandstone rocks. There are several quarries of freestone; the stones obtained from a quarry in the estate of Boath are much sought after for ornamental building.

Climate, Soil, and Agriculture.—The early part of spring is generally severe from snow showers, biting winds, and frost; in the early and later part of summer north-easterly winds are frequent. Along the coast the snow disappears much sooner than in the interior of the county. The general character of the soil is light and sandy, but in many parts the surface soil is a deep loam. In the upper districts, from the abundance of vegetable matter, &c., in the fields, lime has stimulated the soil to great productiveness. Over the county oats and barley are the staple, though wheat is also grown to a great extent. There is much improvement in the breeding of cattle, sheep, swine, and horses; and the agricultural implements employed are generally good. The universal term of lease is 19 years. The farms vary in size from 30 to 200 acres each of arable land.

Divisions, Towns, &c.—Nairnshire contains four entire parishes, and portions of five others belonging to the surrounding counties. The sheriff of Elginshire is also sheriff of Nairn. The only town is NAIRN. Only two agricultural villages are worthy of mention—*Auldearn* and *Cawdor*.

History, Antiquities, &c.—Near to the village of Auldearn, Montrose obtained a great victory over the Covenanters in 1645. About a mile west from Nairn the Duke of Cumberland's army encamped in 1746, prior to the battle of Culloden. The greater part of Cawdor Castle was built in 1454; though the popular tradition makes this the castle in which king Duncan was murdered by Macbeth. Kilravock Castle dates from 1460. Of ecclesiastical antiquities the most interesting are the ruins of the chapel of the Virgin at Geddes, and of the kirk of Barivan in Cawdor parish. The vitrified fort of Dun Evan is situated on the summit of a hill in the parish of Cawdor; that of Castle Finlay, in the parish of Nairn, unlike similar vitrified forts, is in a hollow part of the hill of Urchanly. Scattered over the country are many stone circles and cairns.

Religious Worship, Education, &c.—According to the Returns of the Census for 1851, there were then in the county 10 places of worship, of which 4 belonged to the Free Church, 3 to the Established Church, 2 to the United Presbyterians, and 1 to the Independents. The total number of sittings provided was 4948. The number of Sabbath-schools was 14, of which 8 belonged to the Free Church, and 2 each to the Established Church and the United Presbyterian Church; the total number of Sabbath scholars was 994. The number of day-schools was 21, of which 14 were public schools with 798 scholars, and 7 were private schools with 260 scholars. In 1853 there was one savings bank in the county, at Nairn. The amount owing to depositors on November 20th, 1853, was 3523*l.* 6*s.* 1*d.*

NAJAC. [AVNYRON.]

NAKHICHEVAN. [GEORGIA.]

NAKITSHEVAN. [EKATARINOSLAV.]

NAMUR (*Namen*), a province of Belgium, is bounded N. by Brabant, N.E. and E. by Liège, S.E. by Luxembourg, S. by France, and W. by Hainault. Its greatest length from north to south is 55 miles, from east to west 45 miles; its area is 1411 square miles, and the population in 1849 was 268,143. The province is watered by the Meuse, the Sambre, the Lesse, and several small streams. [MEUSE.] The south of the province is divided in two parts by a long projection of the French territory which terminates near the strong fortresses of Givet and Charlemont, on the Meuse. The soil of the province is generally fertile, consisting for the most part of an unctuous marl, but without any great depth. The valley of the Meuse between Namur and Liège is exceedingly beautiful. Of the three arrondissements into which the province is divided, namely, Namur, Dinant, and Philippeville, that of Namur is the most productive, the other two being more stony. The principal agricultural products are wheat, rye, oats, barley, hemp, flax, and chicory. The grain harvests do not more than suffice for the consumption of the province. There are few natural meadows in the district of Namur, but in the other parts of the province the meadows are the most profitable of the lands. Artificial grasses are also much cultivated. Wood grows abundantly in the province. The trees are principally oak, beech, ash, hornbeam, birch, and hazel. The breeding of draught horses forms an important branch of rural occupation; they are strong and active, and the farmers are careful to preserve the breed unmixed. Great numbers of swine are bred.

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The iron-mines of this province, which lie between the Sambre and the Meuse, are very productive, and give employment to a large portion of the population. Lead-mines are worked near the city of Namur. A great number of coal-mines are worked. Marble is quarried in different parts of the province; it is of various colours, red, gray, blue, and black; the greatest portion of what is raised is exported to France. Pottery-clay is found. The department is crossed by the Liège-Namur railroad, and by the Sambre and Meuse line from Charleroi to Mariembourg and Couvin in the valuable iron and coal district in the west of the province.

Namur, the capital, situated in 50° 28' N. lat., 4° 48' E. long., 67 miles by railway S.E. from Brussels, at the confluence of the Sambre and the Meuse, has 20,471 inhabitants. It is strongly fortified, entered by 11 gates, and commanded by a strong citadel, built on high ground, from which there is a beautiful view of the town and the two rivers. The streets are wide and clean; the houses are mostly built of a bluish stone, and are slated. There are several squares; two bridges, one over the Meuse, the other over the Sambre; and six churches, one of which is a cathedral, dedicated to St. Aubin. This is a fine building of modern architecture; the front is ornamented with 20 Corinthian columns, sustaining a cornice which bears several statues of white marble. On either side of the great altar are fine statues in Carrara marble, representing St. Peter and St. Paul. The new pulpit in this cathedral is considered a masterpiece of oak carving. The situation of Namur, at the confluence of two navigable rivers, is favourable to commerce. The chief manufactures are—superior cutlery, surgical instruments, tin and brass ware, copper utensils, tools of all kinds, agricultural instruments, ironmongery, and leather. The iron, lead, and coal mines and marble quarries of the neighbourhood, give employment to a large portion of the population. Steamboats ply between Namur and Liège. *Andenne*, situated on the right bank of the Meuse, near to the border of Liège, has a population of 5000. *Dinant*, likewise situated on the Meuse, has a cathedral, two hospitals, a population of 6500, who manufacture woollen cloths, hardware, paper, and hats. *Fosse*, a small town about 9 miles S.W. from Namur, has about 8000 inhabitants, who are chiefly employed in the coal-mines and marble-quarries of the vicinity. *Philippeville*, built on an eminence 17 miles W. by S. from Dinant, and fortified, is composed of wide well-paved streets, and has about 1200 inhabitants. Near it is Walcourt on the Heure, a walled town, with about 1500 inhabitants, tanyards, iron-works, and iron-mines. It is situated on the Sambre and Meuse railway. *Mariembourg*, a small fortified town with about 800 inhabitants; and *Couvin*, with about 3000 inhabitants, lie on the same line of railway nearer the French frontier, and both have important iron-works. Near *Sombreffe*, a small place in the north-west of the province, was fought the battle of Fleurus, in which the Austrians were defeated by the French in 1794. In this same vicinity is *Ligny*, a small village which gives name to the victory of the French over the Prussians, commanded by Blücher, June 16th, 1815.

NANCY, once the capital of Lorraine, now of the French department of Meurthe, is situated on the left bank of the Meurthe, 220 miles E. from Paris on the Paris-Strasbourg railway, in 48° 41' 31" N. lat., 6° 11' 22" E. long., 655 feet above the level of the sea, and had 40,289 inhabitants in the commune at the census of 1851. It is built in a beautiful and fertile plain at the foot of wooded and vine-covered hills, and consists of two parts, the old town on the north and the new town on the south. The old town is irregularly built. The new town has wide and straight streets, lined with good houses.

The stateliness of its public buildings, and the extent and beauty of its squares and public walks, render Nancy one of the handsomest of the departmental chief towns of France. The Place-Royale is the finest of the squares: one side is formed by the town-hall, containing a gallery of pictures; two other sides are occupied by the episcopal palace, the custom-house, the theatre, and some private houses. In the angles of the square are four beautiful fountains, in the centre a statue of Stanislas Leszinsky, ex-king of Poland and duke of Lorraine, and at one end a triumphal arch. The Place d'Alliance is adorned with a beautiful sculptured fountain and a fine alley of lime-trees. In the old town are the Place St-Epore, so called from the ancient church of St-Epore which is surmounted by a square tower, and is adorned in the interior with several good paintings, a fresco by Leonardo da Vinci, and a beautiful bas-relief of the Last Supper: the Place des Dames, a rectangular square surrounded by large hotels; the Place de Grève, in the centre of which are the water-works which supply the different quarters of the town; the Cours d'Orléans, which is a continuation of the preceding, is planted with trees, and terminated by a handsome triumphal arch of the Porte-Neuve, by which the city is entered from the side of Metz; and the Place Carrière, which, like the Place de Grève, is a long rectangle, and is separated from the Place Royale by a triumphal arch. At the north end of this square is a fine palace occupied by the prefect of the department; it is united by a lofty gallery to the two pavilions which form the angles of the square towards the north. The two buildings at the southern angles of the Place Carrière are occupied by the high court of justice and the tribunal of commerce. Two streets run in a direct line from the Place Royale to two of the town-gates, which are built like triumphal arches. The town possesses several richly ornamented churches, the

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most remarkable of which are the church of St. Epore already mentioned, the cathedral, and the church of the Cordeliers.

The cathedral, a modern structure in the new town, has a handsome façade richly decorated with sculptures and open stone work, and flanked with two lofty towers capped with domes and lanterns 256 feet high. The interior presents handsome proportions and is neatly decorated; the space between nave and choir is covered with a dome of cut stone 130 feet in diameter, painted in imitation of the open sky. The choir, which is shut off by an iron screen, is paved with black and white marble, and contains a beautiful high altar, constructed of many coloured marbles, and a great number of carved stalls. The gates of the town are imposing structures of their kind; most of them are adorned with graceful and appropriate bas-reliefs. The principal are St. John's, Stanislas, Notre-Dame, and St. Catherine's gates. A little way outside St. John's Gate is the cross which marks the spot whereon the body of Charles the Rash was found after the battle mentioned below. The central house of the order of Sisters Hospitaliers, who devote themselves to tend the sick poor, is at Nancy; they have houses in many other departments of France, and in parts of Germany. The city possesses an institution for deaf-mutes from the departments of Meurthe, Moselle, Meuse, Ardennes, and Vosges. The little church of Bon-Secours, in the suburb of St. Pierre, built by René II. to commemorate his victory over Charles the Rash, the last duke of Bourgogne, Jan. 5th, 1476, is adorned by the monuments of Stanislas Lecsinaky and his wife.

In the old town is the ancient gothic castle, the former residence of the dukes of Lorraine; and adjacent to it is the small church of the Cordeliers, built in the Renaissance style of architecture. This church was the burial-place of the ducal family. The tomb of René II. and some others are in the church itself; others are in the ducal chapel attached to the choir. At the commencement of the first French revolution the tombs in this beautiful church were demolished, the remains of the princes of Lorraine, which were deposited in leaden coffins in the vaults, were dragged out and interred in the cemetery of the town. After the restoration, Louis XVIII. had the remains replaced in their original resting place. The Emperor of Austria still maintains a chaplain to say mass in the church of the Cordeliers for the souls of his ancestors, the dukes of Lorraine. The other important structures are—the university buildings, in which is the public library of 23,000 volumes; the college buildings; the infantry and cavalry barracks; the theological college; five hospitals, one of which is for foundlings; and the public baths. Nancy is connected by a branch from the Paris-Strasbourg railway with Metz, Forbach, and Mannheim on the Rhine; from Metz this line is continued northward down the valley of the Moselle to Thionville.

The inhabitants manufacture hosiery, embroidered muslin, cotton-yarn, woollen-cloth, calico, lace, oil, chemical products, liqueurs, and leather. Trade is carried on in the various articles just named, and in corn, wine, brandy, hides, wool, and iron. There are two yearly fairs, one of which lasts 20 days.

Nancy is the seat of a bishop, whose see is the department of Meurthe; of a High Court, which has jurisdiction over the departments of Meurthe, Meuse and Vosges; and of a university-academy, the limits of which comprise the departments of Meurthe, Meuse, Moselle, and Vosges. It has tribunals of first instance and of commerce, a chamber of commerce, a college, a museum, a medical school, a botanic garden; a scientific, literary, and artistic society; and several charitable institutions.

Nancy existed in the 11th century, and perhaps much earlier. From the 13th century it became the capital of Lorraine, whose dukes had here a vast fortified palace. The town was enlarged and the palace rebuilt by Duke Ferry III.; it was further enlarged by the dukes Jean and Charles II. The suburbs were demolished on the approach of the Burgundians under Charles the Rash, and the ramparts erected on their sites, which enabled the brave Lorrainers to resist his furious assaults. Charles had taken the town in 1475, but it was retaken by the nobles of Lorraine the following year. Charles then besieged the city, and it was suffering terribly from famine, when it was relieved by René II.; in the battle that took place under the walls Charles lost his life. The French occupied Nancy from 1633 to the treaty of Vincennes (1661), according to which the fortifications were ordered to be demolished. This was executed in part, but Louis XIV., having again taken the town in 1670, rebuilt the defences. These were finally destroyed after the treaty of Ryswyk, with the exception of the citadel and the gates. Nancy is indebted for its chief beauties as a city to Stanislas Lecsinaki, ex-king of Poland and duke of Lorraine, who made it his residence. [LORRRAINE.]

NANKING, a town in China, the capital of the province of Kiang-su, on the south bank of the river Yang-tse-kiang, near 32° N. lat., 118° E. long, and about 120 miles from the mouth of the river. This town was the capital of the empire to the end of the 13th century, and at that time the largest town on the globe. The Jesuits, when surveying the town for the purpose of making a plan of it, found that the circuit of the exterior walls was 37 lies, or nearly 20 miles; and this agrees with the description given by Sir J. F. Davis ('Sketches of China'), who says that the walls are 20 miles in circuit, and that the area reminded him of Rome, though the walls are higher, as the present town occupies less than half the ancient

site, the remainder being either waste or laid out in gardens, with the remains of paved roads and scattered cultivation; but Nanking has no antiquities. Chinese architecture, except their walls, is not very enduring, and the Tartars destroyed palaces, temples, and sepulchres. The town began to decrease when Kublai-khan removed the Imperial residence to Peking, and still more rapidly when the six great tribunals, which for some time were kept at Peking and Nanking, were attached to the court at Peking. When this took place the name of the town Nanking (the Southern Court) was changed into that of Kianning-foo, as it is now always called in public documents, though the people continue to call it Nanking.

The present town, which is about 3 or 4 miles from the river, consists of four principal streets, running parallel to one another, and intersected at right angles by smaller ones. Through one of the larger streets a narrow channel flows, which is crossed at intervals by bridges of a single arch. The streets are not spacious, but have the appearance of unusual cleanliness. The population, which is said to have been once four millions, was lately estimated at 300,000. It was the residence of the first viceroy of the empire, was celebrated as a principal seat of Chinese learning, furnishing more members to the imperial college at Peking than any other city; it carried on a considerable trade, by means of the canal which connects it with the river, with the ports of Su-tcheou-foo and Shang-hai; it was famed for its manufactures of crapes, books, and paper, and it exported much tea and silk. But in the civil war, which broke out in 1851, the rebels advanced to Nanking, and in March 1852 captured it. This has interrupted the trade, but as little opposition was made, the town probably suffered but little.

None of the buildings of Nanking are distinguished by their architecture, except some of the gates, two temples noticed by Sir John Davis, and the famous Porcelain Tower, which is attached to one of the pagodas, or temples. This building is octagonal, and of considerable height in proportion to its base, the height being more than 200 feet, while each side of the base measures only 40 feet. It consists of nine stories, all of equal height, except the ground-floor, which is somewhat higher than the rest. Each story consists of one saloon, with painted ceilings; inside along the walls statues are placed. Nearly the whole of the interior is gilded. The material of the wall seems to be a highly-polished stone; but probably it is composed of bricks made of a fine clay, susceptible of impressions, as the figures show which appear on them. On the outer side of the wall they are white, and, according to Ellis, are merely the white bricks frequently used in China. At the termination of every story a roof, built in the Chinese fashion, projects some feet on the outside, and under it is a passage round the tower. At the projecting corners of these roofs small bells are fastened, which sound with the slightest breeze. On the summit of the tower is an ornament in the form of the cone of a fir-tree: it is said to be of gold, but probably is only gilt; it rests immediately upon a pinnacle, with several rings round it. This tower is said to have been 19 years in building, and to have cost 400,000 taels.

NANT. [AVEYRON.]

NAN-TCHANG-FOO. [CHINA.]

NANTES, a large sea-port town, the capital of the French department of Loire-Inférieure, stands on the right bank and about 30 miles from the mouth of the Loire, in 47° 13' 8" N. lat., 1° 32' 55" W. long. at a distance of 270 miles by railway S.W. from Paris, and had 91,303 inhabitants in the commune at the census of 1851. The ground on which the cathedral stands is 62 feet above the sea-level, but some parts of the town are only about 40 feet above that line. The city is admirably situated for commerce, having communication with the interior by railway, and by steam-boats up the Loire, which forms the harbour of Nantes, and admits at high water large vessels up to the quays which line its banks. Formerly only vessels of 200 tons could make their way up to the city, whilst vessels of larger size were obliged to unload at Paimboeuf, but by means of steam-tugs and dredgers large vessels are brought up to the quays. [LOIRE-INFÉRIEURE.] The Erdre, which enters the Loire from the north, and the Sèvre-Nantaise, which empties its waters into the Loire just below the town, are both navigable streams. Besides these facilities for traffic, Nantes has communication by canal with Brest. The town is wall-built, very clean, and well laid-out, especially in the more modern part, which is remarkable for the regularity and elegance of its squares and public places; the Isle Feydeau (which is surrounded by fine quays, and joined to the town by a handsome bridge), the Graalin quarter, and the Place-Royale, will bear comparison with the finest parts of Paris. Indeed the quays, which extend 2 miles along the Loire and along both banks of the Erdre, the magnificent river covered with craft of various sizes, the islands, the meadows that stretch along the river bank opposite the town, the bridges across the Erdre and the arms of the Loire, and the harbour of Lafosse, form a very striking picture. The quays, planted with trees, and backed by large warehouses and other buildings, form very handsome promenades. But the most delightful of the public walks is that formed by the Cours St.-Pierre and St.-André, which run from the Loire to the Erdre, passing the old castle of the dukes of Bretagne: it is formed by four rows of trees, separated by a wide carriage-way, and backed by lines of handsome houses; statues of the Duchess Anne, Du Guesclin, and other

distinguished Bretons, are erected along this walk. The picturesque gable-fronted houses which in the older parts of the town overhang the dark narrow streets, are fast disappearing under modern improvements. In the new parts the streets are wide and well-paved; the houses are built of stone and roofed with slates.

The most remarkable objects in Nantes are—the ancient castle, the birthplace of the Duchess Anne, which stands on the banks of the Loire; its chapel is now a powder magazine: the castle of Bouffay, which is now used as a prison: the cathedral of St. Pierre, the nave and south transept of which alone is finished; the portal entrance, the wood carving, and the stone tracery of the organ loft in the nave, are greatly admired; in the south transept is the splendid mausoleum erected by the Duchess Anne to Francis II., the last duke of Bretagne, and his wife Margaret of Foix: the prefect's residence, the finest modern structure in Nantes; the exchange, which is adorned with several statues; the theatre, which stands in the Place Graalin; the museum of natural history; the picture gallery, which contains several paintings by the great masters; and the public library, which is on the quay Brancas, and contains 30,000 volumes, besides several valuable manuscripts. A lighthouse was erected in 1851 for the benefit of the commercial harbour. A new court-house (Palais de Justice) built in a handsome palazzo style, consisting of a basement and two stories with attics several windows' length on the sides, was opened in 1852. This building contains several courts, reception halls, and depositories for the archives of the department. The Duc de Feltre's gallery of pictures recently presented to the town is placed in a building adjoining the museum.

Nantes contains 33 squares, 450 streets, and 16 bridges. The Place-Royale, which presents a figure of nine sides, is formed by as many masses of buildings constructed on a symmetrical plan; the ground-floors are occupied as shops, which for elegance and splendour are not inferior to those of Paris or London. The Place Graalin is smaller than the preceding; but it is magnificently built, and contains several fine hotels. Suburbs are built on several of the islands and connected by bridges; and at the mouth of the Sèvre is the suburb of Madeleine, on the south side of the Loire, through which the Bordeaux road runs.

The industrial products of Nantes are, white and printed cottons, cotton-twist, refined sugar, ship cordage, glue, chemical products, blankets, serge, flannel, ship biscuits, &c. There are several ship-building yards, copper foundries, tan-yards, brandy distilleries, bleach-mills, and dye-houses. Vessels are fitted out for the whale and cod fisheries. The foreign and coasting trade is active. The chief articles of export are wine, brandy, woollen-cloths, silk, paper, linen, gold and silver lace, hardware, prepared meats, provisions, furniture, small wares, books, &c.; the imports are composed of ship-timber, planks, hemp, pitch and tar, steel, copper, lead, wool, raw cotton, oil, Spanish wine, cochineal, dye-stuffs, gum, ivory, perfumes, and colonial produce. Other articles of commerce are salt, butter, coal, building stone, hoops, flour, vinegar, and agricultural implements. The total number of vessels that entered and cleared out of the harbour in 1852 amounted to 14,935 ships and steamers of all sizes, with 580,843 tons burden, and 61,573 men.

Nantes gives title to a bishop, whose see is the department of Loire-Inférieure. It is the head-quarters of the 15th Military Division, and contains tribunals of first instance and of commerce, an exchange, a council of prud'-hommes, a bank, several insurance offices, a custom-house, a mint, a school of hydrography, a college, an ecclesiastical college, a school of medicine, and several literary and benevolent institutions. Foreign consuls reside in Nantes.

Nantes takes its name from the ancient Namnetes, whose capital it was. Among the important events in its more modern history are—the marriage of the Duchess Anne to Louis XII. in 1499, which united Bretagne to France; the issuing of the edict of Henry IV., April 30, 1598, by which the Calvinists were guaranteed the free exercise of their religion; the revocation of this edict by Louis XIV. in 1685; the fierce but unsuccessful attack which the town sustained (June 29, 1793) from the Vendéans under Cathelineau; the unparalleled butcheries committed soon after by Carrier and other republican agents; and the arrest of the Duchess de Berry, January 7, 1832.

NANTUA. [AIN.]

NANTUCKET. [MASSACHUSETTS.]

NANTWICH, or NAMPTWICH, Cheshire, a market-town and the seat of a Poor-Law Union, in the parish of Nantwich, is situated on the river Weaver, in 53° 4' N. lat., 2° 30' W. long., distant 20 miles S.E. by E. from Chester, and 164 miles N.E. from London by road. The population of the town in 1851 was 5426. The living is a rectory in the archdeaconry and diocese of Chester. Nantwich Poor-Law Union contains 84 parishes and townships, with an area of 104,315 acres, and a population in 1851 of 35,948.

Nantwich is mentioned in the Domesday Survey by the simple designation Wick, and the salt-works, to which the town for so long a period owed its prosperity, are noticed. The town is in a low flat situation, chiefly on the right bank of the Weaver, and is irregularly laid out. It consists of three principal streets, which unite near the church, and of some others. The houses are commonly old, built of timber and plaster, with large bay windows and projecting upper stories. The church is cruciform, and is chiefly of the decorated style.

It has an octagonal tower 110 feet high, rising from the intersection of the nave and transepts. Wesleyan, Primitive, and Association Methodists, Independents, Quakers, and Unitarians have places of worship. There are a Free Grammar school, founded in 1561, which had 85 scholars in 1853; a Blue-Cap school; National, British, and Infant schools; a mechanics institute; and a savings bank.

The brine-springs and salt-works of Nantwich were of great celebrity and antiquity, but only one spring is now worked. The chief manufactures are of shoes, gloves, and cotton goods. There are some malting establishments. Several canals unite in the neighbourhood of the town. The weekly market is on Saturday; a large market for cattle is held once a fortnight, on Saturday, in February and March. There are four yearly fairs. A county court is held in the town.

NAPERVILLE. [ILLINOIS.]

NAPLES, KINGDOM OF, is the name commonly given to the continental part of the Kingdom of the Two Sicilies. In the administrative language of the country it is styled Sicilia Citeriore, 'Hither Sicily,' or *Dominj di quà dal Faro*, 'Territories on this side of the Straits of Messina.' It comprises the southern half of Italy, being bounded N.W. by the Papal States, and on every other side by the sea. The frontier line between the kingdom of Naples and the Papal States begins on the coast of the Mediterranean, at the tower Dei Confini, which is a mile or two S.E. from Terracina. Then follows an offset of the Lepini Mountains as far as the valley of the river Sacco. Crossing that valley, the line proceeds first in a northern and afterwards in a north-north-western direction along several ramifications of the Apennines, which divide the waters of the Liri from those of the Anio; then ascending the loftier group to the west of the Lake Fucino, it descends the Salto into the valley of the Velino, crosses that river a little to the east of Rieti, and then crosses the central ridge of the Apennines between the sources of the Nera and those of the Tronto. Descending along the eastern slope of the central ridge, the line follows an offset which skirts the right bank of the Tronto, and afterwards, below Ascoli, the river itself forms the boundary down to the Adriatic. The whole of this tortuous boundary-line (which in all the vicissitudes of the country, for eight centuries, has never varied) is about 150 miles; but the direct distance, from the Mediterranean to the Adriatic coast is not quite 120 miles. Four roads, which are ultimately reduced to two, lead into the kingdom; one by Terracina to Fondi, along the coast of the Mediterranean; the second from Rome, by Palestrina and the valley of the Sacco, into the valley of the Liris, and thence into the valley of the Volturno, where it joins the former; the third, by Rieti, Civita Ducale, and Antrodoto, to Aquila and the valley of the Pescara; and the fourth by Ascoli to Teramo, and along the coast of the Adriatic to the banks of the Pescara likewise.

The greatest length of the kingdom of Naples, from the Tronto to Capo Spartivento, at the southern extremity of Calabria, is about 350 miles, in a line running through the centre of the peninsula. The breadth varies; in the northern part, between the mouths of the Garigliano and Pescara, it is about 85 miles wide; between Cape Misenum and the mouth of the Fortore it is 100 miles; and from Naples to Vietri, on the promontory of Mount Gargano, it is 125 miles. From Naples to Manfredonia it is about 100 miles. South of Naples, the Gulf of Salerno on one side, and that of Manfredonia on the other, reduce the breadth to 83 miles; but farther south it again widens from the point of Licosa, near Paestum, to Moli di Bari, on the Adriatic, a distance of 130 miles, which is the utmost breadth that the kingdom of Naples attains. The Iapygian peninsula projects in an oblique direction to the line of breadth for about 90 miles, with a mean breadth of 30 miles.

The breadth of the kingdom again becomes contracted between the Gulf of Taranto on the east and the Gulf of Policastro on the west, it being about 65 miles from the mouth of the Bradano to that of the Trecchina. It becomes still narrower to the southward: it is 45 miles between the Gulf of Lao and the Gulf of Taranto; and 35 miles from the mouth of the Cratis to Cape Cetraro, after which it widens again to near 60 miles for a length of about 50 miles. South of the Cape delle Colonne the land becomes contracted into a narrow isthmus about 14 miles across, between the gulfs of Squillace and Sant' Eufemia, and beyond this it spreads again to a breadth of 25 to 35 miles throughout the length of the province of Calabria Ultra. The population of the continental dominions numbered in 1825, 5,456,664; in 1832, 5,809,000; in 1837, 6,021,284; and in 1851, 6,612,892. Of the population about two-thirds live by agriculture, about half a million by manufactures and other mechanical labour, another half million by trade, including sailors and fishermen; the priests, monks, and nuns amount to about 50,000; lawyers, 8000; medical men about 9000; and persons employed under government 30,000.

The provinces of the kingdom are noticed under their proper heads, and to these the reader of this work is referred for a more particular description of the surface, and for the topography of the towns, &c. In the present article only a brief general survey of the country, its resources, and productions can be given. [APULLA; BARI, TERRA DI; CAPITANATA; &c.]

The Apennines, which run through the centre of the kingdom, form in several parts large masses and high table-lands, which, with their numerous offsets, occupy, especially in the southern part, almost the

whole breadth of the peninsula. [APENNINES.] Two extensive plains, Apulia and Campania, spring out, the former to the east and the other to the west of the Apennines, forming the province of Terra di Lavoro. [LAVORO.] Numerous valleys lie between the offsets of the Apennines, of which those on the side of the Adriatic are mostly transverse, while on the side of the Mediterranean the valleys of the Volturno, and its affluents the Calore, Sabato, and Tamaro, and the valley of the Tanagro, an affluent of the Sele, and some others, are longitudinal, running between ridges parallel to the central chain. In addition to the general features of the country, there is a strip of low land along the coast between the base of the mountains and the sea, varying in width from ten miles to one mile, and in some places even less, especially in eastern Calabria and some parts of Abruzzo, where the mountains advance close upon the sea. This low region is hot and naturally fertile, but unwholesome in parts, and exposed to inundations from the mountain torrents.

Among the river-basins is that of the Liris, or Garigliano, which is about 60 miles long, not reckoning the windings of the river, from its source at Mount Camicciola, in the Abruzzo, to its estuary near the site of ancient Minturnæ. [LAVORO.] The breadth of the basin in the upper course of the river is much contracted between the central Apennines to the east and the Sabine Mountains to the west, which latter divide it from the basin of the Anio; but after passing Sora it spreads to about 20 miles in breadth, including the courses of the Fibreno, Melfa, Rapido, Frigido, and other affluents. It also drains part of the Campagna-di-Roma through the channel of the river Sacco. The Garigliano is a deep river, always full of water, and is navigable for boats in the lower part of its course. West of the basin of the Garigliano, and separated from it by the mountains of Itri, is the small basin of Fondi, containing a low plain of about 50 square miles in extent, and drained by the small river Vetera. The basin of the Volturno is the largest and most important in the kingdom. The Volturno drains the greater part of the province of Terra-di-Lavoro, and its affluent the Calore is the drain of Principato Ultra, making in all an area of nearly 3000 square miles. The Volturno has a tortuous course of nearly 100 miles, and the Calore runs for about 60 miles before its junction with the Volturno. The fertile plain east of Mount Vesuvius, and between it and the Apennines, forms a small basin which is drained by the river Sarno. The basin of the Sele and its affluent the Tanagro includes the greater part of the province of Principato Citra, and a part of that of Basilicata which lies west of the central ridge. The Sele has a course of about 60 miles altogether, and the Tanagro a course of about 35 miles above its junction. South of the basin of the Sele the peninsula becomes narrow, the Apennines come close upon the sea, and the course of the rivers towards both coasts is very short. Calabria has only numerous mountain torrents, each of which drains its narrow valley. The basin of the Crati however forms an exception. This river which drains the fine valley of Cosenza, and enters the Gulf of Taranto, has a course of about 60 miles, and is the largest river of Calabria. [CALABRIA.] The basin of Basilicata, with its four parallel rivers, the Agri, Sinnò, Bradano, and Basiento, is described in the article BASILICATA. East of Basilicata, the narrow Iapygian peninsula, which is intersected in its length by a low barren ridge, has no water-course of any importance; and this is also the case with the province of Terra di Bari. [OTRANTO; BARI, TERRA DI.] The Ofanto, one of the principal rivers of the kingdom, rises in the Apennines of Conza, within the boundaries of Principato Ultra; it drains the part of that province which lies east of the Apennines, and also the northern part of Basilicata, as well as a part of Capitanata and Terra di Bari, and after a course of above 70 miles enters the Adriatic. [BASILICATA.] The great plain of Apulia is drained by the Carapella, Cervaro, and Candelaro, the courses of which are nearly parallel, and run from the central Apennines to the sea. The Candelaro has several affluents, and drains a considerable tract of country between the group of Monte Gargano and the Apennines of Lucera and San Severo. [CAPITANATA.] The Abruzzi contain numerous and rapid streams, which run direct to the sea along deep valleys between lofty parallel ridges; but there are no extensive basins, with the exception of that of the Pescara, which has a course of above 80 miles, and receives on one side the waters of the central chain of the Apennines, including Monte Velino, which runs north of Lake Fucino, and on the other those of the lofty mass of Monte Corno, which projects eastward towards the Adriatic coast, and has snow on its summit almost the whole year. [APENNINES.] The Pescara above the middle of its course passes through a narrow defile near the town of Popoli, and turns eastward towards the Adriatic, receiving from the south the waters of another great outlying group of Apennines, called Monte Majella, in the province of Abruzzo. [ABRUZZO.] The basin of Lake Fucino, or Celano, in the centre of the peninsula, is surrounded by mountains on every side. The lake, which is described under CELANO, receives the waters of high lands covered with snow for a great part of the year. It has naturally no visible outlet. The bottom of the lake is much higher than the neighbouring valleys of the Liris and the upper Pescara. On the side of the Liris the intervening ridge about Capistrello is much depressed, and there a tunnel was made in the time of the emperor Claudius. The Liris runs in a deep narrow valley about three miles from the lake. Works are now (Jan., 1855) in progress for draining the lake by enlarging and completing the tunnel of Claudius, and for

forming a channel of communication with the Liris by which all future accumulations of water may be carried off. By this important public work not less than 33,000 acres of the richest soil will be reclaimed.

The kingdom of Naples has a coast-line of about 1500 miles in length, two-fifths of which lie on the west or Mediterranean Sea, and the rest on the Ionian and Adriatic seas. The Ionian Sea extends from the Strait of Messina to Cape Leuca, at the extremity of the Iapygian peninsula. Unfortunately this very extensive line of coast has few harbours. The deficiency of tides in the Mediterranean renders the estuaries of rivers useless for the purposes of navigation. The principal harbours on the Mediterranean coasts are those of Gaëta and Naples; Baia, in the Gulf of Pozzuoli, and Castellamare; but they are either artificial ports or mere roadsteads. South of Castellamare, as far as the Strait of Messina, there is no harbour. The artificial port of Salerno is filled up with sand, which has been the fate of most harbours on the coast of the kingdom wherever a mole has been constructed. To prevent this evil the practice now is as at Nisita to raise, instead of continuous moles, piers made of arches, as the ancients did at Puteoli. On the Ionian Sea are the ports of Taranto and Gallipoli; the last has merely a roadstead. On the Adriatic are Otranto, Brindisi, Trani, and Barletta, all filled up, or nearly so, by accumulations of sand; but Manfredonia has a very good roadstead. Bari has a tolerable harbour for vessels of small draught. On all the coast of Abruzzo there is no harbour; the mouth of the Pescara and the mole of Ortona afford shelter only for small craft.

Statistica.—The continental territories of the kingdom of the Two Sicilies are divided into 15 provinces, the area, subdivisions, and population of which are given in the subjoined table. The provinces beyond the Faro are given under SICILY.

Provinces.	Area in Square Miles.	Districts.	Communes.	Population in 1851.
Napoli	381	4	65	822,142
Terra-di-Lavoro	2,493	5	230	752,012
Principato Citra	2,262	4	158	558,809
Principato Ultra	1,407	3	132	383,414
Basilicata	4,145	4	121	501,222
Capitanata	2,916	3	62	318,415
Terra di Bari	2,358	3	53	497,423
Terra d'Otranto	2,371	4	180	409,000
Calabria Citra	2,619	4	146	435,811
Calabria Ultra (II.)	2,063	4	151	381,147
Calabria Ultra (I.)	2,194	3	104	319,662
Molise or Sannio	1,777	3	135	360,549
Abruzzo Citra	1,243	3	121	312,399
Abruzzo Ultra (II.)	2,519	3	110	329,131
Abruzzo Ultra (I.)	1,227	2	72	231,747
Total	32,475	52	1840	6,612,892
Population of Sicily at the Census of 1851				2,091,580
Total population of the kingdom of the Two Sicilies				8,704,472

Agriculture and Products.—Agriculture is generally speaking in a backward state, although the climate is singularly genial, and the soil, except in the mountains, extremely fertile. The long-continued abuses of the feudal system, with its endless oppressions and restrictions, both as regarded person and property, rendered the pursuit of agriculture as a science impossible. Whatever crop could be raised with least labour, expense, and risk, without regard to the capabilities of the soil, became the object of the farmer's attention. Hence the cultivation of the vine spread over the best lands in the kingdom; with time the people became wedded to the system; and vast districts peculiarly fitted for the production of corn, oil, and silk, are rendered comparatively valueless, because no such crops have been raised upon them before, and because a system sanctioned by long custom cannot be readily relinquished. Next to the vine comes the olive as a staple production, and then maize and beans, preparations of which form the chief food of the mass of the people, and the cultivation of which requires but little skill. Cattle are generally stall-fed on straw and green food, which is raised without effort on the richer soils. The chief food of horses is lupins mixed with straw; hay and corn are luxuries known only to the horses of the nobility. Meadows are generally unknown. In many of the corn districts (with the exception of those near the metropolis) manuring and artificial grasses are disregarded, the system pursued being an unvarying round of corn and fallow. It is true many able works on agriculture have issued from the press of Naples, and many elaborate reports from societies have seen the light, but the instruction which these contain has rarely been reduced to practice, and has not yet reached the local worker. In the cultivated uplands, which embrace by far the largest portion of the kingdom, not including the higher ranges of the mountains, farms vary in extent from two to seven acres. Here after a fallow the rotation is maize or potatoes, next wheat, then rye or beans, and finally barley. In the Terra di Lavoro and the province of Naples, which comprise the ancient Campania Felix, farms are larger; and the land consisting of a light and rich volcanic soil, warmed in many parts by subterranean heat,

requires a different treatment. Here the system of fallowing is unknown: by tillage and manure the ground is kept in a high state of production, and irrigation is very generally practised, especially in raising garden stuffs. But the great characteristic of the Campanian system is the growth of corn under the shade of trees which protects the crop from the sun's rays: thus arable husbandry is combined with the cultivation of the vine, the mulberry, the orange, and the pine. The vine is trained to elms or poplars planted in rows; the other trees named are planted in rows from thirty to forty feet apart, leaving ample room for a crop of corn or green food between. The rotation in these farms is generally carried out with great skill, and the variety of the produce, comprising corn, wine, silk, olives, flax, pulse, and artificial grasses, is proof that no little industry is required to carry out the system. The great pasturage system of Apulia is sufficiently noticed in the article *CAPITANATA*.

The productions of the soil are various. The staple products are—corn, wine, fruits, oil, wool, and silk. The plains of Apulia produce vast quantities of corn for exportation. The average annual yield of the kingdom in corn is estimated at 10,000,000 quarters. A quantity of wool is exported from Apulia, where about 2,500,000 sheep are fed. [*CAPITANATA*.] Olive-oil of the best quality is exported in large quantities. Gallipoli is the great oil-mart. The mulberry is extensively planted for the growth of silk, the produce of which was formerly checked by heavy duties. Cotton is produced in the provinces of Bari, Terra di Lavoro, Napoli, Otranto, Basilicata, and Calabria. Wine is made all over the kingdom, and in great abundance and variety, but most of it is consumed in the country and within the year; and although some of the wine, especially that of Calabria, is as full-bodied and generous as any Portuguese and Spanish wine, yet little of it is kept or sent to the northern parts of Europe. Naples however exports wine to Rome, Genoa, and other parts of Italy. Some brandy is made and exported to America. Some of the wines made in the neighbourhood of Naples, at the foot of Mount Vesuvius (the latter is known by the name of 'Lachryma Christi'), and in the ancient Falernian district [*LAVORO*], are very fine and well flavoured. The country produces most kinds of fruit, such as figs, chestnuts, filberts, almonds, oranges, lemons, pomegranates, melons, peaches, and apricots. The date-palm produces fruit, which however ripens only in favourable situations. Raisins are abundant. Currants are grown in Calabria and the Terra di Bari; the best are produced in the little islands of Dino and Cirrella in the Gulf of Policastro. The carob is extensively grown. Tobacco is cultivated chiefly near Lecce, in the Terra d'Otranto; saffron in Abruzzo; and the sugar-cane in Calabria. Saffron grows wild about Aquila, Taranto, and Cosenza. The caper grows wild also in the stony parts of the Abruzzi, in Apulia, the Terra d'Otranto, and in the island of Ischia. Manna is produced abundantly in the Calabrias, and on a part of the Monte Gargano. In the marshy districts of the Salerno, and in the Adriatic provinces, rice is grown. Liquorice is a general and profitable crop in Basilicata and Calabria. Flax and hemp are also raised in considerable quantity. Maize is also much cultivated. Cheese is made chiefly in Abruzzo and Apulia.

There is a rich iron-mine near Stilo in the farthest Calabria, which is worked for the government. Coal is found also in Calabria near Briatico. Rock-salt is also found in Calabria, but it is not worked. Among other known mineral treasures are alum, sulphur, saltpetre, marble, basalt (which is quarried for building and paving), and pozzolan, or ground lava, used for subaqueous cement.

The forests with which the Apennines were once clothed have in great part disappeared. This is a very serious evil, for not only fuel and timber have become scarce, but the destruction of the forests has caused the springs to be dried up and occasioned summer droughts in the subjacent lands, whilst the winter rains have washed away the vegetable earth from the mountain sides and exposed the bare rock, and the torrents carrying down alluvial matter into the valleys and plains have damaged whole tracts of country, choked up the beds of rivers, and occasioned the formation of pestilential marshes. An attempt has been recently made to arrest the progress of the evil by the enactment of forest laws. [*CALABRIA*.]

The strip of maritime low land which skirts the sea-coast is in many places marshy and covered with underwood. Herds of black cattle, buffaloes, and pigs live in that unwholesome region. Something has been done of late years towards draining the marshes, especially between the mouth of the Volturno and Cuma, and on the opposite coast of Apulia. The number of live stock in the kingdom, according to a recent report, is estimated as follows:—4,000,000 sheep; 600,000 goats; 600,000 mules and asses; 300,000 oxen and cows; 60,000 horses, and 40,000 buffaloes. Pigs are almost entirely of the black breed; their number is not stated. The greater number of the sheep are fed on the Tavoliere of Apulia; the system of pasture is detailed under *CAPITANATA* (vol. ii., cols. 318, 319). The wool, which is fine, is mostly exported raw. Buffaloes are used for draught in Campania and Apulia. From a mixture of sheeps' and goats' milk a great quantity of cheese is made, which is much esteemed by the peasantry. Cheese made of cows' milk is greasy; that made from buffaloes' milk is rank. Butter is made from cows' milk in the neighbourhood of the capital only; olive-oil is the general substitute for butter, and the milk is used for making cheese.

Roads.—At the beginning of the present century there was no good carriage-road through the kingdom, with the exception of the high road from Rome to Naples, and this was broken at the Garigliano by a ferry, for which a fine suspension-bridge was substituted in 1832. The French, during their occupation of the country, made some roads for military purposes. But since the accession of the present king, Ferdinand II., there is scarcely a town in the remotest provinces which has not been connected with the capital by a good highway. There are two classes of roads, *Cammini Consolari*, Consular or main-roads, and *Cammini Traversi*, secondary, or cross-roads. Of the main-roads there are four—1, Naples to Rome (Roman road), through Capua, Mola, Fondi, and Terracina; 2, Naples to Reggio (Calabrian road), through Salerno, Cosenza, and Monteleone; 3, Naples to Otranto (Apulian road), through Avellino, Foggia, Bari, and Lecce; and 4, Naples to Aquila (Abruzzi road), through Capua, Venafrò, Isernia, and Sulmona. The cross-roads are arranged in four groups—9 connected with the Roman road; 26 with the Calabrian road; 13 with the Apulian road; and 11 with the Abruzzi road. There is besides a fifth class of secondary roads, called *Cammini de' Siti Reali*, from their connecting the capital with the royal residences. All these roads are admirably constructed; difficulties of the ground are overcome by high engineering skill, and the viaducts, bridges, and obstructions rank among the first works of their class in Italy. They are kept in good repair, and there is not a turnpike on any of them. The roads, canals, drainage works, rivers, forests, and fisheries of the kingdom are managed by a board, the members of which are architects and civil engineers.

There are two lines of railway open, one from Naples to Nocera, through Portici, Torre dell' Annunziata (whence there is a branch to Castellammare), Angri, and Pagani; the other from Naples to Capua, through Casalnuovo, Cancello (branch to Nola), Maddaloni, and Caserta. It is proposed to extend the former line through the valleys of the Sarno and the Sabato to Foggia and Manfredonia, and thence along the coast to Bari, Brindisi, and Otranto. Another extension southward has been projected through Salerno, Castrovillari, Cosenza, and Mileto to Reggio. The second line will be ultimately extended to the frontier of the States of the Church, either by way of Mola, Itri, Fonda, and Terracina, or by the valley of the Garigliano, through Pontecorvo, Aquino, to Ceprano. Other projected lines are the following:—From Naples to Termoli through Nola, Benevento, and Volturara, with a branch to Aquila through Popoli; and from Popoli another branch to Pescara, and thence along the Adriatic to Ascoli: from the proposed line to Reggio a branch to Melfi, Gravina, and Taranto, with a secondary branch from Gravina to Potenza.

Government.—The government of the kingdom of the Two Sicilies is an absolute hereditary monarchy. The king is assisted in the administration by a council of state, a council of ministers, and two Consulte, one for the continental dominions and one for Sicily. The council of state consists of an indefinite number of members appointed by the king from the nobility or the great officers of state. The superior judges and the heads of some of the principal departments of government are extraordinary members and have the right to vote; and a councillor is appointed for each province who has the privilege of being present at all discussions relating to his province. The king presides; in his absence the heir apparent, or a secretary of state, named for the purpose by the king. The council of state gives an opinion on projects of law, decrees, and acts of the government; the opinions of the members are entered in a minute book and submitted to the king, who adopts or rejects them at pleasure. The council of ministers is composed of eight secretaries of state and a president, who is also a member of the council of state. The decisions of this council have no force unless sanctioned by the king. The two Consulte have, as the name implies, merely to give their opinions on matters laid before them; they can originate nothing. The Consulta for the continental dominions numbers 16 members, for Sicily 8 members: each has its own president. The king takes their opinion on financial matters, treaties, tariffs, &c. In matters that concern the whole kingdom of the Two Sicilies the two Consulte deliberate together under the presidency of one of the ministers.

The provinces are arranged in three classes:—1, Naples, Terra di Lavoro, and Principato Citra; 2, Principato Ultra, Basilicata, Capitanata, Terra di Bari, Terra d'Otranto, Calabria Citra, and Calabria Ultra ii.; 3, Calabria Ultra i., Molise, and the Abruzzi. Each province is governed by an Intendente, or governor, appointed by the king and changed every three years. The powers of the Intendente comprise the civil, financial, and military administration of his province. He is assisted by a secretary and a council, which in provinces of the first class numbers 5 members, in those of the second class 4 members, and in those of the third class 3 members. In each province there is also a provincial council, which in provinces of the first and second classes numbers 20 members, in those of the third class 15 members. The members are appointed in the following manner. The communal councils in each province select among the land-owners, persons whom they approve of for members; the lists are submitted to the king who chooses as he thinks fit. The provincial council holds a session, not exceeding 20 days, once a year, to examine the accounts of the province, to recommend improvements, &c.; and at the close of its labours it names from the principal proprietors three persons from whom the king appoints one to be councillor of state for the province.

Each province is divided into districts (*distretti*) and these again into communes (*comuni*). There are 38 districts in the kingdom, and these are also arranged into three classes according to their wealth and population. The district is governed by a *Sottintendente*, or lieutenant-governor, who resides in the chief town of his district, his duty being to execute the orders of the *Intendente* and to report on matters laid before him by the communes. Each district has its council, consisting of a president and 10 members. The president is nominated by the minister of the interior and appointed by the king; the members are chosen by the king from a list of local proprietors filled up by the communal councils. The district council meets once a year for not more than 15 days, to examine and report to the provincial council on matters concerning the district. The districts are sub-divided for police purposes into circles (*circondarii*), of which there are 525 in the kingdom.

Finally, the communes also are arranged in three classes according to population and revenue. Each commune is governed by a *Sindaco*, or mayor, assisted by two *Eletti*, or aldermen, and a *Decurionato*, or communal council. The inhabitants at large are eligible to be members of this council, provided they possess a certain trifling qualification or practise a liberal profession. The names of persons thus qualified are elected by ballot; from the lists the king nominates the members of the councils for the first and second classes of communes, and the *Intendente* for the third class. In communes of the first class the council numbers not more than 30 members, 3 being appointed for every 1000 inhabitants; in the smaller communes the councils are composed of 8 or 10 members. The *Sindaco*, or one of the *Eletti*, presides at the meetings, which are held once a month. The communal council fixes the local rates, elects the *Sindaco*, and other municipal officers, administers the local revenues, and nominates to the king proprietors eligible to be appointed members of the provincial and district councils. The *Sindaco* has the management of the minor affairs of the commune, looks after the public establishments, the registration of births, deaths, and marriages, and is responsible for the commissariat of troops quartered in the commune. If there is no justice of the peace (*Regio Giudice*) in the commune, the *Sindaco* also has local jurisdiction in civil and criminal matters of minor importance. The *Eletti* act as deputies of the *Sindaco* and also as commissioners of police. This communal corporation, the basis of the whole system, has existed from time immemorial, having survived all the dynastic and constitutional changes, all the wars and conquests that have affected the country since the time of the Romans, of whose municipal system it is no doubt a remnant.

The judicial department consists of four '*gran corti civili*,' which sit at Naples, Aquila, Trani, and Catanzaro; a criminal court and a civil court in every head town of a province; a public prosecutor ('*giudice d'istruzione*') in every district, and a '*giudice di circondario*,' or police magistrate, in every circle. A supreme court of appeal, with jurisdiction in both civil and criminal matters ('*corte suprema di giustizia*') sits at Naples. Special courts, for the trial of offences against the state, are appointed by commission; from these there is no appeal. Finally, each commune has a magistrate called '*conciliatore*,' who holds courts of arbitration to prevent people from going to law for trifling causes: he has jurisdiction in minor disputes, and in actions involving not a greater amount than 6 ducats (a pound sterling), without appeal. The conciliator is elected by the communal council, but obtains his appointment (for three years) directly from the king, as do all the other judges named; he is eligible to re-election. Trials are public in the kingdom of Naples, as in France. The French civil and commercial codes, with some modifications, have been retained.

Education.—For the purposes of public instruction there is an elementary school in every commune; but these schools, established under French domination, are in many instances neglected, and the quality of education afforded by the best of them is very inferior: the result is that the great bulk of the population is illiterate. For the middle classes there are 38 grammar schools and 12 royal colleges; 5 lycées, at Naples, Salerno, Aquila, Bari, and Catanzaro, in which academical instruction and minor degrees may be obtained; and, lastly, the University of Naples, which has faculties of Catholic theology, law, philosophy, physical science, and medicine; 54 professors; and, on the average, about 1500 students. There are also special colleges at Naples for the army and the navy; the college of San Sebastian, directed by the Jesuit Fathers for the education of the children of the nobility; the Chinese College, for theological students natives of the celestial empire; and two ladies' colleges. To most of the monasteries also schools are attached, which are directed by the monks. Students for the church study at Naples and in the several diocesan seminaries.

The ecclesiastical establishment consists of 19 archbishops and 64 bishops, 72 clerical seminaries, 3 abbeys, and 3746 rectors of parishes. The ecclesiastical jurisdiction and discipline were defined by a concordat in March 1818. The Roman Catholic is the exclusive religion of the country. A Protestant chapel is tolerated in the capital for the accommodation of foreigners.

Army and Navy, &c.—The peace establishment of the army in 1854 comprised 34 regiments, numbering altogether 56,043 men, besides a few veteran battalions for garrison duty. The fleet numbers 2 vessels of the line, 5 frigates, 2 corvettes, 5 brigs, and 12 steam frigates of 300 to 450 horse-power, and 14 small steam-boats. The revenue of

the state averages about 4½ millions sterling, of which the island of Sicily contributes about one-ninth. The debt is about 15 millions sterling. The average value of the exports is about 1,800,000*l.*; of the imports 2,400,000*l.* The exports are chiefly olive-oil, silk, corn, liquorice, brandy, argol, nitre, sulphur, &c. The imports comprise British and other manufactured goods, colonial produce, fish, and metallic wares. The aggregate number of shipping is about 5000, measuring 132,000 tons only. Manufactures which have considerably increased in the reign of Ferdinand II. are not confined to one or two centres, but are diffused through the provinces, in the articles on which the most important are noticed.

The inhabitants of the countries composing the kingdom of Naples are derived from various and mixed races. The descendants of the ancient Samnites, Peligni, Marsi, Frentani, Lucanians, and other people of old Italian origin; the Etruscan Campanians, the Brutii, the Greek population of the coasts became mixed with numerous Roman and Latin colonies. The ancient Oscan and Samnite languages were gradually lost, but the Greek still remained a spoken language over a great part of the maritime districts. At the fall of the empire the country was overrun, rather than occupied, by the northern tribes, but afterwards returned to the allegiance of the Byzantine emperors, when it received a fresh admixture of Greek blood, Greek language, and Greek usages. In the 6th century the Longobards took possession of Beneventum, and founded there a powerful duchy, which survived the fall of their power in north Italy. In the 11th century the Normans came, who conquered both the Longobards and the Greeks, and founded the monarchy of the Two Sicilies upon the base of feudal institutions. Then came in succession the Suabians, the French or Provençals, the Aragonese, and the Spaniards. All these nations have left traces of their residence. Considerable shades of variety are observable among the inhabitants of different parts of the kingdom, whilst the capital contains specimens of them all; but notwithstanding these varieties, the long habits of amalgamation produced by a central administration and a large capital during eight centuries have created a lasting feeling of common nationality, which is perhaps stronger in the kingdom of Naples than in any other Italian state. Neapolitan, not Italian, is the national appellation. Generally speaking the Neapolitan is quick, shrewd, humorous, fond of music and dancing, rather inclined to bombast and hyperbole, fiery but changeable, inclined to pleasure and ease, hospitable, susceptible of generous feelings, and also of a high social polish.

NAPLES (*Napoli*), the metropolitan province of the kingdom of the Two Sicilies, is bounded N. and E. by the Terra-di-Lavoro, S.E. by the Principato Citra, and S. and W. by the sea. The coast-line runs first nearly south from the Lake of Patria, past Cuma, to the promontory of Misenum, which, with the islands of Procida and Ischia, forms the northern boundary of the Bay of Naples. From Misenum the coast curves round to north and east, forming the bays of Baia and Pozzuoli, the latter separated from the harbour of Naples by the hill of Posilippo. Almost every inch of this coast—from the hill of Posilippo, with its tomb of Virgil, its ancient tunnel through which the suns of October and February shine, to Cuma, where the Prince of Syracuse has lately disinterred such interesting remains of ancient times—is hallowed ground to the antiquary and the scholar. The hills that rise above this part of the plain of Campania (the ancient Phlegrean Fields) are all of volcanic origin: the Hill of Posilippo, the Solfatara, still only half extinct; the barren trachytic mass of Olibano, the Monte Nuovo thrown up in 1588, which half filled up the Lucrine Lake and the channel cut by Agrippa to join it to the Lake of Avernus in forming the Portus Julius; and the Monte Barbaro. The Lake Avernus, on the west side of the Monte Nuovo, is a beautiful bright piece of water about a mile and a half round placed in the crater of an ancient volcano, the lips of which, now clothed with vineyards, chestnut-woods, and plantations of orange-trees, inclose it on all sides except the south, where it opens to the Lucrine. A tunnel cut through a hill of tufa from the lake to the Lucrine is shown as the Sybil's Grotto described by Virgil. Another great ancient tunnel deserving of mention is that called Grotta-di-Sillaro, and cut by Lucullus through the promontory which is still crowned with the magnificent ruins of his villa. This tunnel, 2755 feet long, was restored by the emperor Honorius, and cleared out by the present king, Ferdinand II. Lucullus attached the volcanic island of Nisita with the villa by a bridge, on the piers of which the arches of one of the moles erected in the reign of the present king to form a harbour here are supported.

From the point of Posilippo the coast curves round in a north-east direction, its line being broken however by the rocky promontory called Castell del Ovo, the long mole of the military harbour, and the great and little moles, which form respectively the great and small commercial harbours of the city of Naples. At the eastern extremity of the city the little river Seleto empties itself into the bay. From this point the coast trends south-eastward, past Portici, Torre del Greco, near the western base of Mount Vesuvius, and the towns Annunziata and Castellamare. Between the last two towns it sweeps round to the southward, and below Castellamare to the south-south-west, terminating in the point Campanella, the extremity of an offset of the Apennines, which, with the island of Capri, lying off it to the south-west, forms

the southern boundary of the Bay of Naples. Along the crest of this ridge, called Monte Sant' Angelo, the boundary runs to a few miles east of Castellamare, whence the line runs up the plain east of Vesuvius to the sluggish stream of the Clanius (Regi Lagni), which it strikes a little south of Acerra. The banks of this river are unhealthy from malaria, and from the maceration of flax in its sluggish stream. A mile or two N.W. from Acerra, near 41° N. lat., the boundary runs first south and then west (leaving Aversa on the north), to the northern extremity of the Lago di Patria, the ancient Literna Palus, which is fed by the Clanius, and is now a mere marsh abounding with wild-fowl. This lake was the harbour of the ancient Liternum, the retreat and death-place of the great Scipio. It was joined to the sea by a canal. A tower marks the spot where Scipio was interred. Patria, the representative of Liternum, is a mere fishing village.

The only rivers are the Clanius, the Sebeto, and the Sarno, which last crosses the narrowest part of the province from the neighbourhood of Pompeii, and enters the sea midway between Annunziata and Castellamare. Among the lakes which have not been already mentioned are the Lago-di-Licola, north of Cumæ, supposed to be part of the canal begun by Nero to connect the Avernus with the Tiber; and the Lake of AGNANO; and the Lake of Fusaro, the Acherusius of the Latin poets, which communicates with the sea by a Roman canal now called Foce-di-Fusaro; this lake is famous for its oysters. The Mare-Morto also, once the harbour of Misenum, east of Mount Procida, deserves mention though not quite a lake. Of the ancient craters the most remarkable are those that lie between Monte Rosso, near Cumæ, and the hill of Posilippo, namely, Monte Barbaro, Monte Cigliano, Monte Campana, Astroni, Monte Nuovo, and some others already mentioned. The Astroni is the most perfect of all; its rim, 4 miles in circuit, is crowned by a wall, and unbroken, except by an artificial entrance to the crater, which is clothed with magnificent trees, and has been long used as a royal preserve for wild boars and deer.

The great feature of the province to the south-east of the city of Naples is Mount Vesuvius, which forms the subject of a separate article. [VESUVIUS.] The beautiful range of Monte Sant' Angelo, with its three lofty peaks, running through the peninsula of Sorrento, forms a grand feature in the scenery beyond Castellamare. Mount Cepparica, an offshoot of the range, runs west by north from the three peaks to the sea, between Vico Equense and Castellamare, and sends out northward a beautiful spur called Quisisana, which is covered with magnificent villas. The province is traversed by railways to Nocera and Capua, which start from a common terminus in the east of the city of Naples; the former running south-east along the coast to Annunziata, near which the main line takes an eastern direction, whilst a branch continues along the coast to Castellamare; the latter runs first north-east and then north-west up the plain of Campania.

The province is divided into four districts:—1, Naples; 2, Pozzuoli, which includes the whole western division and the islands Ischia and Procida; 3, Castellamare, which comprises the territory at the base of Mount Vesuvius and the coast opposite Naples as far as Sorrento; 4, Casoria, which comprehends a tract of the Campanian plain stretching north of the range of hills behind the city of Naples.

The principal towns of the province of Naples, exclusive of the capital, are:—*Pozzuoli*, the ancient *Puteoli*, situated on the east side of the gulf of the same name, and opposite to Baia, originally a colony of Cumæ, called *Dicaearchia*, founded in the 6th century before Christ, and now a bishop's see with 10,000 inhabitants. The whole surrounding country is of a volcanic character. The hill called *Solfatara*, which is the crater of a volcano not yet extinct, rises to the east above the town. *Afragola*, a town of 15,000 inhabitants, N.E. of Naples in the Campanian plain, has some hat manufactories. *Fratia*, near the ancient *Atella*, is famous for its strawberry-beds, which supply the markets of Naples: population, 10,000. *Somma*, at the north base of Mount Vesuvius, has 7000 inhabitants. *Sant' Anastasia*, near *Somma*, has 6000 inhabitants. The whole neighbourhood produces the luscious wine known by the name of 'Lachryma Christi.' *Portici* and *Resina*, two adjoining towns built on the south-west slope of Vesuvius, on the site of *Herculaneum*, contain respectively 6000 and 11,000 inhabitants. Visitors who ascend Mount Vesuvius pass through *Resina*. *Portici* has a royal palace: its museum of antiquities, obtained from *Herculaneum* and *Pompeii*, has been lately removed to the Museo Borbonico at Naples. East of *Resina* is another pretty royal villa called *La Favorita*, in a lovely situation near the sea-shore. *Torre del Greco*, about 2 miles S.E. from *Portici*, at the foot of Vesuvius, a town of 17,000 inhabitants, has been repeatedly destroyed by the lava and earthquakes, but rebuilt over and over again. The inhabitants are mostly addicted to a sea-faring life. *Annunziata*, or *Torre dell' Annunziata*, about 4 miles S.E. from *Torre del Greco*, and near the site of *Pompeii*, has 12,000 inhabitants, a manufactory of muskets for the royal service, and a large gunpowder magazine. It is also known for its great manufactory of 'maccaroni,' which is the best in Naples, and known by the name of 'Maccaroni della Costa.' North of *Torre dell' Annunziata* is the large village of *Bosco tre Case*, and farther north, on the east slope of Vesuvius, is the town of *Ottajano*, with 15,000 inhabitants. CASTELLAMARE. *Vico Equense* (*Vicus Equanus*), a small town perched upon the cliffs above the coast, about 4 miles S.W.

from Castellamare, was the birthplace of the metaphysician and historian Gianbattista di Vico: population of the town and neighbourhood about 10,000. *Sorrento* is in a delightful valley surrounded by hills, which is a complete grove of orange and mulberry trees, and contains several villages and numerous country houses. The town of Sorrento has 6000 inhabitants, is a bishop's see, and the birth-place of Tasso. The plain of Sorrento is much frequented by the wealthy Neapolitans during summer. There are boats which cross daily from Naples to Sorrento, and return loaded with oranges and other fruit. Silk is also produced here. *Casoria*, in the plain north of Naples, on the road to Afragola, is the head town of a district, and has 8000 inhabitants. East of *Casoria*, on the railway to Capua, is the long straggling village of *Casalnuovo*. West of it are the villages of *Arzana* and *Melito*. Farther west is *Giugliano*, which with two dependent hamlets has about 10,000 inhabitants. South of *Giugliano* is *Mugnano*: population, 4000. A little south-west of *Mugnano* is *Marano*, the chief town of a circle, with a population of about 8000. At *Marano* terminates the semicircular ridge of hills which bounds the Phlegrean Fields on the north, stretching across to the Lake of Licola, near the sea-shore. This ridge is probably a portion of the lip of a gigantic crater that may have once inclosed the whole volcanic region of the Phlegrean plain.

NAPLES (*Napoli*), the capital of the kingdom of the Two Sicilies, is situated in 40° 52' N. lat., 14° 15' E. long., on the northern coast of the fine Bay of Naples, partly at the foot and partly on the slope of a range of hills which runs obliquely to the shore. The population in 1851 was 450,000. The city is 4 miles long from the Maddalena bridge over the Sebeto on the east to the suburb of Mergillina on the west; its breadth from the Capodimonte to the Castel dell' Ovo is 2½ miles; and its circumference is about 10 miles.

Seen from the sea Naples appears in the form of two crescents, of very unequal depth, one on the east, and the other on the west, divided by the point of Castel dell' Ovo and the hill of Pizzofalcone, which is behind it. The eastern crescent, which includes the great bulk of the city, faces the south-east, and is bounded by the hill of Capodimonte to the north, and Sant' Elmo to the west, crowned by the castle of that name, which commands the town. Between these two hills is a considerable depression, on which the suburbs of La Sanità and L'Infrascata are built. The slope of the hill of Capodimonte is likewise covered with houses, forming the suburbs called Dei Miracoli and Le Vergini. To the eastward the town is open to the plain of Campania. From the barrier of Capo di Chino, at the entrance from Rome, a succession of fine streets run through the body of the town to the sea, the principal of which, called *Strada di Toledo*, about a mile in length, runs due south, and divides the old city, which is east of it, from the new districts. The street of Toledo terminates southward in the Piazza before the royal palace. Of the old city part of the walls, towers, and ditches still remain, and several of the gates are standing, namely, *Porta Nolana*, on the road to Nola, *Porta Capuana*, on the road to Apulia, and *Porta S. Gennaro*, and *Porta S. Maria di Constantinopoli*, towards the north. Between the gates of Nola and Carmine on the eastern side of the city is the common terminus of the railroads to Nocera and Capua. The old part of the town, which is in a plain, has narrow streets and lofty massive houses, many of them six or seven stories high; it is very thickly inhabited, and contains more than one half of the whole population of the capital. West of the *Strada di Toledo* numerous streets run up the hill of Sant' Elmo, which is covered with houses for two-thirds of its height. South of the hill of Sant' Elmo, and between it and the point of Pizzofalcone, is another depression, which affords a carriage communication between the *Strada di Toledo* and the western crescent, or new part of the town, which is called by the general name of Chiaja, 'the quay.' This part, which is much contracted between the hills and the sea, extends in length about a mile and a half between the hill of Pizzofalcone to the east and that of Posilippo to the west. A fine road runs all this length, parallel to the sea-shore, and between the public gardens of *Villa Reale* on one side and a row of fine houses on the other; it then turns along the base of Mount Posilippo, and gradually ascending it, leads to the other side of it towards Pozzuoli. There is another and straighter road to Pozzuoli by the tunnel called *Grotta di Posilippo* mentioned in the preceding article.

Naples is an open city like London, but it has barriers or custom-house posts at the principal avenues leading into the town, for the purpose of collecting the 'gaballa,' or duty on provisions. The most remarkable buildings are:—

1. The royal palace, 'La Reggia,' a large mass of buildings, constructed at two different times, first by the Spanish viceroy Pedro de Toledo, which part goes by the name of Palazzo Vecchio; and the second, after the design of the architect Fontana, under the Spanish viceroy Count de Lemos, in the 17th century. This new palace has a front of nearly 400 feet in length, with three orders of pillars, one above the other, Doric, Ionic, and Corinthian. The great court has two rows of arcades, one above the other, supported by granite columns; the grand staircase is ample and commodious. The apartments are adorned with valuable paintings of the old Italian masters. The great gallery contains the portraits of all the Spanish viceroys who presided over Naples for more than two centuries. At the back of the palace, along the first floor, facing the sea, is a handsome terrace

paved with marble and shaded with trees, from which there is a delightful view of the bay. Facing the palace is a semicircular colonnade, with a pantheon-shaped church in the centre, raised by the late king Ferdinand I.

Adjoining the palace, and between it and the sea, are the arsenal, the cannon-foundry, and basin or wet-dock for the king's barges or yachts. From the south-eastern part of the dockyard a broad massive mole, begun in 1826, runs in a south-east direction 1200 feet, and is to terminate in an arm bending to the north-east, in order to shelter the new naval harbour, which extends between this mole and the mole of the Porto Grande, and has a depth of about five fathoms. On the eastern side the palace adjoins the theatre of San Carlo, which is one of the remarkable structures of Naples. It was rebuilt after the fire of 1815, and is one of the largest theatres in Europe; it has six tiers of boxes, each box capable of containing from ten to twelve persons. Farther on, the old palace adjoins the Castel Nuovo, a massive and extensive castle, with towers and a ditch around, begun in the 13th century by Charles of Anjou, and successively increased. Fronting the castle is the finest square in Naples, called Largo del Castello. East of Castel Nuovo is the mole, or Molo Grande, which shelters the commercial harbour. It is fortified, and has two lighthouses; the depth in the harbour does not exceed four fathoms. The mole affords a promenade which is much frequented by the citizens. The Porto Piccolo, or small harbour, to the north of the preceding, is little more than a wet dock; but it is very interesting as being all that remains of the ancient harbour, which existed here probably before the Greek colonisation of Neapolis. This port evidently extended some way into the city. It is separated from the Porto Grande by a small mole.

2. The palace, museum, and library, called 'Degli Studj,' are in the northern part of the town, at the foot of the hill of Capodimonte. The museum, styled 'Museo Borbonico,' is one of the richest in Europe. Among the numerous master-pieces of ancient sculpture which it contains, are the Hercules Farnese, the Venus Callipyge, the Apollo Citharoedus, the Bacchus, and the statue of an orator called Aristides. The museum is also rich in ancient bronzes. The collection of ancient instruments, utensils, female ornaments, and other household articles found at Herculaneum and Pompeii, is unique. It contains also a vast number of articles of glass, mostly Egyptian. The collection of Campanian, Greek, and Sicilian vases, as well as the numismatic cabinet, is also very rich. That of ancient paintings is very remarkable. There are also some fine ancient mosaics. The tables found at Heracles, in Magna Græcia, are valuable as specimens of Greek palmography.

The Gallery of Modern Paintings contains many good works of the Neapolitan, Flemish, Venetian, and Bolognese schools. The royal library, in the Museo Borbonico, contains 200,000 printed volumes, and about 3000 manuscripts. Among the latter is the book called the Office of the Blessed Virgin, illustrated by Giulio Clovio, and the gem of illuminated works. Besides this library, which is open to the public, there are the Brancacciana library of 70,000 books and 7000 manuscripts attached to the church of St. Angelo à Nilo, the library of San Filippo Neri in the magnificent monastery of the Oratorians with 18,000 volumes and 60 manuscripts, and the university library of 25,000 volumes.

3. The churches of Naples amount to 257. The cathedral, begun by Masuccio, a Neapolitan architect and sculptor of the 13th century, has been since repeatedly altered. The interior is rich in ancient columns of valuable marbles; it also contains a splendid mausoleum of Charles I. of Anjou, the conqueror of Naples. The adjoining chapel of San Gennaro is rich in paintings: the ceremony of the liquefaction of the blood of St. Januarius is performed there annually. The front of the church of San Paolo, built on the site of a temple of Castor and Pollux, contains some fluted columns of marble, the remains of the ancient structure.

The church of San Lorenzo, founded by Charles of Anjou, on the site of the town-house, where the municipal council of the city formerly used to assemble, contains several royal tombs and some good paintings. The church of San Filippo Neri is built in better taste than most of the churches of Naples; it is rich in paintings. The church, sacristy, and convent of San Domenico constitute a real museum of the middle ages, on account of the numerous monuments of kings, literary men, and other distinguished personages of the times of the Anjou and Aragonese; and for the cell, lecture-room, and chair of Thomas Aquinas, who resided, wrote, and taught in this convent. The interior of Santa Chiara is elegant and rich; it contains the monuments of Robert of Anjou; of his son, the duke of Calabria; and of Joanna I. The neighbouring church of Gesù Nuovo, or Trinità Maggiore, the façade of which has been compared to that of a prison, has in the interior the appearance of a splendid ball-room. It belongs to the Jesuits. In one of the chapels is Guercino's celebrated picture of the Trinity. The church of Monte Oliveto is rich in sculptures by Giovanni di Nola, Donatello, Benedetto da Majano, and other celebrated artists. The vast adjoining convent, which once afforded an asylum to Tasso, has been suppressed, and is now occupied by several offices of the municipal administration. San Giacomo dei Spagnoli contains the magnificent tomb of Don Pedro de Toledo, one of the best Spanish viceroys of Naples. The small neglected church of San Giovanni à Carbonara is remarkable for the

monuments of King Ladislaus and his sister Joanna II., and in the chapel behind the altar, that of her favourite, Ser Gianni Caracciolo, who was murdered at last through a court intrigue. The church Del Carmine, with its lofty steeple, is chiefly noticed for its neighbourhood to the great market, the scene of Masaniello's insurrection, and also of the desperate defence of the populace against the French in 1799; and likewise for the modest tomb of the unfortunate Corradino and his cousin Frederick of Austria, who were beheaded near this spot by order of Charles of Anjou. The church of L'Annunziata, by the architect Vanvitelli, is one of the best churches of Naples: adjoining to it is a foundling hospital and a Magdalen. The church of San Martino, near the castle of Sant' Elmo, from which there is a most magnificent view of Naples and the bay, is richly painted by Lanfranco, Spagnoletto, and D'Arpino. The church of Santa Maria del Parto, founded by Sannazaro, in a delightful spot, near the shore of Mergellina, has a fine mausoleum of the poet. San Gennaro dei Poveri is remarkable for its vast catacombs, which extend under the hill of Capodimonte.

4. The royal palace of Capodimonte is a heavy structure, but is remarkable for its fine situation, the excellent road leading to it, constructed by the French, its extensive park and hunting grounds, and the adjoining observatory along the southern part of the road, forming the new street of Capodimonte, which may be considered a continuation of the fine Strada di Toledo. On the slope of the hill is the Chinese college, for the education of young Chinese, who, after taking holy orders, return to their country as missionaries. On the hill of Miradois to the south of the hill of Capodimonte is the observatory and the botanical garden. Not far from thence, in a secluded valley at the foot of the hill, are the remains of an aqueduct constructed by Augustus, which is called Ponti Rossi, 'red bridges or arches,' from the colour of the brick.

Naples has many charitable institutions, such as the great hospital Degli Incurabili, the foundling hospital already mentioned, the school of the deaf and dumb, the asylum for the blind; the Reclusorio, or general workhouse for able-bodied poor, near the botanic garden, with a school annexed to it, and which contains about 3000 poor; San Gennaro dei Poveri, for the poor who are unable to work, San Francesco di Sales, and several other minor hospitals and houses of refuge. Mendicity is forbidden by law; but the law is often evaded. There are no poor-rates at Naples.

The university is well provided with professors. It has a good library and a cabinet of natural history annexed to it. This institution is noticed in a preceding article on the kingdom of NAPLES. Among the special schools are a medical college, a veterinary college, two military schools, a college of pilots, and the 'Conservatorio,' or school of music, which has produced many illustrious composers. Besides San Carlo, Naples has half a dozen minor theatres, Il Fondo, I Fiorentini, Teatro Nuovo, La Fenice, San Carlino, &c. In the last two, plays are performed in the Neapolitan dialect, which is full of humour and naive expression, a mixture of Italian and Spanish, but different from both.

The chief manufactures of Naples are silks, embroideries, broad-cloth, flannel, carpets, chemicals, and macaroni; soaps, perfumes, gloves, artificial flowers, corals, china, hats, carriages, &c. There are royal type-foundries, iron and glass works. The chief exports are agricultural products, oil, raw silk, liquors, corn, brandy, &c.: the imports are manufactured goods, colonial produce, fish, iron and tin ware, hardware, &c. French, Sardinian, Neapolitan, Tuscan, and Austrian companies' steamers ply between Naples, Leghorn, Marseille, Sicily, and various towns in the Mediterranean. Small passenger steamers ply between the city and towns along the coast daily. The tunny and anchovy fisheries are actively plying. Ship-building is carried on.

The town is divided into twelve 'quartieri,' or districts, of which five and the most populous are in the old or eastern part of the town, namely, Mercato, Pendino, Porto, San Lorenzo, and Vicaria; one in the middle, San Ferdinando, in the neighbourhood of the royal palace; two at the west end, Chiaja and San Giuseppe; one, San Carlo all' Arena, at the north end towards the road to Rome; and three, Stella, Avvocata, and Monte Calvario include the upper part of the town, which is built on the hills of Capodimonte and San Elmo. Every district has a commissary of police, whose office is open at all hours of the day. There are 66 military posts in the whole town, 4 castles—San Elmo, Castel Nuovo, Castel dell' Ovo, and Castello del Carmine, besides extensive barracks both for infantry and cavalry. The town has six prisons, one of which is for debtors. The vast and massive structure called 'La Vicaria,' at the east end of Naples near the Porta Capuana, which was once a castle and the residence of the Norman kings, now contains various courts of justice (hence it is named I Tribunali), and also the archives of the kingdom, an immense collection of documents, divided into four sections, historical, financial, judicial, and communal. The acts, edicts, &c. of the sovereigns of the Anjou dynasty alone fill 300 thick folio volumes. The 'Constitutiones' of Frederick II., the oldest code of the kingdom, written by his chancellor Pietro delle Vigne, are also there.

The Lazzaroni, so often mentioned by travellers, and so confusedly described, included the lowest orders of the inhabitants or populace, the porters, the hawkers of fish vegetables, and other eatables, the

boatmen, journeymen out of place, and numerous vagrants, and other low and loose characters. Many of these classes in former times had no regular domicile, and lived chiefly in the open air, or were huddled together at night under some porch or vestibule, in narrow alleys, in their boats, and wherever they could find shelter. To these were added indiscriminately the numerous class of fishermen, an industrious race, whose habits have always been more domestic and orderly than those of the common *lazzaroni*. All these people were vaguely reckoned, with probably some exaggeration, at 40,000 individuals, a muscular, brawny, and erect set of men, but totally uneducated and little civilised, very abstemious and frugal in their habits, mostly barefooted, living from day to day on their casual earnings, their dress consisting merely of a shirt and a pair of loose trousers; very good-tempered in quiet times, but apt to run riot on the first political excitement or tumult. As a peculiar class, the *lazzaroni* may be said to be now extinct: the lower orders live like those of other cities; they are all duly registered in their respective parishes, they have all a domicile of some sort, and police regulations have produced a material alteration in their habits, though the every-day clothing of many of them continues to be the same as before.

The nobility at Naples are very numerous, but, excepting their titles, they enjoy no privilege or influence above the rest of their countrymen. The palaces of the nobility are spacious and massive. The most remarkable are the palazzo Gravina, or Orsini, the palace Maddaloni, that of Sansevero, remarkable for its chapel, adorned with some good statues, that of Della Rocca, those of Francavilla, Stigliano, Berio, &c. The building which has been raised between the streets Toledo and S. Giacomo, for the offices of the financial department and for the bank of the Two Sicilies, is one of the finest structures in Naples.

Naples is not so well supplied with water as Rome, and has not such handsome fountains; those of Fontana Medina and Monte Oliveto are the best. Several aqueducts from the neighbouring mountains supply the water, besides which most houses have cisterns. There is a sulphureous spring of water on the shore of Santa Lucia, which is much drunk by the inhabitants in the spring. Another spring, called Acqua del Leone, in the suburb of Mergellina, is the purest fresh-water. Of mineral waters there is an abundant supply.

The neighbourhood of Naples abounds in delightful walks. The public gardens, or Villa Reale, extending along the shore of the Chiaja for nearly a mile, enjoy the advantages of the sea-breeze, and of a view unrivalled in the world. The new road over the hill of Posilipo is a beautiful drive. The hills of Capodimonte and Scuttilo, and the suburbs of Infrascata and Arenella, at the back of Sant' Elmo, abound with pleasant walks and a variety of scenery. These, as well as the other neighbouring hills of Vomero, Posilipo, &c., are covered with country-houses and gardens of all sizes.

Naples is an archbishop's see, and is divided into 50 parishes, including the neighbouring villages.

The town is abundantly supplied with provisions of every kind; fish and shell-fish are plentiful, as well as vegetables and fruits. Snow, of which a great quantity is used, especially in summer, for cooling the drink and for ices, is brought from the mountain of Castellamare, where it is kept in large reservoirs. The city is lighted with gas since 1840. Omnibuses ply to all parts of the town, and steam-boats to all the towns on the bay.

The great street of Toledo is thronged with people and carriages at all times of the day, and until very late at night, or rather until two or three o'clock in the morning, when fashionable people retire to rest. It is decidedly the noisiest street in Europe, as the people are in the habit of vociferating at the top of their voices; and others must do the same in order to be heard. The motley groups which are seen mixing pell-mell in the street, the crowded balconies above, the numerous vendors of provisions, the *acquaiuoli*, or sellers of ice-water, at the corners of the bye-streets, the life out of doors, which is a general habit in this country, all render the streets of Naples, and especially that of the Toledo, most curious to a foreigner.

Naples, or Neapolis, that is, 'New City,' was a Greek colony from Cumæ; the date of its origin is not known. The story of its first foundation, under the name of Parthenope, is a mythic tradition. Livy (b. viii. 22) says that there were once two towns near each other, Palæapolis and Neapolis, the inhabitants of both being from Cumæ, but Palæapolis had, long before Livy's time, merged into the new town, or Neapolis. Some modern writers think that the original foundation on the site was made by the Phœnicians, and that their town was distinguished by the Greeks from their own new city (Neapolis) by the designation Palæapolis, or old city.

Neapolis, after its first foundation by the Cumæans, received colonists from Chalcis, Pithecusa, and Athens; and subsequently admitted some Campanians also among the body of citizens. (Strabo, p. 246. Casaub.) It became allied to the Samnites, but after their subjugation by Rome it maintained its independence as a republic, and during the second Punic war sent ambassadors to Rome to propose an alliance against Hannibal, and with it a rich present in golden vases, which the people took from their temples to defray the expenses of the war. (Livy, xxii. 32.) It continued afterwards an ally to Rome and became a municipium. After the fall of the empire Neapolis was taken by the Goths, retaken by Belisarius, and lastly

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destroyed by Totila in 543. It was afterwards rebuilt and annexed to the Longobard duchy of Beneventum, but after the decline of the Longobard power, when the Byzantine emperors asserted a kind of supremacy over southern Italy, Naples had its dukes, who were chosen by the inhabitants. In the 9th century the dukes of Beneventum obliged it to pay tribute. When the duchy of Beneventum was split into three principalities, Benevento, Capua, and Salerno, Landulf, count of Capua, in order to maintain its independence of the other two, called in the Saracens, who devastated the shores of Campania. The Norman adventurers lent their assistance to the prince of Salerno against these piratical hordes, and afterwards by degrees established their own power in Apulia and Sicily. Naples was one of the last towns which submitted to the Normans; it acknowledged king Roger I., of Sicily, as its sovereign, about 1137. The Norman dynasty becoming extinct at the death of the emperor Henry VI., Naples then became subject to the house of Suabia from 1198 to 1268, when that line ceased at the death of the ill-fated Conradin. Next came the Angevine dynasty, founded by Charles of Anjou, who removed the seat of government from Palermo to Naples, which continued under the house of Anjou till 1442, when Alfonso of Aragon took the city from king René, the last of the Angevine kings. Under the Aragonese and Spanish kings the country was ruled by viceroys till 1700, when it became subject to German princes of the house of Austria. Don Carlos, son of Philip IV. of Spain, made himself master of the city and the kingdom, and founded the dynasty that still occupies the throne.

(Celano, *Notizie della Città di Napoli*; Romanelli, *Napoli Antica e Moderna*; Giraffi, *Le Rivoluzioni di Napoli*, 8vo., 1847; Chioccarelli, *Antistitium Neapolitanæ Ecclesiæ Catalogus ab Apostolorum Temporibus ad Annum 1643*, fol.; Stefano, *Descrizione dei Luoghi Sacri di Napoli*, 4to., 1560; Caracciolo, *Napoli Sacra*, 4to., 1623; Blewitt, *Handbook of South Italy*.)



Coin of Naples.

British Museum. Actual size. Silver.

NAPOLI DI MALVASIA (*Monembasia*) is a town built on the small island of Monembasia, on the east coast of Laconia, and connected with the mainland by a bridge. About four miles north of the bridge are the ruins of Epidaurus Liméra. As Epidaurus fell into decay the town on the island grew into importance, and it then probably assumed the name of Neapolis. It was a place of some consequence under the Byzantine emperors, and Andronicus Comnenus in the 12th century founded here a monastery, which still exists. The town, which is a poor place with narrow steep streets, and about 400 houses, including those on the summit of the hill near the castle, gives title to a Greek archbishop. The country in the neighbouring district formerly produced a luscious wine, to which the English gave the name of Malmsey.

NAPOLI DI ROMANIA (*Nauplia, Anapli*), a town of the Morea, built on a rocky promontory at the north-east extremity of the Argolis Gulf. The harbour between this promontory and the north coast is large and tolerably safe, but too shallow to admit large ships. The town stands on the north-east slope of the hill facing the mainland, and is fortified: the hill has a tabular summit, which is unoccupied with houses, and from which abrupt cliffs descend to the open sea at the back of the promontory. A steep and rocky mountain rises above it to the south-east, called Palamedis; on this cliff is a strong castle. Nauplia was once the port and arsenal of Argos, but in the time of Pausanias it was deserted. It was occupied by the Venetians in the 13th century, and became their chief settlement in the Morea, until it was taken from them by Sultan Solyman in 1537. After the Greek insurrection it remained for several years the head town of Greece, until it was superseded by Athens. Its population, which had risen to about 12,000, has recently declined. The streets are irregular and dirty, but some improvements have been recently made: the air is not wholesome. The Greek bishop is styled Bishop of Argos and Anapli. An aqueduct of good water from the rocky ridge near Tiryns supplies the town.

NARBERTH, Pembrokeshire, South Wales, a market-town, parliamentary borough, and the seat of a Poor-Law Union in the parish of Narberth, is situated on elevated ground near the left bank of the East Cleddau River, in 51° 47' N. lat., 4° 44' W. long., distant 13 miles N.N.E. from Pembroke, and 240 miles W. by N. from London. The population of the borough in 1851 was 1392. The living is a rectory in the archdeaconry and diocese of St. David's. Narberth Poor-Law Union comprises 51 parishes and townships, with an area of 55,996 acres, and a population in 1851 of 22,120. The town is the centre of a considerable agricultural district. A new market-house has been erected, and other improvements have been made. The market-day is Thursday: eight fairs are held in the year.

NARBONNE, a city in the French department of Aude, stands

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near the coast of the Mediterranean, in $43^{\circ} 18' 8''$ N. lat., $3^{\circ} 0' 23''$ E. long., 54 miles S.W. from Montpellier, and had 11,855 inhabitants in the commune at the census of 1851. Narbonne is one of the oldest cities of France. It is the *Narbo-Martius* of the Romans, who planted here their first colony west of the Alps in B.C. 112. The city became the capital of Roman Gaul until the rise of Vienna on the Rhône; and on the death of Constantine it again became the capital of Gallia Narbonensis. In the reign of Antoninus it was destroyed by fire, but was soon after rebuilt. In A.D. 414 Narbonne witnessed the marriage of Placidia, sister of the emperor Honorius, to Ataulphus, brother-in-law of Alaric. In 462 it was ceded to the Visigoths as the price of their alliance with Rome. During the Roman domination Narbonne had a capitol, many temples, and other public buildings, and it was celebrated for its schools. After the capture of Toulouse by Clovis, Narbonne became the capital of the Visigoths, who held it till the death of king Roderic in Spain. The Visigothic kings made the Roman capitol their palace. The Burgundiones pillaged the city in 508; in 681 it was taken by the Franks; and in 719 by the Saracens, who planted a Mussulman colony in the city. The Saracens held the city against Charles Martel, who laid siege to it from 738 to 737. Again for five years after 750 did Saracen skill defend the town against the assaults of Pepin and his Franks till betrayed by the Christian portion of the inhabitants, who massacred the Saracen garrison and opened the gates to the Franks. In 859 the Northmen plundered the town, and the Saracens unsuccessfully besieged it in 1018. In the 11th and 12th centuries the city, which retained still the form and spirit of its Roman municipal institutions, flourished by its manufactures and wealth, and was distinguished by the spirit of liberty that animated its inhabitants. It afterwards fell into comparative obscurity. But in vain is any monument of its ancient splendour sought for. Time, ignorance, and war have swept away every trace of its Roman structures, with the exception of a few fragments of capitals and marble slabs with inscriptions.

The town is situated upon the Robine Canal, a branch of the Canal-du-Midi, by which a portion of the waters of the Aude flow into the Mediterranean. It is surrounded by an old wall pierced by four gates, and defended by several bastions and towers. The canal divides it into two parts, between which there is communication by three bridges. Along the bank of the canal is a public walk planted with trees. The cathedral of St. Just, founded in 1272, and finished only recently, is a handsome gothic church; it has a splendid nave and choir, which are richly ornamented with good sculptures, and contain several marble monuments. Philippe III. of France was buried in the choir, but his monument has now disappeared. The other principal structures of Narbonne are—the church of St. Paul, the archbishop's palace, the barracks, and three hospitals. The city has tribunals of first instance and of commerce, a custom-house, an ecclesiastical college, a theatre, and a school of hydrography. The chief industrial products are—brandy, verdigris, bricks, tiles, pottery, linen, leather, and paper. The inhabitants trade in corn, wine, brandy, oil, salt, soda, wax, and excellent honey. [AUDE.] Narbonne has given title to an archbishop since 419; the see however is now united to that of Toulouse, the prelate being styled Archbishop of Toulouse and Narbonne. The church of Narbonne has seen two of its prelates raised to the Papal chair, Clement IV. and Clement VII. The archbishop of Narbonne was styled Primate, and was *ex-officio* president of the states of Languedoc, which held their sessions at Montpellier down to the time of the first French revolution. The projected railway from Bordeaux to Cette is to pass through Narbonne.

NARENTA, RIVER. [BOSNIA.]

NARNI [SPOLETO.]

NARRAGANSET BAY. [RHODE ISLAND.]

NARRAINGUNGE. [Dacca.]

NARVA. [PETERSBURG, St. Government of.]

NASEBY. [NORTHAMPTONSHIRE.]

NASSAU, a small German duchy, is comprised between $49^{\circ} 55'$ and $50^{\circ} 50'$ N. lat., $7^{\circ} 31'$ and $8^{\circ} 45'$ E. long., and is bounded by the Prussian-Rhenish provinces and by the different states of Hesse. The duchy is divided into 11 circles. The country is generally mountainous or hilly, and there is no part that can be called plain. The Westerwald in the north and the Taunus Mountains in the south cover nearly the whole surface. The mountains follow the Rhine and the Lahn in their whole course through the duchy, and form delightful valleys, which are among the most romantic parts of Germany; the most picturesque is the Rheingau from Biberich to Lorchhausen, celebrated for its fine wines. Of the rivers the chief is the Rhine, which bounds the duchy on the south and west, and at Lahnstein receives the Lahn, which is navigable 14 leagues from its junction with the Rhine to Weilburg. The Main forms the boundary to the south-east. There are several smaller rivers and mountain streams, such as the Embs, Aar, Sieg, Wiedbach, Weilbach, and Niestar. There are no canals and no lakes. On the other hand the country has numerous Spas and mineral springs, which are among the most celebrated in Germany; as Ems, Wiesbaden, Langenschwalbach, Selters, Faehingen, and Geilenau. The natural productions various and valuable. But the boast of Nassau is its wine, of which that produced about Hochheim is well known by the name of 'König'; there are likewise the wines of Marcobrunn, Asmannshausen,

Rüdesheim, and Johannisberg. The vineyard of Johannisberg was originally formed by the monks of the monastery of St. John, the site of which is now occupied by the castle of Johannisberg, the property of Prince Metternich, and well known to all tourists on the right bank of the Rhine. The breeding of cattle is a chief source of wealth. The minerals are silver, lead, iron, copper, marble, freestone, limestone, slate, fullers' earth; and potters', pipe, and porcelain clay. There are also some salt-springs. The forests, which abound in game, supply quantities of timber and fire-wood. The smelting and manufacturing of metals are carried on to a considerable extent; there are also paper-mills, tanneries, distilleries, tobacco, vinegar, and potash-works, and some woollen, leather, and linen manufactures, but on a small scale. The trade is almost wholly limited to the exportation of the produce of the country. The area of the duchy is 268 square miles. The population in 1852 amounted to 429,341, of whom 224,103 were Protestants, 197,892 Catholics, 6741 Jews, and the rest Mennonites, Lutherans, and German Catholics.

The duke was formerly an absolute sovereign, but in 1817 a representative constitution was introduced. Otho, brother of king Conrad I., in the 10th century, is considered as the founder of the Nassau family, which after the death of Henry II. was divided into two branches, of which his sons, Wabram and Otho, were the heads. The dukes of Nassau are descended from the elder, and the house of Orange-Nassau (Dutch royal family) from the younger branch. The duke is assisted in the administration by a ministry of state. The people elect deputies who discuss the budget. The supreme court of appeal is at Wiesbaden, the Catholics of the duchy are subject to the Bishop of Limburg, the Protestants to the Bishop of Wiesbaden. The revenue amounts to about 4 millions of florins annually. The expenses in 1854 were estimated at 3,989,203 florins. The state debt in 1850 was 10,200,000 florins. The total military force numbers 6285 men. The circles of the duchy of Nassau, with the population in 1852, are as follows:—Hachenburg, 38,395; Hadamar, 54,871; Herborn, 47,077; Höchst, 49,879; Idstein, 40,456; Langenschwalbach, 33,686; Limburg, 48,305; Nassau, 43,820; Reichelsheim, 1578; Rudesheim, 37,365; and Wiesbaden, 33,903. The Taunus railway connects Wiesbaden with Frankfort. There are many remains of ancient ramparts and hill forts in the country.

The chief town, Wiesbaden, is situated in a small and pleasant valley on the southern declivity of Mount Taunus. In the immediate vicinity of the town there are productive gardens and orchards, and on every side neat farmhouses and villages. Wiesbaden is an open and constantly improving town, and has broad and well-paved streets. This place owes its prosperity and its name, 'Baden,' to the celebrated hot springs, which are 16 in number. The visitors to these springs are very numerous. The chief buildings in Wiesbaden are—the palace, the town-hall, the Kur-Saal, several splendid hotels, nearly 30 bathing-houses, the barracks, schools, a theatre, &c. The Kur-Saal has banqueting-rooms, ball-rooms, assembly-rooms, and gaming-rooms. It is the chief centre of attraction and gaiety, and on Sundays especially the rooms are very numerously attended. The town has one Lutheran, one Calvinist, and one Roman Catholic church. The fixed population of Wiesbaden is about 13,000; from June to September the number of visitors to the springs and gaming-tables doubles the number of inhabitants. [See SUPPLEMENT.]

NASSAU, or POGGY ISLANDS, THE, form a part of a chain of islands which lie off the whole length of the west coast of Sumatra, at a distance of 60 or 80 miles. There are two islands which bear this name: they lie between $2^{\circ} 30'$ and $3^{\circ} 16'$ S. lat., and are separated from each other by a strait, which forms an excellent harbour for ships of any size. It is surrounded by mountains, so that the water is literally as smooth as in a pond; and there are 25 fathoms of water close in-shore, and 45 fathoms in the mid-channel.

The surface of the islands is rough and irregular, consisting of high hills or mountains of sudden and steep ascents. The mountains are covered to their summits with trees, many of which supply excellent timber. The sago-tree grows in abundance, and affords the chief article of food to the inhabitants, who cultivate no rice. The coconut tree and the bamboo also abound. The fruits common in the islands of the Indian archipelago, such as mangosteens, plantains, &c., are numerous. The woods in their natural condition are impervious to man, and harbour various wild animals, as deer, hogs, and several kinds of monkeys. Fowl and pigs are raised, and fish are plentiful.

The inhabitants of these islands are few in number: the population amounted in 1792 to about 1400 individuals. In colour and stature they resemble the Malays, but they speak a language quite different from those used on the coast of Sumatra.

NASSAU. [BAHAMAS.]

NATAL, a British colony on the south-east coast of Africa, is bounded S.W. by the river Umtacoune (about 30 miles W. from the Umzincla, the previous boundary), N.E. by the river Tugala, N.W. by the Drachenberg or Quathlamba Mountains, and S.E. by the Indian Ocean. The colony lies between $29^{\circ} 20'$ and $30^{\circ} 50'$ S. lat., $29^{\circ} 40'$ and $31^{\circ} 25'$ E. long. The area is about 20,000 square miles. The white population in 1850 was estimated at 16,000, the native population at 100,000.

The Drachenberg or Quathlamba Mountains form a broad range which runs nearly parallel with the coast, at a distance varying from

60 to 90 miles from the shore. The average height of the range may be estimated at 8000 or 9000 feet above the sea, and the summits are covered with snow at least four months in the year. On the north-west, or interior side, a table-land slopes gradually down almost from the summits of the mountains, exhibiting extensive plains, diversified by a few isolated mountain-groups and low ranges of hills. There is no pass in the whole range between 28° 30' and 31° S. lat. practicable for horses or wheel carriages, and there are very few for pedestrians. Coal occurs not far from the sources of the Tugala, and ironstone is frequently found. Copper has been discovered within 20 miles of Pietermaritzburg. In Natal the country gradually rises from the sea to the foot of the mountains. A few mountain groups occur, which are offsets from the Drachenberg range. The country is diversified with hill and dale.

The rivers are very numerous, and all flow eastward to the sea. Two of the largest are the Tugala and the Umzincula; they both rise in the Drachenberg Mountains. The Tugala receives several tributaries, of which the principal are the Buffalo River, which forms a portion of the boundary to the north, and the Bushman River; and it reaches the sea in 29° 15' S. lat., 31° 25' E. long. It has a bar at the mouth, and is not navigable. The Umzincula flows through a rugged and almost inaccessible country, and falls into the sea in 30° 50' S. lat., 29° 20' E. long.

Along the coast, in summer, the average temperature is about 74° Fahr.; in winter about 63°. Nearer the mountains the climate becomes colder. The rains generally commence in March, and end in September. Thunder-storms are of frequent occurrence, and are very violent. The climate, on the whole, is pleasant and healthy.

The climate and soil have been found suitable for the cotton-plant, but it is doubtful if it can be cultivated profitably. Indigo, sugar, and coffee are cultivated, and it is expected that sugar and coffee will become articles of export. Tobacco, maize, sweet potatoes, oranges, pine-apples, and pumpkins are raised in abundance. Cattle thrive well; but the climate does not appear to be suitable to the growth of wool. Horses are liable to sickness in the spring months, and many die. The soil is generally more fertile than in the Cape Colony, nor does it appear to suffer so much from droughts.

The elephant, which was formerly common in the colony, is now nearly driven away. The lion and leopard are still met with along the mountain ranges. Hyenas, jackals, wild dogs, ant-bears, and porcupines are numerous. The hippopotamus abounds in several of the rivers, and in the Tugala are numbers of small crocodiles. The larger antelopes are becoming scarce, but there are still many of the smaller ones. The vulture, rock-eagle, and Kaffir crane are common. Several valuable timber-trees grow on the declivities of the mountains and in the mountain valleys.

The colony of Natal is divided into the districts of Pietermaritzburg, D'Urban, Umvoti, Impafane, Tugala, and Umsinyate, and a tract in the south-west part of the territory. The principal town in the colony is Pietermaritzburg, founded by the Dutch boers in 1840, and containing about 3000 inhabitants. It is situated on an offset of the Drachenberg Mountains, in 29° 30' S. lat., 30° 2' E. long., about 50 miles W.N.W. from Port Natal. It contains a barrack, ordnance stores, and Dutch, Episcopal, and Methodist places of worship. It is well supplied with water. D'Urban, the only port of the colony, is situated on the east side of the inlet called Port Natal, which is a bay completely landlocked, and affording good anchorage. The entrance is narrow, and is impeded by a bar, on which there is sometimes not more than two fathoms of water. The cape at the entrance of Port Natal is in 29° 53' S. lat., 31° 2' E. long. Verulam, Windsor, and Western are the largest of the villages.

The white population of the colony is mostly composed of the original Dutch settlers who remained after the dispersion of the boers in 1842, and of the immigrants who have since arrived chiefly from Great Britain. The native population, consisting mostly of Zooloos, are an intelligent and docile people, and make excellent servants. They are scattered in kraals along the banks of the rivers, and round the mission stations along the coast and western boundary. The British commissioner manages the affairs of the aborigines, and is regarded as their protector and chief. British, American, and Norwegian missionary societies have mission stations in the colony.

Natal has a lieutenant-governor, who is assisted by an attorney-general and an auditor-general, a collector of customs, a surveyor-general, a crown prosecutor, and a government secretary, who form a legislative and executive council. The revenue is derived from a customs duty of 5 per cent. on all British goods, and of 12 per cent. on all foreign goods imported, sale of lands, a capitation tax on the aborigines, and a few other sources. A bishopric of Natal was created in 1858. There are episcopal ministers at Pietermaritzburg and D'Urban.

The colony of Natal owes its origin to the Dutch boers (farmers), who in the year 1836 emigrated northward beyond the boundaries of the Cape Colony, and established themselves in small communities, with their families and cattle, in different parts of the unoccupied territory. These emigrants in 1838 employed their commandant, Pieter Retief, to enter into a treaty with Dingaan, the chief of the Zooloos. Retief crossed the Drachenberg Mountains, accompanied by 70 or 80 farmers, and their families and attendants, who visited Dingaan at his place of residence, preparatory to forming their intended

establishment in the vicinity of Port Natal. They were received by the Zooloo chief and his warriors with every demonstration of kindness, but were treacherously surrounded and slain in the midst of professedly friendly festivities. The farmers scattered over the territory were next attacked successively, and upwards of 600 men, women, and children were killed, besides those who had been previously massacred at Dingaan's residence. The great body of emigrants, who still remained behind the Drachenberg Mountains, sent off expedition after expedition against Dingaan, and at length, in February 1839, succeeded in putting him to flight. The greater part of the Dutch farmers then removed to Port Natal, where, in December 1839, they hoisted the tricolor flag, and proclaimed an independent republic, with Andries Wilhelm Pretorius for president. The British government refused to acknowledge their independence, and Sir George Napier, then governor of the Cape Colony, sent some troops to take possession of Port Natal. They entrenched themselves, and maintained their position till the arrival of reinforcements by sea, in June 1842, when the Dutch were compelled to submit. By a proclamation dated Aug. 21, 1845, the colony of Natal was established by the British Government. [See SUPP.]

NATCHEZ. [MISSISSIPPI.]

NATCHITOCHEES. [LOUISIANA.]

NATOLIA. [ANATOLIA.]

NAUCELE. [AVEYRON.]

NAUMBURG. [MERSBURG.]

NAUPACTUS. [LEPANTO; LOCRIE.]

NAUPLIA. [NAPOLI DI ROMANIA.]

NAUVOO. [UTAH.]

NAVAN, county Meath, Ireland, a market-town and the seat of a Poor-Law Union, is situated at the junction of the rivers Boyne and Blackwater, in 43° 39' N. lat., 6° 38' W. long., 8 miles N.N.W. from Trim, 28 miles N.W. by N. from Dublin by road, 49½ miles by the Dublin and Drogheda and the Navan branch railways. The population in 1851 was 4016, besides 803 inmates of the workhouse. Navan Poor-Law Union comprises 12 electoral divisions, with an area of 94,466 acres, and a population in 1851 of 27,657. Navan was the first borough established by the English in this part of the country. It returned two members to the Irish Parliament, but was disfranchised at the Union. The town lies mainly between the two rivers, and consists of four streets, meeting in a central triangular area. A bridge over the Boyne leads to the small suburb of Athlumney. A bridge over the Blackwater leads to a larger suburb called Donaghmore. The parish church is a neat building, erected in 1818. The Roman Catholic chapel is a spacious Grecian structure. There are four National schools, an Endowed school, a Roman Catholic diocesan seminary, and a savings bank. The town also contains a court-house and market-house, the county infirmary, a fever hospital, dispensary, bridewell, and union workhouse. An infantry barrack on the right bank of the Blackwater occupies the site of an abbey founded in the 12th century. The town is connected with the Boyne navigation by a canal. It also communicates with Drogheda, by the Navan branch railway. Fringe and sacking are manufactured. There are a flax-spinning mill, two paper-mills, and several flour-mills; a tannery, a brewery, and two distilleries. Quarter and petty sessions are held. Fairs are held seven times a year. The market-days are Wednesday and Saturday.

NAVARINO, called *Neocastro* by the Greeks, a small town and fortress of the Morea, built on the south coast of the bay of the same name, about 5 miles N. from Modon, and about 3 miles measured across the bay from old Navarino, which is a ruined town with an old fort of the middle ages, built on a steep hill on the northern coast of the bay, near the site of the ancient Messenian Pylos, which, according to Pausanias, was situated on the promontory Coryphasium. The island of Sphacteria, or Sphagia, lies across the entrance of the bay, and adds to its security, rendering it one of the best harbours in the Levant. Sphacteria is known in ancient history for the defeat and capture of the Lacedaemonians by the Athenians, in the seventh year of the Peloponnesian war. (Thucyd., iv. 39.) In modern times the Bay of Navarino has become memorable for the naval battle which took place on the 20th October, 1827, between the French, English, and Russian combined fleet on one side, and the Turco-Egyptian fleet which was anchored in the bay on the other. The object was to oblige Ibrahim Pasha to evacuate the Morea. After a warm resistance, the Turco-Egyptians were completely defeated, with the loss of 8 ships of the line, 4 frigates, and about 40 or 50 smaller vessels. The rest surrendered, and a convention followed by which Ibrahim evacuated the Morea, and the Greek prisoners whom he had sent to Egypt were restored to their country. The Egyptian ships which had not been destroyed were returned to the Pasha of Egypt. The battle of Navarino decided the independence of Greece.

NAVARRA, a province of Spain, formerly a kingdom, is bounded N. by France, S. by the province of Soria in Castilla la Vieja, E. by Aragon, and W. by the Basque Provinces. It is situated between 41° 57' and 43° 18' N. lat., 0° 45' and 2° 27' W. long. The greatest length from north to south is about 100 miles; the greatest width from east to west is about 70 miles. The area is 2450 square miles. The population in 1849 was 280,000. It is divided into the five merindades, or districts, of Pamplona (north), Tudela (south), Sanguesa (east), Estella (west), and Olite (central).

Surface.—The great mountain chain of the Pyrenees entering from Aragon runs along the northern border of Navarra, the irregular line of the summit-level forming the boundary between this province and France as far as the pass of Lanz, which is about 10 miles W. from the pass of Roncesvalles. From this point the main ridge continues its course westward, whilst an offset of less elevation runs first northward in the direction of Bayonne, and then westward towards the mouth of the Bidassoa, where it terminates. This offset incloses the whole course of the Bidassoa except about six miles at the mouth of the river, and thus includes, at the north-west angle of Navarra and on the northern or French side of the summit-ridge of the Pyrenees, a beautiful and fertile series of valleys, the principal of which are those of Bastan, San Esteban, and the Cinco Villas, the last receiving its name from the five hamlets of Echalar, Sumbilla, Lesaca, Vera, and Aranax. The summit-level of the Pyrenean chain is of less elevation in Navarra than it is in Aragon, the highest summit in Navarra being only 5400 feet above the level of the sea.

Navarra south of the summit-level of the Pyrenees consists mostly of a series of offset-ridges, which gradually decrease in height as they extend southward towards the valley of the Ebro, which river bounds the whole of the province on the south, with the exception of the merindad of Tudela at the south-eastern corner. Several of the offsets from the Pyrenean chain extend far into the central and southern parts of Navarra; they have some large valleys between them, and several smaller ones, and leave a considerable extent of fertile plains on the northern side of the Ebro.

Navarra, from its mountainous character, is almost isolated from the countries around it. Across the Pyrenees there are ten passes; the five principal are those of Vera, Lanz (or Mays), Roncesvalles, Ochagavia, and Ibañeta. On the sides of Biscaya and Aragon the approaches are more difficult; and on the side of Castilla the deep and rapid Ebro forms a barrier passable only by the three bridges of Logroño, Lodosa, and Tudela.

Of the geology of Navarra little is known. The mountains are mostly of transition and secondary rocks. Jasper and marbles occur in some places, and there are many mines of iron.

Rivers.—All the rivers which descend on the southern side of the Pyrenean chain fall into the Ebro. [Ebro.] The river Aragon enters Navarra from the province of Aragon. It soon afterwards receives the Salazar, the Irati, and some smaller rivers, passes southward by Sangüesa, and after flowing in this direction about 20 miles takes a western course, during which it receives the Cidacos on the north bank. It afterwards receives the Arga, and then turning southward soon reaches the Ebro. The Arga rises above Pamplona, among the ridges of the Pyrenees, and receives the Araquil from the west, below Pamplona, and many other smaller affluents on both banks. The only other river of importance on the south side of the Pyrenees is the Ega, which has an eastern course past Estella, and then flows south-east and south till it enters the Ebro about 12 miles above the mouth of the Aragon. On the northern side of the Pyrenees the Bidassoa is the only river of importance in Navarra. It arises from two head-streams, and has at first a southern course, but afterwards turns westward, and flows to San Esteban de Lerin, whence it pursues a northern course, forming by itself and its numerous small affluents the beautiful series of valleys before mentioned. The valley of Bastan extends about twenty-three miles from north to south, and has a varying width of from two to three miles. The river in this the upper part of its course is called Bastan-Zubi, and does not receive its name of Bidassoa till after it turns and enters the valley of San Esteban. It afterwards commences its course northward, and passes through the valley of the Cinco Villas. The total length of the Bidassoa is about 45 miles.

Climate, Soil, and Productions.—The climate of the northern districts is exceedingly cold in winter, and rarely subject to excessive heat in summer; in the south it is far more genial, and highly delightful and salubrious. The soil in the low grounds is very rich, and susceptible of a high degree of cultivation; there is also much fine pasture-land.

Forests of pines (*Pinus sylvestris*) cover the slopes of the Pyrenees, and much wood is cut, and sent down by the mountain-streams to the Ebro, by which it is floated onward to Aragon and Cataluña. The other principal forest-trees are the oak, evergreen and deciduous, the olive, the chestnut, and the beech. The forests are not extensive, yet Navarra yields more valuable timber than any other province of Spain. Heaths, ferns, and broom, with many aromatic plants, grow on the sides of the mountains. Of grain Navarra yields annually about 4,000,000 bushels, consisting of wheat, maize, barley, oats, rye, and spelt-wheat. Other vegetable productions are chestnuts, broad beans, kidney-beans, hemp, and flax. Of olive-oil about 150,000 gallons are produced, and of wines, which are excellent and of various descriptions, about 10,000,000 gallons. After an abundant vintage people are invited by the public crier to take the old wine away from particular vaults gratis, in order to make room for the new. A small quantity of cider is also produced in the valleys of the Bastan and Cinco Villas.

There are in Navarra about 40,000 head of horned cattle, 700,000 sheep, 70,000 goats, 40,000 pigs, and 30,000 mules. The annual produce of wool amounts to 1,500,000 lbs. The mountains abound

in game and the rivers in fish. The wild animals are wolves, foxes, and wild boars.

The manufactures of Navarra are inconsiderable. There are several manufactories of coarse linen and woollen-cloth, and some of leather, soap, and iron. The quantity of brandy annually distilled averages about 2,000,000 gallons. Besides these are some potteries and some manufactories of Spanish liquors.

The greater part of the produce, natural and manufactured, is consumed in the province, but some grain, a little oil, half the wine, the greater portion of the wool, and two-thirds of the iron annually remain unconsumed, and are exported, which however fall very far short in amount of the cottons and silks, cutlery, tobacco, sugar, spices, and other luxuries, imported, principally from France.

Towns.—The city of Pamplona is the capital of Navarra. It is situated on the western or left bank of the Arga, in 42° 48' N. lat., 1° 40' W. long. The river here makes a bend northward, and flows through the beautiful plain called La Cuenca, which is about 30 miles in circumference, and is full of beautiful gardens and verdant meadows. Pamplona was anciently the court of the kings of Navarra, and has since been the residence of the viceroys of the province, is now the seat of the captain-general and the local government, and is the see of a bishop, suffragan of the archbishop of Burgos. The population in 1845 was 11,000. The city is built on an eminence, and is defended by a citadel, which overlooks the river by two of its bastions, and commands the level plain with the others, and is not commanded itself: it is a regular pentagon of 1000 feet each side, and is connected with the city by an esplanade, or glacis. The river is crossed by several bridges, and has a suburb called La Rochapea. The city itself is well built, well paved, and well cleansed. The fountains are abundantly supplied from a noble aqueduct constructed by Ventura Rodrigues with Roman solidity, and which brings the water from the hills of Subisa, 12 miles distant: one portion of it, 2300 feet long, is supported on 97 arches of 35 feet span and 65 feet high. The cathedral is small, and the exterior is disfigured by a Corinthian façade constructed in 1783, but the interior is of a good light gothic. The city contains also four parish churches, an episcopal palace, a town-hall, a university, a casa de espositos (foundling hospital), a theatre, and a plaza de toros, or bull arena. The Plaza del Castillo, which is the principal square, is also, on great festivals, converted into a plaza de toros. There are public walks on the roads leading to Madrid, to France, and La Rioja, but the alameda in the city, called La Taconera, is the most admired and most frequented. The manufactures and trade are of small importance. Pamplona is called Pompelon by Strabo (161, Casaub.), who adds, "as if it might be Pompeiopolis," that is, the City of Pompey. The people are called Pompelonenses by Pliny (iii. 3). The name of the city was corrupted by the Arabs, who took it in the beginning of the 8th century, into Bamblona. In 1808 it was seized by the French, who had been allowed to enter as friends; it was held by them till 1813, when it capitulated to the allies under the Duke of Wellington, after the battle of Vitoria.

Cascaste, 58 miles S. from Pamplona, overhangs the small river Queyles, an affluent of the Ebro flowing from the south. There are two bridges over the Queyles. The town contains two churches, in one of which is a very fine retablo, or carved altar-piece, executed in 1596. The population is about 3000. **Corella**, 45 miles S. by W. from Pamplona, stands in a fertile plain, on the west bank of the Albama, a small affluent of the Ebro from the south. It has several distilleries of brandy, some oil-mills, and some liquors-factories. The population in 1845 was 4648. **Estella**, 27 miles S.W. from Pamplona, is an ancient city, now the chief town of the merindad of Estella. It is situated on the river Ega, which is here joined by the Amescua. It has a ruined alcazar on an eminence, and contains two old churches, an hospital, and a college, and has some manufactures of woollens. The population in 1845 was 6192. **Olite**, 28 miles S. from Pamplona, is the chief town of the merindad of Olite. It is situated on the west bank of the Cidacos, and contains remains of old walls and of an old royal palace, once a residence of the kings of Navarra. The population in 1845 was 2748. **Sangüesa**, 25 miles S.E. from Pamplona, the chief town of the merindad of Sangüesa, is situated on the west bank of the river Aragon, which is here crossed by a stone bridge. The town is inclosed by walls except on the side next the river, where there are embankments as a defence against inundations of the river. The streets are wide and well paved, and the houses tolerably well built. It contains four parish churches, and has some brandy-distilleries. The population is about 3500. **Tafalla**, 23 miles S. from Pamplona, is built on the west bank of the Cidacos, about 5 miles above Olite. It is surrounded by old walls, and contains the ruins of a royal palace. It has brandy-distilleries and tanneries. The population in 1845 was 2912. This town and Olite were favourite places of residence of the kings of Navarra. **Tudela**, 52 miles S. from Pamplona, the chief town of the merindad of Tudela, is situated a little above the mouth of the Queyles, on the south bank of the Ebro, in the angle formed by the junction of the two rivers. The Ebro is here crossed by a substantial stone bridge of 17 arches, and 1200 feet in length. The town is the see of a bishop, the collegiate church having been raised to the rank of a cathedral in 1788, when the bishopric was established. This cathedral is an ancient gothic structure, and contains the tomb of Blanche of Castilla,

queen of Pedro the Cruel. The houses are solidly built and lofty; the streets are narrow, but well cleansed. The town contains several churches, some conventual buildings now converted to secular uses, a workhouse, a prison, and three or four hospitals. There are manufactures of woollen-cloth, soap, bricks, and earthenware. The population in 1845 was 6790. *Viana*, 50 miles S.W. from Pamplona, is an ancient city in a rich corn country, with the Ebro flowing at a short distance on the south. It is a pleasant town, with a good plaza, and a fine church dedicated to La Santa Maria. The population in 1845 was 3146.

History.—The earliest inhabitants of Navarra were called Vascones by the Romans. In 470 they were subdued by the Goths. Early in the 8th century Navarra was conquered by the Arabs; but the Christian inhabitants, who had fled to the recesses of the Pyrenees, resolving to expel the invaders, chose a noble knight, Garci Ximenez, for their chief or king; and thus was founded the monarchy of Navarra. His family became extinct in the middle of the 9th century, and the Navarrese then elected Ifigo Sanchez, count of Bigorre, in the hands of whose descendants the sceptre of Navarra remained for five centuries. In 1512 Fernando the Catholic obtained possession of that part of the ancient kingdom of Navarra which forms the present province, and annexed it to the Spanish dominions, leaving unconquered a portion on the northern side of the Pyrenees, which was afterwards united by Henri IV. to the crown of France, and is now known as the department of Basses Pyrenées; but this, as will be seen from our description, does not include the valley of the Bidasoa.

(Miñano, *Dic. Geog.*; Antillon, *Geografía de España y Portugal*, 1824; Bowles, *Introducción a l'Historia Natural de España*; Cook, *Sketches in Spain*; Madox, *Diccionario Geográfico de España*; Ford, *Handbook of Spain*; Mariana, *Historia General de España*; Conde, *Arabes*, &c.)

NAVARRE, BASSE. [PYRENEES, BASSES.]

NAVENBY. [LINCOLNSHIRE.]

NAVIA. [ASTURIAS.]

NAVIGATOR ISLANDS, a group of islands situated in the Pacific, between 10° and 15° S. lat., 169° and 173° E. long., consists of nine islands, of which the largest, called Pola, or Savan, is the most western. It is about 50 miles long and 30 miles wide, and the mountains rise to the height of 1000 feet. Eastward of Pola is Ojalava, which is hardly inferior in size. Maouna, also east of Pola, is much smaller, and the other six are smaller still. They are all volcanic; the rocks of the beach, upon which the sea breaks with so much force as to throw the water more than 50 feet high, are only pieces of lava, rounded basalts, or coral, by which the islands are wholly surrounded. In the coral-reefs are narrow passages for boats. Along the beach are level tracts, but at some distance the country rises into hills and mountains. The islands are clothed even to the very summits of the hills with trees loaded with fruit. They abound in pigs, dogs, fowls, birds, and fish; and the lower parts are covered with extensive plantations of guavas, bananas, and other fruits. The sugar-cane grows spontaneously on the banks of the rivers. The inhabitants are numerous; they belong to the Malay race, and speak a language which is a dialect of that used in the Friendly Islands.

NAVY BAY, a natural harbour lying between the Atlantic coast of New Granada and the island of Manzanilla. The island, which is a mile and a quarter long, a mile broad, and covered with luxuriant trees and shrubs, is separated from the mainland at its southern extremity by a channel of about 60 feet wide and about 10 feet in depth. A projecting reef stretching out from the mainland at the north-eastern extremity of the bay forms a natural breakwater. The harbour thus formed is accessible at all seasons: it is secure in every wind, with a depth of 6 to 7 fathoms in the middle and 3 to 4 fathoms within 60 feet of the shore, and capable of containing 300 sail. Navy Bay is the Atlantic terminus of the Panama railway, which from hence to Gatun (7 miles) is carried over a swamp supported on piles. A lighthouse has been erected at the western point of the island.

Aspinwall city, founded in 1851, is situated on the island, the terminus of the railway, and is now the depôt of the eastern side of the isthmus, instead of Chagres, from which it is distant 7 miles, and which has been since nearly altogether abandoned.

NAXOS, NAXIA, one of the larger Cyclades, lies between 36° 45' and 37° 15' N. lat., 25° 20' and 25° 35' E. long., to the east of Paros, from which it is separated by a channel 6 miles wide. It is situated in the middle of the archipelago, about half-way between the coasts of Greece and Asia Minor. It was anciently called Strongyle (Round) on account of its shape; and also Dia, in honour of Jupiter; and Dionysias, from the worship of Dionysus, who, according to the mythi, was brought up on this island. Its first inhabitants were said to have been Thracians. According to Herodotus, the Greek inhabitants of Naxos were Ionians from Athens (viii. 46). The island was taken by the Athenians in the time of Pisistratus. It was captured and ravaged by the Persians under Datis and Artaphernes (B.C. 490). After the defeat of Xerxes at Salamis (B.C. 480) the Naxians recovered their independence. After the battle of Mycale it became one of the confederate states, at the head of which was Athens; and it was the first of those states that fell under political subjection to Athens.

In modern times Naxos, after the conquest of Constantinople by the Latins, became the seat of a dukedom founded by the Venetians, which embraced most of the other Cyclades. It was taken possession

of by the Turks in the 16th century, and it now forms part of the new kingdom of Greece.

Naxos is the most fertile of the Cyclades, and its wine is much esteemed. It produces corn, oil, cotton, silk, most kinds of fruits, and abounds with game. The plains and valleys are well supplied with springs, and all travellers describe Naxos as a very pleasant country. The chief town, called *Naxia*, is on the western coast of the island, and near it is the harbour, called Porto Saline, on account of the sea-salt which is collected there. The castle of Naxia, on the hill above the town, was built by the Venetians, and was the residence of the dukes. According to Thevenot, the plant (*Cistus*) which produces ladanum grows here, and in his time the substance was collected from the beards of the goats which fed on the plant, in the manner mentioned by Herodotus (iii. 112). There are about 40 villages and many country-houses scattered about the island, the population of which is reckoned at 20,000. There is a Greek and a Latin bishop, with convents of both churches. The northern part of the island contains some mountains, from which came a kind of marble called by the Greeks ophites, on account of its being spotted like a serpent's skin, and which was much valued. Emery is also found there, which is considered of the best kind, and constitutes an article of export.

There was an ancient city of Sicily called *Naxos*, north of Catania, and near the site of Taormina, which was founded by some Chalcidians from Euboea. (Strabo, p. 267.)



Coin of Naxos.
British Museum. Actual size. Silver.

NAYLAND. [SUFFOLK.]

NAZAIRE, ST. [LOIRE-INFÉRIEURE.]

NAZARETH. [SYRIA.]

NAZING. [ESSEX.]

NEAGH, LOUGH, Ireland, a lake in the province of Ulster, is bounded N. by the county of Antrim, E. by Antrim and a small part of Down, S. by Armagh, and W. by Tyrone. Its greatest length from north to south is 18 miles; from east to west, 11 miles. It covers 98,255 acres, or 154 square miles. The surface of the lake is 48 feet above the level of the sea at low water, and its greatest depth is about 102 feet. It is the largest lake in the British Islands.

The principal bays are Antrim Bay, Sandy Bay, and Bartin's Bay on the east side, and Washing Bay in the south-west. In the lough are several very small islands; on Rams Island, in Sandy Bay, there is an ancient round tower. Lough Neagh receives the Blackwater, the Upper Ban, the Six-Mile-Water, the Main, and the Moyola. The only outlet is the Lower Ban, which quits the lake at the north-western angle, and, passing through Lough Beg, enters the ocean below Coleraine. The shores of the lake are low and flat, and in some parts marshy and frequently flooded. The water possesses in several parts a petrifying quality. The petrified wood is manufactured into hones; and the pebbles found in the white sand of the shores, chiefly chalcodony, are polished and wrought into seals and necklaces. The char, the pullan (or fresh-water herring), the dollaghern (a species of trout), and other fish are taken in the lough; and the swan, the heron, the bittern, the teal, and the widgeon frequent the shores.

Lough Neagh possesses several good landing-places and ports, and is navigated by small vessels. It communicates by one canal with Lisburn and Belfast, by another with Newry, and by the river Blackwater and the Tyrone and Ulster canals with the Tyrone coal-field, Monaghan, Clones, and Lough Erne. A steam-boat is employed on it in towing vessels.

NEAPOLIS. [ISTRIA; NAPLES.]

NEATH, Glamorganshire, South Wales, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union in the parish of Neath, is pleasantly situated on the left bank of the river Neath, in 51° 40' N. lat., 3° 49' W. long., distant 35 miles W.N.W. from Cardiff, 193 miles W. by N. from London by road, and 203 miles by the Great Western and South Wales railways. The population of the borough in 1851 was 5841. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor, and is contributory to Swansea in returning one member to the Imperial Parliament. The living is a rectory in the archdeaconry and diocese of Llandaff. Neath Poor-Law Union contains 30 parishes and townships, with an area of 162,817 acres, and a population in 1851 of 46,471.

Neath occupies the site of the Roman station Nidum. The river Neath is crossed at the town by a bridge. The streets are lighted with gas and paved. There is a commodious market-house, erected in 1837. The church has a square embattled tower. The Wesleyan Methodists, Independents, and Baptists, have places of worship; and there are schools partially endowed, a philosophical society, museum,

library, and mechanics institute. Of the castle, part of the walls and a gateway, flanked by two towers, are yet standing. The exports are coal, copper, iron, fire-bricks, oak, timber, &c.; the imports are copper and iron-ore, corn, flour, foreign timber, &c. There are large copper, iron-, and tin-plate-works. Machinery for smelting and mining operations is extensively made. The market is held on Wednesday, and there are three fairs in the year. About a mile from Neath are the ruins of Neath Abbey, founded in the 12th century.

NEBRASKA, a territory of the United States of North America, established by Act of Congress 1854, occupies the tract of unreclaimed country north of the Nebraska River up to 42° N. lat. It is bounded E. by the state of Iowa, from which it is divided by the Missouri River; N. by the North-West territory; W. by the Rocky Mountains, which divides it from the Oregon and Utah territories; and S. by the territory of Kansas. No definite statement of its limits has been published; but the area of Kansas and Nebraska together is estimated by the United States land-office at 136,700 square miles. No census has been taken of the population: the civilised inhabitants are very few in number.

This country and Kansas have hitherto been usually spoken of together [KANSAS], and the descriptions published have included both. Like Kansas, Nebraska has on the east, extending down to the valley of the Missouri, extensive tracts of prairie lands; on the west a broken and hilly country, rising into the mountainous tract of the Rocky Mountain range; while the centre is occupied by a broad apparently irreclaimable waste, forming the northern part of the Great American Desert, and the home of numerous wandering tribes of Indians. But Nebraska has a larger share than Kansas of this desert land, and in other parts it is believed a less fertile soil.

The Missouri, as we have said forms its eastern boundary, and the only actual settlements, so far as we know, yet made in this territory are on its banks. The chief river belonging to the territory, and that which gives it its name, is the Nebraska, which is formed by the union, in 41° 5' N. lat., 101° 21' W. long., of two branches from the Rocky Mountains. The united stream flows in a generally eastern direction to the Missouri into which it falls about 50 miles below Council Bluffs, and about 600 miles above the confluence of the Missouri with the Mississippi. It is a very rapid shallow stream, fordable, except during floods, in almost every part; and full of islands covered with cotton wood, willows, and shrubs, and of shifting sandy shoals: it is thought to be unavailable for navigation by steam-boats of light draught for more than 40 miles. At its confluence with the Missouri it is 600 yards wide. One of the two main routes for emigrants to Oregon and the Pacific lies along this river quite up to the Rocky Mountains. The chief affluents of the Nebraska belonging to this territory are the Loup Fork, Elkhorn, and Wood rivers.

The chief settlement yet formed is Council Bluffs on the Missouri, which is within this territory, though previous to its organisation assigned to IOWA, under which state it will be found noticed. It is of considerable local importance as the last civilised resting place of the emigrant to the 'far west,' who here makes his final arrangements and purchases, previous to entering upon what has hitherto been commonly known as the Indian country. Council Bluffs was established as a government Indian agency station. Bellevue, a little lower down the Missouri, is the only other civilised settlement in the Nebraska territory, with the exception of a military station for the surveillance of the Indians. The chief tribes of Indians in Nebraska are the Pawnees, Poncahs, Omahas, Otoes, &c., but we have no account of their numbers or condition.

The Act of Congress which erected Nebraska into a territory, leaves it open to settlement by citizens of the United States, and to aliens who make the usual declaration of their intention to become citizens; and defers to the inhabitants themselves the power to determine whether slavery shall be permitted to exist within the territory.

NECKAR-KREIS (circle of the Neckar), a province in the north-west of the kingdom of Würtemberg, is bounded N. and W. by the grand-duchy of Baden, E. by the circles of Jaxt and Danube, and S. by that of Schwarzwald. Its length from north to south is 55 miles; its breadth is about 36 miles; its area is 1278 square miles; and its population in 1852 was 501,034. The province is traversed by several ranges of moderately high forest-clad hills, which run in a western or north-western direction from the Rauhe Alb, or Alps of Suabia, in the east of the kingdom. It takes its name from the river Neckar, which, rising on the Baden frontier in the south of the Schwarzwald, runs in a general north-eastern direction to the centre of the kingdom of Würtemberg, whence it flows northerly past Heilbronn, below which it turns to the north-west, crosses the territory of Baden till it reaches that of Hesse-Darmstadt; of this it forms the boundary to its entrance into the Rhine at Mannheim, after a course of about 170 miles. The Neckar receives in this province the Enz, the Kocher, the Jaxt, and a great number of small streams. It is navigable for small craft from Cannstadt. There are several lakes and mineral springs in the province. The soil of the valley of the Neckar and of the other rivers is exceedingly rich and fertile. The chief products are wheat, hemp, wine, silk, and wood. Horned cattle, sheep, and horses of good breed are numerous. Railroads run from Stuttgart to Heilbronn, and from Stuttgart to Ulm and Frederikshaf on the Lake of Constance (from Ulm a line runs east to Augsburg). From the former line a

branch is constructed to join the great trunk line along the right bank of the Rhine at the Bruchsal station, between Karlsruhe and Heidelberg. [WÜRTEMBERG.]

Towns.—STUTTGARDT. CANNSTADT. ESSLINGEN. Heilbronn, 28 miles N. by railway from Stuttgart, is situated on the right bank of the Neckar, which is here crossed by a wooden bridge. It is surrounded with high walls and a deep ditch, and contains some good buildings, the most interesting of which are the church of St-Kilian, the town-hall, and the house of the Teutonic Knights, now used as barracks. Heilbronn has a gymnasium, a public library, and about 10,000 inhabitants, who are actively engaged in trade, and in the manufacture of silver ware, carpets, tobacco, white lead, chemical products, gunshot, paper, &c. The navigation of the Neckar below this town is much facilitated by the Wilhelm's Canal. Ludwigsburg, N. of Cannstadt, a mile from the left bank of the Neckar, is a well-built town, with 6208 inhabitants, exclusive of the garrison. The town, which, for its size, is one of the prettiest in Germany, has long wide streets, mostly lined with trees. The principal building is the former royal palace, one of the largest in Germany; it contains a great number of pictures of the old German and Flemish schools. The other remarkable objects are the military college, the lyceum, and the arsenal. Woollen cloth, linen, calico, jewellery, leather, nails, and cannon, are among its industrial products.

NEEDHAM MARKET. [SUFFOLK.]

NEELGHERRY, or NILGHERRY, MOUNTAINS. [HINDUSTAN.]

NEGAPATAM. [CARNATIC.]

NEGRO, RIO. [BRAZIL.]

NEGROPONT. [EUBŒA.]

NEISSE. [OPPELN.]

NEJD. [ARABIA.]

NELLORE. [CARNATIC; HINDUSTAN.]

NELSON. [ZEALAND, NEW.]

NELSON RIVER. [HUDSON'S BAY TERRITORIES.]

NEMOURS. [SEINE-ET-MARNE.]

NEN, or NENE, RIVER. [CAMBRIDGESHIRE; NORTHAMPTONSHIRE.]

NENAGH, Tipperary county, Ireland, a market- and post-town, and the seat of a Poor-Law Union, is situated on the Dublin and Limerick road, in 52° 52' N. lat., 8° 11' W. long., distant by road 24 miles N.E. from Limerick, and 95 miles S.W. from Dublin. The population in 1851 was 7349, besides 1943 inmates of the workhouse. Nenagh Poor-Law Union comprises 28 electoral divisions, with an area of 183,088 acres, and a population in 1841 of 72,045; in 1851 of 50,492. The town consists of four streets which contain some well built houses, and the place has a neat and pleasant appearance. The parish church is a plain building, erected in 1810. There are chapels for Roman Catholics and Methodists, a parochial Free school, three National schools, the court-house and jail for the North Riding, a dispensary, and Union workhouse, and an infantry barracks. There is a weekly market for corn and cattle. The market-day is Thursday. Nenagh Round, a lofty and massive keep, forms a conspicuous object in the town.

NENTHEAD. [CUMBERLAND.]

NEOT'S, ST., Huntingdonshire, a market-town, and the seat of a Poor-Law Union, in the parish of St. Neot's, is situated on the right bank of the river Ouse, in 52° 14' N. lat., 0° 17' W. long., distant 9 miles S. by W. from Huntingdon, 56 miles N. by W. from London by road, and 51½ miles by the Great Northern railway. The population of the town in 1851 was 2951. The living is a vicarage in the archdeaconry of Huntingdon and diocese of Ely. St. Neot's Poor-Law Union contains 30 parishes and townships, with an area of 65,256 acres, and a population in 1851 of 18,825.

At this place, anciently called Ainulphabury, a Benedictine monastery was early established, to which the remains of Neot, a Saxon saint, were transferred from Neotstock, in Cornwall. The town consists of several streets, and has a commodious market-place. The lowness of its site exposes the town to inundations of the Ouse, which is here crossed by a bridge of five arches, with six additional arches over the low ground on the banks. The parish church is considered the finest church in the county. It consists of a nave, aisles, and chancel, with a tower 150 feet high at the west end. The interior has been well restored. The Baptists and Wesleyan Methodists have chapels, and there are Free, National, and Infant schools. A paper manufactory employs some of the inhabitants. The market is held on Thursday, and there are three yearly fairs.

NEOT'S, ST. [CORNWALL.]

NEPACTOS. [LEPANTO, GULF OF.]

NEPAUL, or NEPAL, a principality situated within the range of the Himalaya Mountains, lies between 26° 20' and 30° 40' N. lat., 80° 5' and 88° 20' E. long. It has Tibet on the N., the plains of Hindustan on the S., Kumaon on the W., and Sikkim on the E. The length east to west is about 450 miles, the breadth north to south, on an average, is about 100 miles. The area is 54,000 square miles. The population is estimated at 1,940,000.

Nepaul forms a long and elevated valley, inclosed by the Himalaya Mountains on the north, and by the Lama Dangra Mountains on the south. Some of the summits of the Himalaya Mountains bordering upon Nepal are the highest of the range, one of them, the Dhawalaghiri, or White Mountain, attaining an elevation of 28,000 feet above

the sea, and two others to 25,000 and 23,000 feet respectively. The Lama Dangra Mountains have a general elevation of 6000 or 7000 feet above the sea. The valley of Nepal itself is 3000 or 4000 feet high. The surface is very uneven and broken, and the general width of the cultivated part is not more than 30 or 40 miles. It includes at the east end a portion of the plain of the Ganges, which is a part of the Tarai, or swamp, but is of a much better kind than that which is south of Bootan, and belongs to Bengal: the products are timber, of which a great quantity is sent to Calcutta, and elephants. The principal object of cultivation in Nepal is rice, but maize, wheat, barley, sugar-cane, cotton, madder, and legumes, are also grown.

The streams in Nepal are very numerous. The principal rivers are—the Coosy in the east, which reaches the Ganges about 20 miles below Boglipoor; the Gunduck in the centre, which falls into the Ganges nearly opposite to Patna, and the upper course of the Gogra in the west. The tributaries of the Coosy and Gunduck are numerous, and some of them large.

Nepal contains several considerable towns, which owe their origin or prosperity to the country being the thoroughfare between the table-land of Tibet and the plains of the Ganges. Other towns owe their prosperity to the fertility of the district in which they are situated. This is particularly the case with the capital, *Khatmandu*, which stands in a plain about 20 miles long by 16 miles wide, environed by mountains which rise from 3000 to 4000 feet above it. The town is surrounded by a wall. The streets are long, narrow, well drained, and tolerably clean. The same plain contains two other large towns, Lalita Patan and Bhatgong, which are Newar towns, and are falling into decay. Khatmandu has a population of about 50,000, and contains many temples. *Neacote*, another large town, about 20 miles N.W. from Khatmandu, stands on a high hill, on one of the most frequented of the roads into Tibet, along the course of an affluent of the Trisul Ganga, and over the pass of Kheru.

The population of Nepal consists of several tribes, some of whom are Buddhists, and appear to be of Mongol origin; others seem to be of Hindoo origin, and adhere to Brahmanism. The ruling tribe are Ghorkas, and belong to the latter class; the next most important are Newars, who, until 1716, supplied the sovereigns of the state until subdued by the Ghorkas. The Newar tribe now presents the best artisans and cultivators, while the Ghorkas form the soldiery. In 1814 the Nepaulesse commenced a war with the English, which was terminated in 1816, when all the countries between the Sutlej and Kali rivers were ceded by them to the British, and the territories of the raja of Sikkim, which they had occupied, were evacuated. In 1850 the raja of Nepal sent his prime-minister as ambassador extraordinary to the government of Great Britain; he landed at Southampton May 25, and left London on his return August 20. In 1854 another expedition was preparing against Tibet.

Nepal is not under British protection, but the raja is united by treaty to the British government, whose decisions he is bound to follow in certain cases.

NERAC. [LOT-ET-GABONNE.]

NERBUDDA. [HINDUSTAN.]

NERESHEIM. [JAXT.]

NÉRIS-LES-BAINS. [ALLIER.]

NERTSCHINSK. [SIBERIA.]

NERVI. [GENOA.]

NESHIN. [CÆRNIGOF.]

NESS, LOCH. [INVERNESS-SHIRE.]

NESTON, GREAT. [CHESHIRE.]

NETHERBURY. [DORSETSHIRE.]

NETHERLANDS, a kingdom in the north-west of the continent of Europe, consists of the territory of the republic of the Seven United Provinces, the duchy of Limburg, and the grand-duchy of Luxemburg, which the king of the Netherlands possesses, with the title of grand-duke, as a part of the German Confederation. It is situated between 50° 44' and 53° 34' N. lat., 3° 30' and 7° 10' E. long., and is bounded E. by Germany, N. and W. by the North Sea, and S. by Belgium. The area of the kingdom is 12,567 square miles. The population, on the 1st of January 1839 was 2,583,271; on the 31st of December 1853 it amounted to 3,203,232. The area and population are distributed over 11 provinces as follows:—

Provinces.	Area in Square Miles.	Population.
North Brabant	1976.2	405,525
Guelderland	1962.0	387,423
North Holland	955.0	514,755
South Holland	1169.6	591,493
Zealand	670.4	165,075
Utrecht	534.2	155,324
Friesland	1260.9	259,508
Overijssel	1280.8	227,683
Groningen	882.5	197,101
Drenthe	1027.0	87,944
Limburg	848.5	211,401
Total	12,567.1	3,203,232

If to these numbers be added respectively 986 square miles and 194,619 inhabitants, for the grand-duchy of Luxemburg, the total extent of the European territory subject to the king of the Netherlands is 13,553 square miles, and the total population 3,397,851. Of the number about 60,000 are Jews; about 50 Greeks and Armenians; and the rest Protestants and Catholics, in the ratio of 11 to 7.

Face of the Country; Soil; Climate.—The Netherlands are part of the great plain of Northern Europe, and are not separated from Germany on the north-east by any natural boundaries. The provinces about the mouths of the Schelde and the Rhine, and the country to the north of them, Zealand, North and South Holland, Friesland, Groningen, Drenthe, and Overijssel, are indeed most appropriately called the Netherlands, that is, the Lowlands. They form one unbroken flat without a hill or rock, without forests or running waters, they lie in part even below the level of the sea, against the inroads of which they are protected partly by immense dykes, and partly by sandhills, or 'dunes,' from 80 to 180 feet high, which have been cast up by the ocean, and, running parallel with the coast, protect it against the element to which they owe their origin. Nothing can be more dreary than this ocean of sand; it is a perfect image of aridity and barrenness; some broom scarcely green, some stunted shrubs growing at intervals in the hollows, where they are protected from the wind, alone interrupt this dreary solitude. From the Helder to the mouth of the Maas, a distance of 75 miles, these gloomy though protecting deserts everywhere extend between the cultivated country and the sea. The land thus rescued from the sea, consisting of moor and mud, is traversed by numberless canals, which are absolutely necessary to drain it and render it fit for cultivation. The labour is simply rewarded, for the land is extremely fertile and covered with the richest pastures. The lowest parts are called polders. When a marsh is to be drained, it is first inclosed with a rampart, or dyke, to prevent any water from flowing into it. Windmills are then erected on the edge of the dyke, each of which works a pump. As the mills raise the water it is discharged into a canal, which conveys it to the sea or to some inland piece of water. But in general the operation cannot be performed at once; where the marshes are too deep below the surrounding country, two or three dikes and as many canals are made at different levels, rising by degrees to the upper canal, in which the whole terminates. All the polders have an extremely rich alimy soil, which is generally used for pasturage, but in some places produces rich crops of corn. The eastern provinces nearest to Germany contain many meres and marshes, and especially the great series of turf moors which extend from the mouth of the Schelde eastward to the Maas, and there join the great morass called the Peel, on the east frontier of North Brabant, which is 10 leagues long and from 1 to 3 leagues broad.

This marshy country, which is so wholly artificial that it has justly been said 'the Dutch built Holland,' is one of the best cultivated, the most wealthy, and the most populous in Europe; and it would be difficult to find elsewhere, in so small a compass, such a number of large and well-built villages, towns, and cities. The atmosphere in these low tracts is for the most part damp, thick, and heavy; fogs and storms are very frequent; but both the heat and the cold are more moderate than in Northern Germany. The climate is unhealthy, especially for foreigners. The want of good spring water is very sensibly felt. The climate is more healthy in the eastern provinces, which are rather more elevated, and contain some small hills, which the inhabitants dignify with the name of mountains.

Bays, Rivers, Canals, and Lakes.—The whole coast, which is much broken and indented with considerable bays, large inlets of the sea, and the mouths of great rivers, would measure near 500 miles. The North Sea, which borders Belgium and the Netherlands from the frontier of France to the mouth of the Ems, has produced in the lapse of ages great physical revolutions in the maritime provinces. The most remarkable of these revolutions have been the retreat and encroachment of the sea, and the changes in the course of the Rhine. The whole country probably once belonged to the ocean, but the oldest accounts that we possess represent the land as more extensive than at present. The Yssel, it appears, ran into an inland lake called Flevo, from which a river pursued its course for 50 miles to the sea. That lake, with the adjacent continent, has been covered for many centuries by the Zuyder-Zee, the only remains of the continent being the islands of Texel, Vlieland, Schelling, and Ameland, which lie in a curved line, convex towards the ocean, in front of and protecting the entrance of the Zuyder-Zee. This inland sea, which is inclosed by the islands and the provinces of Holland, Utrecht, Guelderland, Overijssel, and Friesland, resembles a great lake: it is 80 miles long from north to south, and its breadth varies from 20 to 30 and 40 miles. On account of its great extent, the navigation is dangerous in stormy weather for small vessels, which however cross it from South Holland to Friesland rather than go all round the coast. The entrances between the islands being much obstructed by sand-banks, the trade of Amsterdam derives infinite benefits from that noble work the Helder, or North Holland Canal. The Lauwer-Zee, between Friesland and Groningen, and the Dollart, between Groningen and the German province of East Friesland, were formed by similar irruptions of the sea in the 13th century; and so late as the 15th century a great salt-

water lake, called the Bies-Bosch, was suddenly formed to the south-east of Dort, by the sea bursting through a dam and overwhelming 72 villages, with 100,000 inhabitants. [BIESBOSCH.]

The principal river is the RHINE, which, coming from Germany, enters the Netherlands at Lobith, where it is 2300 feet broad; but in traversing this country it is divided into three arms, and before it reaches the sea even loses its venerable name. Soon after crossing the frontier it divides into two branches, the larger and left arm forming the Waal. The right or northern arm flows to Arnheim, where it again divides into two branches; one, called the Yssel, flows northward to the Zuyder-Zee; the other runs to Wijk, where it again divides into two streams, the larger, called the Leek, joining the Waal above Rotterdam, and the smaller, now reduced to an insignificant river, passing by Utrecht to Leyden and the sea. Till the beginning of the 19th century, this branch was lost in the sand, the mouth being completely choked up since A.D. 840; works were commenced by Louis Bonaparte to re-open this mouth of the river near Katwyk, and the operation was happily completed in 1807. The other principal rivers are—the Maas, or MEUSE, which comes from Belgium and joins the Waal at the fort of St.-Andries; and the SCHelde, which, likewise coming from Belgium, enters Holland below Antwerp, and divides into two arms, the East and the West Schelde; the West Schelde falls into the ocean at Flushing, and the East Schelde between the Zealand Islands of Schouwen and North Beveland. Of the canals the most important is the North or Heider Canal. [HOLLAND, North.] The greatest lake, that of Haarlem, has been recently drained by the action of steam-engines, and its area converted into polders. [HAARLEM.]

The railway system of the Netherlands comprises a line running from Rotterdam through the Hague, Leyden, and Haarlem to Amsterdam; a second line joining Amsterdam to Utrecht, and continued eastward to Arnheim near the Prussian frontier; and a line connecting Rotterdam with Antwerp, thus uniting the great Dutch commercial cities with the general railway system of Europe. Electro-telegraphic wires are laid along all these lines.

Natural Productions.—The horses are a large strong breed, well adapted for draught and for heavy cavalry, but like all horses bred in a damp soft soil, they have tender feet. The horned-cattle are mostly remarkable for their size and beauty, and amount to about a million. Vast numbers of lean cattle from Denmark and Germany are fattened in the rich pastures of North Holland. There are about 700,000 sheep. The swine are of the German breed, and are most numerous in the provinces next to Germany. The only kind of game is the hare, and even that is rare; wild-rabbits however are very numerous among the sand-hills. Domestic poultry is plentiful. There are wild geese and ducks, snipes, woodcocks, and plovers. This is the paradise of storks, it being considered a great offence to kill one. Accordingly they build their nests on the house-tops, and walk about unmolested and unconcerned. Fish is abundant on the coasts and in the rivers; the cod fishery on the Doggerbank and the Greenland whale fishery are very productive. But the herring fishery on the coast of the Shetland Islands, formerly a chief source of the wealth of the Dutch, has greatly declined. In 1601 there were 1500 vessels employed in the herring fishery; in the years from 1795 to 1807 and 1808 there were only 30 vessels; but the number has since greatly increased. In 1842 the Dutch fisheries employed 1603 vessels, worked by 8350 men. The average annual produce then amounted to 40,000 tons of salt-herrings; 10,000,000 herrings for smoking or drying; and 10,000 tons of salt-fish. The gross value of the produce was estimated at 4,000,000 florins, or 333,333*l.*, a sum, which, taking into account the capital employed in the ships, &c. amounting to 354,410*l.*, and to the yearly expenditure of about 314,416*l.*, leaves but a small margin for profit. The Dutch carry on a large trade in eels with London; the eels are kept alive in wells on board the schuyts (as the vessels are called). The vessels generally remain at Erith, and the fish are sent up by lighters in eel-boxes.

Sufficient corn for home consumption is not raised; hemp and flax are grown in great abundance.

There are no minerals, except a little bog-iron in Overijssel and Guelderland: there are brick-earth and potters'-clay in most of the provinces. Fullers'-earth (but mixed with too much sand) is got in pretty considerable quantities about Tilburg; and immense quantities of turf are dug in Holland and Friesland: some sea-salt, but in small quantities, is made on the coasts of Holland and Friesland.

Trade.—The history of the commerce of the Netherlands, properly begins with Bruges in Flanders, in the 14th century. From Bruges the trade was for the most part transferred at the end of the 15th century to Antwerp, which became the greatest emporium in the world. But the ravages of the war with Spain and the capture of the city after the memorable siege in 1585 drove the wealthiest inhabitants to the northern provinces, especially to Amsterdam. The new republic of the 'Seven United Provinces,' founded on principles of civil and religious liberty, became a sure asylum for the oppressed, while religious dissensions and persecutions prevailed in many other parts of Europe. Poor as the country then was in natural resources, it was necessary to find for the rapidly increasing population employment beyond the seas. The republicans, who were at first driven by necessity to become bold corsairs against the Spanish squadrons, soon

became excellent and intrepid seamen, and enterprising indefatigable merchants. The commerce of Antwerp, Cadix, and Lisbon fell into their hands, and thus, in the middle of the 17th century, the United Provinces became the first commercial state and the greatest maritime power in the world, and the trade of Amsterdam acquired an unparalleled degree of prosperity. The East India Company, founded in 1602, with a capital of only 6,500,000 florins, conquered kingdoms and islands in Asia. With 200 ships it traded with China and Japan; it alone furnished Europe with the costly productions of the Spice Islands; the gold, the pearls, and the diamonds of the East passed only through its hands. The prosperity of Amsterdam remained almost unimpaired till towards the latter end of the 18th century, when the French revolution in 1795 gave it a fatal blow, and its rival, London, became the commercial capital of the world. Reduced to the condition of a vassal and afterwards of a province of France, and consequently engaged in a constant war with England, Holland lost its ships, its colonies, its commerce, and its public credit. After recovering its independence on the expulsion of the French in 1813, the commerce of Holland revived in a remarkable manner, but is still below its former magnitude. During the union of the northern and southern provinces, under the name of the kingdom of the Netherlands, both Holland and Belgium flourished. Holland indeed lost the colonies of Berbice, Demerara, and Essequibo, with the Cape of Good Hope and Ceylon. The very profitable contraband trade formerly carried on with Spanish America has also been destroyed, since those colonies declared themselves independent. The trade with India has undergone a great change, not only by the loss of the Cape and Ceylon, but by the fall of the East India company and the throwing open of the East India trade to all the subjects of the Netherlands, excepting that to the Moluccas and to Japan. On the other hand the improved administration of Java has led to a vast increase of the productions of that fine colony, and new and profitable channels have been opened to Dutch commerce in Brasil, Cuba, and Haiti. The revolt of the southern provinces in 1830 was a great check to the progress of commerce; yet it continued to improve even during that period, and has again become very flourishing. In recent times, especially since 1840, the city of Rotterdam has obtained a preponderating share in the shipping and foreign commerce of the Netherlands; before that date Amsterdam was the leading commercial city as it still is in all banking and exchange transactions.

Commerce.—The Dutch import from and export to all the great producing countries of the world. The total value of the imports according to official returns in 1851 and 1852 respectively, was 303,993,224 and 322,719,559 Dutch florins. The total value of the exports in the same years amounted to 242,744,806 and 272,484,555 florins respectively. The following table shows the countries most weightily concerned in Dutch commerce, the numbers expressing the official value (in florins) of the imports from, and the exports to, each country in 1852:—

Countries.	Imports.	Exports.
Belgium	16,517,060	24,565,335
France	12,800,992	10,311,122
Great Britain	83,408,545	61,022,444
Java	76,316,357	18,833,592
United States	9,335,773	5,393,474
Norway	4,543,059	737,224
Austria	1,618,803	3,731,987
Russia	18,367,788	5,182,174
Sardinia	240,046	3,291,697
Surinam	4,872,358	1,467,113
German Zollverein	53,502,643	111,743,569
Turkey and Greece	2,723,111	3,659,274
Denmark	2,212,018	1,276,097
China	3,603,234	4,371
Hamburg	3,214,861	7,580,473
Hanover and Oldenburg	3,100,244	2,314,792
Canaries	5,938,917	216,769
Naples	1,433,975	3,673,613
Cuba	1,943,665	217,915

The exports consist of colonial produce from the East and West Indies, coffee, sugar, spices, tea, silks, and other articles from China and Japan; the productions of the home country, butter, cheese, flax, hemp, and corn; tobacco, madder, flower-roots, cattle, and horses; the produce of their fisheries, especially herrings, and of their distilleries and manufactories. The chief articles of importation are corn, salt, wine, timber in very large quantities, partly from Norway and partly from Germany, whence it is floated down the Rhine; stone, such as blocks of granite from Norway for the dykes, and freestone for building; marble; and various manufactured goods: besides colonial produce of every kind from Asia, Africa, and the West Indies.

Manufactures.—The principal manufactures are linen, wool, silks, leather, refined sugar, tobacco-pipes, gin or hollandia (distilled in vast quantities at Schiedam and Delft), cotton manufactures, jewelry, and numerous other articles, which will be found enumerated in the articles on the chief towns and on the provinces.

Religion.—The established religion is Calvinian; but other religious

are tolerated. The Calvinist and Lutheran Churches have each their own synod. The Protestant clergy have a support from the state: the amount allotted to them in the budget of 1854 amounted to 1,677,906 florins. The Catholics, perhaps the largest united religious body in the state, received in the same year for the support of their worship 573,329 florins. A bull of the Pope, dated March 4th 1853, established a hierarchy in the kingdom of the Netherlands, consisting of an archbishop (Utrecht), and four suffragans (Haerlem, Bois-le-Duc, Breda, and Ruremonde).

Education is very generally diffused throughout the kingdom. Besides the pariah schools, under the protection of the government, private boarding-schools are numerous. For the higher branches there are seminaries called royal schools, where the ancient and modern languages, mathematics, rhetoric, and drawing are taught: of these there is one in every large town. The universities are those of Leyden, Utrecht, and Groningen, the first of which was formerly one of the most illustrious in Europe. There are likewise schools for particular branches of education, such as military and naval schools.

Constitution.—According to the constitution, which was promulgated by a royal ordinance August 24, 1815, the crown is hereditary in the male line, and in default of male descendants in the female line. The executive power is in the hands of the king, whose person is inviolable, his ministers being responsible. The legislative power is in the king and the states-general, consisting of two chambers: the members of the first chamber are appointed by the king for life; the second chamber is elected by the provincial assemblies, and one-third of the members go out annually by rotation, but they may be re-elected. All new laws are proposed by the king to the second chamber. The sittings of the second chamber are open to the public; those of the first are not. Each province has its own provincial assembly, which has various important local duties, such as the superintendence of religious worship and charitable institutions, the care of the roads and bridges, and the election of the deputies to the second chamber.

Finances.—In the budget of 1854 the revenue is estimated at 71,833,752 florins; the expenditure at 70,703,711 florins. The total amount of the public debt in 1854 was 1,200,988,330 florins, the interest payable on which within the year was 35,123,122 florins. The receipts from the East India possessions, including the proceeds of the sale of colonial produce, was estimated at 69,942,791 florins in 1852; the whole of this sum, it is stated, would be absorbed by the colonial administration and expenses in the mother country. The revenue of Dutch Guyana amounted to 1,006,150 florins, and the expenses to the same sum. The revenue obtained from the West India Islands and the coast of Guinea does not pay the expenditure required for the maintenance of those colonies.

Army and Navy.—The army in 1854 consisted of 8 regiments of the line; 1 regiment of grenadiers and chasseurs; 4 regiments of dragoons, and 1 of mounted chasseurs; 1 regiment of field artillery, 3 of garrison artillery, and 1 regiment of horse artillery; with a corps of pontooners and a battalion of sappers and miners; the whole force numbering 57,959, including 1869 officers.

The navy in July 1854 comprised 2 ships of eighty-four guns; 3 seventy-fours; 5 first-class frigates (one of them a screw), with fifty-four to sixty guns each; 8 second-class frigates, of thirty-eight to forty-four guns; 12 corvettes (two propelled by screw); 20 sloops (one of them a screw); 21 war steamers; 2 frigates and 1 corvette for port duty, carrying together one hundred guns; 2 armed transports; and 49 gun-boats: all manned by 6760 men (580 of whom are East Indians), and carrying altogether 2174 guns.

Colonies.—The colonial possessions of the Dutch in the East Indies comprise the islands of Java and Madura, the west coast of Sumatra, the west, south, and east coasts of Borneo; Celebes, the Moluccas, Banca, Billiton, Menado, Ternate, Amboyna, Banda, Timor, &c., with an aggregate area of 612,000 square miles, and 12,006,700 inhabitants.

The West India colonies comprise Dutch Guyana, Curaçao, Bonaire, Aruba, St. Eustache, St. Martin, and Saba, with a total area of 59,880 square miles, and a population of 76,500.

The Dutch possessions in Africa are estimated at 10,500 square miles, with a population of about 100,000.

History.—Julius Cæsar, in prosecuting his conquests in Northern Gaul, advanced as far as the Rhine. The inhabitants of the north bank of the Rhine were called Batavi, and considered as belonging to Germany. They were engaged in many wars, either with the Romans or as their allies. We afterwards find them partly as trading, partly as seafaring people, and as pirates, who were in the end subdued by the Romans. In the 5th century the Batavians, and in the 6th century the Belgæ, were conquered by the Franks, but the Frieslanders not till the 7th century. At the peace of Verdun, in 843, Batavia and Friesland were incorporated with the newly-created kingdom of Germany, of which Ludwig (that is, Lewis), surnamed the German, was the first king, and were under governors, who afterwards made themselves independent. From the year 1000 to the end of the 11th century the country was divided into duchies, counties, and imperial cities. Utrecht became a bishopric, and extended its temporal power over Groningen and Overysel. Of all these princes the counts of Flanders were the most powerful, and their country having become subject in 1383 to the still more powerful house of Burgundy, the

latter made itself master of almost the whole of the Netherlands. Charles the Bold, the last duke of Burgundy, fell in a battle with the Swiss; and his only daughter and heiress Maria marrying Maximilian, son of Frederick III., duke of Austria and emperor of Germany, the Netherlands came under the dominion of the house of Austria. Maximilian's grandson, Charles V., by the Pragmatic Sanction in 1548, united all the seventeen provinces with Spain; they however retained the name of the Circle of Burgundy, and were attached to the German empire. During the reign of Charles V. the Protestant religion began to spread in these provinces, though grievously oppressed, for the number of persons in the seventeen provinces put to death in his reign as heretics is estimated at several thousands. His son and successor Philip II. introduced the inquisition, and carried on religious persecution with a cruelty before unknown. The patience of the people was exhausted, and they rose in open rebellion, which the atrocities of the bloodthirsty Alba could not quell. Most of the other provinces concluded with Holland and Zealand the Convention of Ghent in 1576, and formed a still closer alliance in the following year by the Union of Brussels. But the consummate abilities of the Prince of Parma succeeded in bringing all the southern provinces under the authority of Spain. In 1579 the five provinces of Holland, Zealand, Utrecht, Guelderland, and Friesland concluded the celebrated Union of Utrecht, in which they declared themselves independent of Spain. They were joined in 1580 by Overysel. On the 26th of July 1581 they renounced their allegiance to Philip, and being joined in 1594 by Groningen, formed the celebrated republic of the Seven United Provinces, which was afterwards generally called Holland, from that province, which exceeded the others in extent, population, wealth, and influence. Though Philip III. was obliged to conclude in 1609 a thirteen years' truce, called the Peace of Antwerp, and the independence of the provinces was recognised by all the European powers except Spain, it was not fully secured till the peace of Münster, at the close of the thirty years' war, in 1648. Towards the end of the 17th century they were engaged in war with France and England, and at the beginning of the 18th century in the war of the Spanish succession. Holland was weakened by these efforts, while republican jealousy of the attempts of the house of Orange to increase its authority sowed the seeds of party rage and civil war. In 1747 the house of Orange triumphed, and William IV. obtained the hereditary dignity of stadtholder in all the seven provinces. In 1786 the republicans again raised their heads, but the wife of the stadtholder William V., who was sister to Frederick William II., king of Prussia, having been insulted by some violent patriots, applied to her brother, who sent a Prussian army of 25,000 men to avenge the indignity she had received, and secure the rights of her husband. The patriots resisted in vain; the rights of the house of Orange were confirmed and enlarged, and a close alliance concluded between the republic and Great Britain and Prussia. In 1794 the republican or anti-Orange party, encouraged by the approach of the victorious armies of France, again rose. Pichegru easily conquered Holland, being favoured by the severe winter and by the popular party; and the stadtholder, with his family, was obliged to fly to England. The provinces were now organised under the title of the Batavian Republic. A necessary consequence of this change was war with England, which led to the capture of their fleets, the destruction of their trade, and the loss of their colonies, to all which evils were added the exorbitant demands of their French allies, who also changed several times the constitution of the republic. In 1806 it was formed by Napoleon into a kingdom, and given to his brother Louis, who studied the welfare of his subjects, but lost the friendship of his brother by his too great liberality, and unexpectedly resigned the crown in favour of his eldest son, a minor, on the 1st of July, 1810. Napoleon however refused to recognise his brother's arrangement, and incorporated the kingdom with the French empire, with which it remained united till November, 1813, when the people, encouraged by the disasters of the French, rose and expelled them from the country, and recalled the Orange family. The Prince of Orange governed the country by the title of 'Sovereign Prince' till 1815, when the seven northern and the ten southern provinces, after a separation of 200 years, were again united by the name of the kingdom of the Netherlands. This union continued for fifteen years. In 1830 the Belgians revolted from their allegiance, and became an independent state. [BELGIUM.] [See SUPPLEMENT.]

NEU-BRANDENBURG. [MECKLENBURG STRELITZ.]

NEUBOURG. [EURE.]

NEUBURG, a well-built town in the Bavarian circle of Suabia, is agreeably situated on an eminence on the right bank of the Danube, 33 miles N.N.E. from Augsburg, and opposite to an island which is connected with both banks by bridges. Among the public buildings are a large handsome palace, which contains the great hall, with a collection of ancient armour; a college, formerly belonging to the Jesuits; a rich library, a collection of antiquities, a gymnasium, extensive barracks, the church of St. Peter, two other churches, an hospital, and an orphan asylum. Neuburg is the seat of a court of appeal, and of the courts of justice of the circle and the town. The inhabitants, who are about 7000 in number, have considerable breweries and distilleries, a manufactory of earthenware, and a flourishing trade. In the neighbourhood are the royal country-seats of Grunau and Petzelheim, the royal stud at Rothanfeld, and, near the village of

Unterhausen, the monument erected in honour of Latour d'Auvergne, "the first grenadier of the French army," who was killed here by an Austrian lancer on the 27th of June 1800. Neuburg was formerly the residence of the palgrave, and the capital of the ancient principality of Neuburg.

NEUFCHATEAU. [VOSGES.]

NEUFCHÂTEL. [AISNE; SEINE INFÉRIEURE.]

NEUFCHÂTEL (generally written *Neuchâtel*, but called *Neuenburg* by the Germans), a canton of Switzerland, situated in the Jura Mountains, which here form several parallel narrow ridges running in the direction of north-east to south-west, and separated by elevated longitudinal valleys. The greatest length of the canton is about 31 miles; the greatest breadth 13 miles. The area is 250 square miles. It is bounded W. by France, S. by the Canton de Vaud, E. by the Lake of Neuchâtel, and N. by the Canton of Bern. The canton is naturally divided into three regions:—1, the 'Vignobles,' being the banks of the lake, the level of which is 1400 feet above the sea, and the lower hills which rise immediately above, and are planted chiefly with vines; 2, the 'Vallon,' or the two valleys, Val de Travers and Val de Ruz, which run between two parallel ridges of the Jura, and rise from 2000 to 2400 feet above the sea; they produce corn, hay, pulse, and fruits; 3, the 'Montagnes,' or highlands of the Jura, nearer to France, consisting of some naked and some wooded ridges, with high bleak valleys intervening, which are known by the names of La Chaux de Fond, Locle, Chaux du Milieu, La Brevine, and La Sagne. The canton does not produce corn sufficient for its population; the deficiency is made up by importations from Bern and Basle. The products are chiefly cheese, wine, cattle, barley, and timber.

The population of the canton in March 1850 was 70,753, of whom 5570 were Catholics, and the rest Protestants of different sects. Of the population about 18,000 are employed in watchmaking in the towns and country districts; watches are exported in large numbers to all parts of Europe and America. Other manufactures are cotton fabrics for export, hosiery, cutlery, and hardware. The women, especially in the Val de Travers, are employed in the manufacture of lace. The language of the inhabitants is French.

Neuchâtel, the capital, is built partly on the bank of the lake and partly on two hills divided by the river Seyon, which comes from the Val de Ruz. It contained 12,846 inhabitants in 1850. On one of the two hills is the castle, which was built in the 13th century, and near it the cathedral, which dates from the 10th century, and contains the tombs of the ancient counts of Neuchâtel. In the lower town are the town-hall, the burgesses' hospital, the orphan asylum, the Pourtales hospital, and a fine college, which contains a public library and a cabinet of natural history. The lower town, generally speaking, is well built, and has a fine appearance when seen from the lake.

Among the other places the following are worthy of notice:—*Chaux-de-Fonds*, a large scattered town resembling an assemblage of villages and hamlets, is 10 miles N. from Neuchâtel, and at the census of 1850 had 12,688 inhabitants. It stands in a bare bleak valley more than 3000 feet above the sea. The inhabitants live chiefly by the manufacture of watch- and clock-works, which is carried on, not in factories, but in the dwellings of the workmen, each of whom devotes himself to making one particular piece of the machinery. *Locle*, about 10 miles W. by N. from Neuchâtel, is another scattered village nearly as populous as Chaux-de-Fonds. The men are almost all watchmakers and the women lacemakers. A tunnel through the limestone rock forms a channel for the little river Bied which traverses the valley and which formerly inundated the plain. A short distance from the town, and below its exit from the tunnel, the Bied, on its way to join the Doubs, disappears down a chasm 100 feet deep, and the fall is made available to turn the machinery of three or four mills, one above the other, each receiving in succession the water-power that turns its wheels. There are two similar subterranean mills in Chaux-de-Fonds. *Vallengin*, the chief place in Val de Ruz, has an old castle which dates from the 12th century and is now used as a prison, and about 6000 inhabitants comprising the neighbouring district. At *Motiers*, a village in the Val de Travers, Rousseau resided for a while after his banishment from Geneva, and here he wrote his 'Lettres de la Montagne.' The mountains in this neighbourhood and generally throughout the canton present many frightful chasms and crater-like cavities in the limestone rock. One of these cavities, a few miles below Motiers, is seen on the summit of the mountains called *Croix-de-Vent*, which is 4300 feet above the sea, and is hollowed out from the summit to a depth of 500 feet.

The county of Neuchâtel was a fief of the old kingdom of Burgundy, and it had its line of counts until A.D. 1283, when it passed into the house of Châlons, from which it came into that of Longueville. In 1707 the ownership was obtained by Prussia. Bonaparte obliged the King of Prussia to surrender Neuchâtel in 1806, and he gave it to General Berthier, but in 1814 the county returned to the allegiance of the house of Brandenburg, and it was at the same time received as a canton into the Swiss confederation, of which it had already been for a long time an ally.

Neuchâtel continued to be a principality of which the King of Prussia was the sovereign prince, till the Swiss revolution of 1847, when it became a democratic member of the Swiss confederation. It

returns 4 members to the National Council of the republic. The canton has a representative assembly, and a constitutional code.

The *Lake of Neuchâtel*, called also the *Lake of Yverdon*, is 25 miles long by 5 miles broad. Its greatest depth towards the middle is about 400 feet. Its feeders are the rivers Orbe, Brole, Reuse, and Seyon. The outlet is the Thiele at the north-east extremity, which carries its waters into the neighbouring lake of Bièvre, whence there is an outlet into the river Aar. The basin of the Lake of Neuchâtel belongs to the water-system of the Rhine. The level of the lake is nearly 200 feet above that of the Lake of Geneva. Steamers ply on the lake between Neuchâtel and Yverdon. The projected railway from Geneva to Bern skirts the east shore of this lake.

NEUHAUS, a well-built town in Bohemia, 68 miles S.S.E. from Prague, has about 8000 inhabitants. It is the chief place of a lordship belonging to Count Czerny, whose palace is a very magnificent edifice. It has one of the finest churches in Bohemia; a gymnasium, which formerly belonged to the Jesuits; and extensive manufactories of woollens, linen, paper, and playing-cards. A great part of the town was destroyed by fire in 1801. Fine topazes are found in the vicinity.

NEUHAUSEL. [HUNGARY.]

NEUILLY. [SEINE.]

NEUILLY LE RÉAL. [ALLIER.] and ST. FRONT. [AISNE.]

NEUSATZ. [HUNGARY.]

NEUSOHL. [HUNGARY.]

NEUSS. [DÜSSELDORF, Government of.]

NEUSTADT, or WIENER-NEUSTADT. [ENGL.]

NEUSTETTIN. [POMERANIA.]

NEUVIC. [CORRÈZE; DORDOGNE.]

NEUVY ST. SEPULCHRE. [INDRE.]

NEUWIED, a town in the Prussian government of Coblenz, is situated in 50° 25' N. lat., 7° 30' E. long., on the right bank of the Rhine, was formerly the capital of the small principality of Wied, which retained its independence till 1806, when it was mediatised, and assigned to Nassau, but in 1814 it was transferred to Prussia. It is a very regular well-built town with broad straight streets, and houses all of equal height. It contains about 6000 inhabitants, consisting of Roman Catholics, Lutherans, Calvinists, Anabaptists, Moravians, Mennonites, Quakers, and Jews: all these sects have their own places of worship. Neuwied is the residence of the Prince of Wied-Neuwied, who has a very fine palace with extensive gardens. The palace contains a good library, and an interesting collection of Roman coins, statues, &c. found in the neighbourhood, this having been the site of the standing Roman frontier camp against the Germans. There is likewise the collection of natural history made in Brazil and North America by Prince Maximilian of Wied. Among the public institutions there are a training school, a school for mechanics, several infirmaries, a Moravian school, a synagogue, and many manufactories. It is the seat of the government of the principality and of many public offices. The inhabitants are very active and industrious, and have a large slaughtering establishment, manufactures of silk, cotton, wool, lace, thread, hats, carpets, leather, tobacco, stockings, and tape; a considerable manufactory of tin culinary utensils, stoves, and also a manufactory of musical clocks. There are breweries, distilleries, and vinegar manufactories. The inhabitants carry on a profitable trade in their own manufactures, and in the products of the country, such as pipe-clay, timber, potash, iron, lead, corn, and wine.

NEVA, RIVER. [PETERSBURG.]

NEVADA, SIERRA. [ANDALUCIA.]

NEVERS (the *Noviodunum Aduorum* of Julius Cæsar), the capital of the French department of Nièvre, stands on the right bank of the Loire, at the junction of the river Nièvre, in 46° 59' 15" N. lat., 3° 9' 37" E. long., 188 miles by railway through Orléans and Bourges, S. by E. from Paris, and had 16,113 inhabitants in the commune in 1851. The town is built on the slope of a hill above the Loire, and presents a pretty aspect when seen from the left bank of the river. The streets however are narrow, steep, and irregularly built. Some remains of the old turreted walls of the town still exist. The entrance to Nevers from Paris is by the triumphal arch erected on the occasion of the victory of Fontenoy in 1746. The chief public buildings are—the cathedral, the pavement of which is 658 feet above the sea-level; the churches of St.-Etienne and St.-Sauveur; the old castle, which forms one side of the principal square in the town; the barracks, the arsenal, the bridge over the Loire, which has 20 arches, and the residence of the prefect of the department. Nevers gives title to a bishop, whose see is the department of Nièvre. It has tribunals of first instance and of commerce, ecclesiastical and communal colleges, and an agricultural society. The inhabitants manufacture iron-ware of massive character, cannon and shot, chain-cables, anchors, chains for suspension-bridges, steam-machinery and millwork, &c. Agricultural implements, files, and other tools, earthenware, porcelain, enamel, cordage, violin-strings, glue, vinegar, candles, beer, leather, coarse woollens, and glass are also manufactured. There is a commodious port for river craft at the mouth of the Nièvre, and considerable trade is carried on in iron and steel, wood, coal, wine, leather, cattle, and manufactured goods. A short branch railway joins Nevers to the continuation of the Vierzon-Bourges line southward.

Noviodunum seems early to have acquired the name of *Nivernis*, from the river Niveris (Nièvre), on which it is situated. It was of

little importance until the reign of Clovis, in whose time it belonged to the Burgundians. It afterwards came into the hands of the Franks, and was taken and burnt by Hugues, count of Paris, in 972. It suffered much in the wars of the English under Henry V. and VI., and in the disputes of the dukes of Bourgogne with the kings of France. In the middle ages it was the capital of the county of Nevers, which was raised by François I. to the rank of a duchy (1539). The duchy was sold by Charles III. de Gonzague (Gonzaga), the last duke, to Cardinal Mazarin, and was (1665) united to the crown of France. It constituted the province of Nivernais.

NEVIN. [CAMBRIDGESHIRE.]

NEVIS, one of the Leeward Islands, in the West Indies, belonging to the group called the Lesser Antilles, is situated in 17° 14' N. lat., 63° 3' W. long. Nevis is about 2 miles S.E. from St. Christopher's, from which it is separated by a channel called the Narrows. The island is about 24 miles in circumference. The area is 20 square miles. The population in 1853 was estimated at 10,200, of whom a very small number were whites. Of the white population there were only 64 adult males. Nevis consists of a single conical mountain, of volcanic origin, which reaches an elevation of 2500 feet. The sides of the mountains are covered with plantations, and the soil is a fertile marl; the higher parts are rocky and sterile. A forest of evergreen-trees grows like a collar round the neck of the highland where cultivation ceases. The summit is constantly covered with clouds. The exportable produce of the island consists almost wholly of sugar, molasses, and rum. The exports amounted in 1850 to 17,197*l.*; in 1851 to 30,284*l.*; the imports were 16,474*l.* in 1850; 16,483*l.* in 1851. *Charlestown*, the seat of government, stands near the south-west end of the island, and has a tolerable roadstead, but is somewhat difficult of approach on account of a shoal which extends from the shore to the distance of half a mile. There are here a court-house and a jail. Nevis was first colonised by the English in 1628.

NEVIS, BEN. [INVERNESSSHIRE.]

NEW ALBANY. [INDIANA.]

NEW AMSTERDAM. [BERBICE.]

NEW BEDFORD. [MASSACHUSETTS.]

NEW BRITAIN is a large island in the Pacific, situated between 5° and 7° 30' S. lat., 148° and 153° E. long. It is separated from New Guinea by Dampier's Strait (discovered by Dampier in 1700), about 40 miles wide; and from New Ireland by St. George's Channel. New Britain is of a very irregular figure, and its southern shores have a coast-line of more than 350 miles. The surface is estimated at 24,000 square miles, or nearly half the extent of England. The interior of the island contains mountains of great elevation, as may be inferred from their being seen from sea at a great distance. Carteret observed smoke to rise from the highest summit. In several places the mountains come close to the sea, as at Cape Gloucester. Along the shores there are some good harbours. The declivities of the mountains are generally covered with trees. The island is fertile, and produces the cocoa-nut, sago, and other kinds of palms; also bananas, yams, ginger, sugar-cane, the bread-tree, bamboo, and many other plants and trees. Dogs, pigs, turtles, and fish abound. The inhabitants, who appear to be rather numerous, belong to the race of the Australian negroes; they are stout and well made, of a very dark colour, with curly hair, and go naked.

NEW BRITAIN. [CONNECTICUT.]

NEW BRUNSWICK, a British colony in North America, lies between 45° and 48° 5' N. lat., 68° 48' and 67° 53' W. long. It is bounded N. by Canada, from which it is separated by the Ristigouche River and the Bay of Chaleurs; E. by the Gulf of St. Lawrence, and by Northumberland Strait, which divides it from Prince Edward Island; S. by Nova Scotia, the Bay of Fundy, and the State of Maine; W. by the State of Maine and Canada East, the boundary line, except a small part in the southern extremity, lying along the meridian of 67° 53' W. long. The greatest length of the province, from north to south, is 180 miles, from east to west, 150 miles. Its area is 27,704 square miles, or 17,730,560 acres. The population in 1834 was 119,457, in 1853 it was 211,473.

Surface and Soil.—New Brunswick may be divided into three regions, the Southern, Central, and Northern. The Southern Region comprehends the country along the Bay of Fundy, and from 40 to 50 miles inland. It is divided into two unequal portions by the St. John River. The western section contains the greatest part of Passamaquoddy Bay, an extensive sheet of water, branching out into several inlets, and forming harbours for vessels of considerable size. It receives many rivers, of which the St. Croix is the most important, being navigable for large vessels to St. Stephen's, above which place it is interrupted by falls, yet timber is floated down. Passamaquoddy Bay contains several islands: Campobello, 10 miles long and 2 miles wide, is separated by a narrow deep channel from Maine; and Deer Island is nearly 7 miles long and 3 miles broad in the widest part. Before the bay lies Grand Manan Island, about 14 miles long and 6 or 7 miles wide. The coast of this section is rocky. The surface is much broken, but as the rocks are generally covered with a deep layer of earth, it is clothed with high forest trees, and when cultivated yields good crops of grain. The most elevated part of this tract is intersected by several lakes. That part of the Southern Region which lies east of the St. John River is rather rocky and sterile. The

rocky and elevated coast runs off in an almost continuous line, so that the inlets along it may rather be called coves than harbours. At the back of this iron-bound coast the country rises with a rather steep ascent, and then extends in an uneven and broken plain. The soil of this tract is very stony, and generally shallow. When cultivated it produces moderate crops of rye, barley, oats, and potatoes, but not wheat. There are however several fine valleys, in which the rivers flow, mostly to the St. John. The lower part of the valleys is occupied by lakes, as Kenebekasis, Belleisle, and Washademoak. These valleys are covered with large timber-trees, and when cultivated produce excellent crops of grain. In climate this tract is somewhat less cold than the country farther northward, but much more humid, and exposed to thick and frequent fogs when the winds blow from the Atlantic.

The Central Region is divided from the Northern by a line beginning on the west, on the banks of the St. John River at Presqueisle, and running thence in a north-eastern direction to the mouth of the Little Nipisighet River in the Bay of Chaleurs. The shores of this region are low, and the rivers have sand-bars across their entrance, though there is usually a considerable depth of water on them. There are no deep harbours except at the mouths of the rivers. The country begins to rise at from 12 to 20 miles from the shores, and continues to rise till about 60 miles, where it begins to descend rather rapidly towards the St. John River at a distance of about 30 miles from its banks. Low hills with gentle slopes occur in several places. Their whole surface is covered with a continuous forest of heavy timber. Along the banks of the St. John extends a flat country, which on the east begins at the mouth of the Washademoak, and extends west to Meductic, and thence north to Presqueisle. The eastern portion is nearly a level, and contains the most fertile and best settled part of the colony.

The Northern Region is very hilly, and even mountainous, especially on the banks of the river Ristigouche, and in that tract where the rivers Tobique and Nipisighet originate. This tract forms an elevated table-land, exceeding 2000 feet in height, and thickly studded with lakes. The interior of this region is little known, except the country along the river Tobique, which is covered with fine forest red pine. There is a settlement on the Bay of Chaleurs, the estuary of the Ristigouche, where the inhabitants live to a great extent on the produce of their fishing.

Rivers.—The largest river is the Looshtook, or St. John River, which rises far in the west, and flows for above 200 miles through the State of Maine, and along the boundary between it and Canada. It enters New Brunswick near 47° N. lat., and soon afterwards forms the Great Falls. By the most northern fall the river descends a perpendicular height of 58 feet. This is followed by some smaller falls, so that in about three-quarters of a mile the water descends 116 feet. Up to the foot of these falls the river is ascended by flat-bottomed boats of 20 tons burden. Below the falls the river often runs between abrupt banks, and its rugged bed renders navigation dangerous in many places. Several rapids occur, of which the most difficult are those called Meductic Falls, situated where the river begins to run eastward. The last of the rapids occurs 6 or 7 miles above Fredericton, at Saraye Islands. Where the river bends again to the south it is connected by narrow channels with several lakes, among which the largest is Grand Lake, whose channel joins it opposite Gagetown. This lake is 30 miles long and about 8 miles wide. The other lakes, Washademoak, Belleisle, and Kenebekasis, are somewhat smaller. All of them, as well as the rivers which fall into them, are navigable for sloops. Sloops can ascend the St. John River to Fredericton. About a mile above the town of St. John are the Rugged Narrows, where the river is interrupted by huge rocks, over and among which the waters roll and foam, and which render the navigation, except for four short diurnal periods, impracticable. The great rise of tide, which here attains from 25 to 30 feet, so far overflows these rapids that when the flood rises 12 feet at the foot of the town, sloops and schooners pass in safety for about 20 minutes, and for the same time when the tide ebbs to 12 feet. The whole course of the St. John River exceeds 400 miles, of which 220 lie within this colony. It receives many rivers from Maine. The most important is the Aroostook, which joins the St. John a little above the confluence of the Tobique. In the seasons of flood the Aroostook has a river and lake navigation of 400 miles.

The Petitcodiac, which falls into Shepody Bay, the western branch of Chignecto Bay, is about 70 miles long, and the tide flows up 40 miles. The Miramichi, the most important river next to the St. John, has two main branches, the North-West and the South-West Miramichi, which, with their numerous head streams, drain the middle of the Central Region. The Miramichi falls into the Gulf of St. Lawrence, after a course of more than 100 miles, and is navigable for large ships for about 40 miles. There is a sand-bar across its entrance, but the channel over it is broad, and has water for ships of from 600 to 700 tons. The Nipisighet River, which drains the Northern Region, and runs nearly 100 miles, is much broken by falls and rapids, and does not appear to be navigable to any extent. The Ristigouche has its source in the Canadian and New Brunswick highlands, and runs along the northern boundary of the province. On approaching the Bay of Chaleurs it widens into a spacious harbour, 24 miles long by

2 miles broad, which is navigable for the largest ships to the head of tide-water within 2 miles of its upper extremity. Ristigouche harbour opens into Ristigouche Bay, the head of the Bay of Chaleurs, which is a magnificent inlet 80 miles long and from 16 to 30 miles broad.

Steamers ply daily in summer between the city of St. John and Fredericton. During the floods of spring and autumn small steamers ascend to Woodstock, which is 62 miles above Fredericton. During the summer months steamers run between St. John and the Bend of Petitcodiac, Annapolis in Nova Scotia, and Eastpool in Maine. Much attention is paid to the formation of roads and bridges in the settled parts of the province. In addition to local assessments large yearly grants are made for the purpose. The province possesses more than 2000 miles of excellent roads. Settlements are formed by government, in which three-fourths of the price of the land are received in labour for the construction of new lines of communication.

Geology, &c.—Metamorphic slates occupy the higher parts of the province, and extend from the upper parts of the shore of the Bay of Chaleurs to the St. John, crossing that river some miles west from Fredericton. These slates are intersected by a broad belt of granite, running in the same direction and crossing the St. John into Maine, about 12 miles east from Woodstock. In the valley of the Tobique the slate rocks are interrupted by a bed of red-sandstone, which extends 80 miles up the river, and presents about midway interstratified cliffs of gypsum. The lower parts of the province consist of the Carboniferous and New Red-Sandstone Systems, including large deposits of red marl and gypsum, and extensive beds of coal. Coal abounds on the banks of the Grand Lake and the Salmon River, where it is worked. Anthracite coal is worked near Shepody Bay, and a large vein of very pure bitumen has been discovered in that neighbourhood, and is exported for making gas.

Iron-ore, of the hematite variety, is abundant near Woodstock, where extensive hot-blast smelting-works have been erected. Copper, plumbago, and manganese have been found. Marble abounds on the banks of the lake Kenebekasis. Gypsum occurs in large beds along the shores of the Bay of Fundy, and is exported to the United States, as are also grindstones, which are quarried in the vicinity of Shepody Bay. Salt-springs, capable of yielding the finest salt, are numerous, and sulphureous springs are met with. Specimens of amethyst, carnelian, and jasper have been found in several places.

Climate, Soil, Agriculture.—The heat is greater and the cold more intense than under the same latitudes in Europe. The thermometer however rarely rises above 90° of Fahrenheit in July, and rarely sinks below 10° in January. Spring lasts from the middle of April to the middle of May, and is accompanied by cold winds and rain. During summer, which extends to the beginning or middle of September, rain seldom falls, except in thunder-storms, which are frequent. In September and October the weather is pleasant, but in the two following months it is cold, with frequent rains. The frost, previously felt at intervals, becomes continuous about the end of December, and the winter lasts till the end of March or the middle of April, about which time the ice on the rivers generally breaks up. The average length of the agricultural year is 6 months and 22 days. The average period between the sowing and reaping of grain crops is 3 months and 17 days, leaving an open period of about 3 months for labouring on the land. The climate is remarkably healthy. Epidemics are unknown; ague is seldom met with; rheumatism, low typhus, and consumption are the only diseases that prevail to any extent.

The most valuable soils of the province are those formed from the extensive marsh-lands that occur at the mouths of the rivers, and at the heads of bays and inlets. Large tracts of this description, called 'dyked' lands, have been reclaimed from the muddy deposits of Shepody Bay and Cumberland Basin. The soils next to these in fertility are those called 'intervale' lands, or river terraces, spacious alluvial tracts, a succession of which in many places appears along all the larger rivers.

The forests, which still cover nearly the whole surface of the province, consist of pine, fir, spruce, hemlock, birch, beech, maple, ash, elm, and poplar. Oak is not common. Pine has the chief commercial value. The lumbering trade, or the preparation of timber, has hitherto been the engrossing pursuit, to the neglect of agriculture, so that the province has imported yearly from the United States bread-stuffs to the value of more than 200,000*l*. Greater attention is now given to the cultivation of the land. Agricultural associations have been formed in the several counties, which are encouraged by grants from government. Improved methods are introduced, and efforts are made to raise from the soil of the province the requisite supplies of grain. An almost unbroken line of settlements extends up the valley of the St. John on both sides of the river. Up the valley of the Miramichi the land is extensively cleared. New settlements have been formed along the estuary of the Ristigouche. On the shores of the Bay of Chaleurs and of Fundy Bay every year is adding to the openings in the forest. The crops raised are wheat, rye, oats, barley, beans, peas, buck-wheat, and flax. In the southern districts maize is extensively cultivated. Potatoes are raised in large quantities. The turnip culture is extending. Red and white clover are the grasses most cultivated. It is estimated that there are in the province 150,000 horses and cattle and 250,000 sheep and pigs. Apples, plums, and cherries grow well, but not the other fruit-trees of England.

The number of wild animals is rapidly diminishing. More than

300 bears are destroyed annually under the operation of a government bounty. There is a like premium for the destruction of wolves, which first entered the province in 1818 along with the fallow-deer. Foxes, racoons, minks, squirrels, and beavers are in considerable numbers. The moose-deer is nearly extinct. Wild geese, ducks, partridges, and pigeons are the most common game. The rivers abound with salmon, eel, trout, and perch, and the sea near the shores with cod, haddock, shad, mackerel, and herrings. At the mouth of the St. John River, and along the shores of the Bay of Fundy, great quantities of salmon, herrings, and shad are taken; and on the shores of the Gulf and of the Bay of Chaleurs there are extensive fisheries of herrings, mackerel, and cod. The cod is sent to the Mediterranean. Considerable exports of fish are made to the United States and to the West India. A profitable whale fishery has been carried on for some years.

There are two settlements of Indians in the province, one of the Micmacs, on the Miramichi, the other of the Mellicetes, near the Grand Falls on the St. John. They do not cultivate the land, but live chiefly by hunting and fishing. They profess the Roman Catholic religion, and are strict in the observance of its forms. Their whole number is about 1400, and they hold 63,000 acres of land, reserved for them by government. There are extensive settlements of French, descendants of the old Acadians, on the shores of Northumberland Strait and of the Bay of Chaleurs. The great proportion of the population of the colony consists of emigrants and the descendants of emigrants from the British Isles.

The province is divided into 12 counties:—Ristigouche and Gloucester in the north; Northumberland, Kent, and Westmoreland in the east; Albert and St. John's in the south; York and Carleton in the west; and King's, Queen's, and Sunbury, which are intersected by the St. John River, and extend inland north-west from the county of St. John.

Fredericton, or *Fredericton*, the capital of the province, on the bank of the St. John River, 85 miles from its mouth, is built on a flat, bounded on two sides by the stream, and consists chiefly of handsome wooden houses, in regular streets. It contains a cathedral, five or six churches, the government house, the legislative halls, King's college, a Baptist college, a grammar school, a normal school, a court-house, and barracks. Vessels of 50 tons burden ascend to the town. The population is about 6000.

St. John, the principal trading place, and an incorporated town, is situated on a rocky peninsula, and on adjoining crags and hollows, near the mouth of the St. John River. The city is lighted with gas. It contains an excellent court-house, church, and bank of stone. In the neighbourhood are the lunatic asylum and the provincial penitentiary. The population is about 12,000.

St. Andrews, a thriving town, with some handsome buildings, and about 3000 inhabitants, stands at the mouth of the St. Croix River, in Passamaquoddy Bay. *Woodstock*, a town of 3000 inhabitants, is advantageously situated on the road into Maine, at the mouth of the Meduxnukik River, and on the right bank of the St. John. It contains four churches and a grammar school. *Newcastle*, on the banks of the Miramichi, about 20 miles from its mouth, is a small place, well situated for the exportation of timber. *Douglstown* and *Chatham* are improving towns some miles farther down, on opposite sides of the river. *Bathurst* is a well-built town, with about 1000 inhabitants, on an inlet of the Bay of Chaleurs. It contains an Episcopal, a Roman Catholic, and a Presbyterian church. It is chiefly dependent on ship-building. *Dalhousie*, at the mouth of Ristigouche Harbour, and *Campbelltown*, 16 miles higher, are thriving towns of about 1000 inhabitants each.

The affairs of the province are administered by a governor and an executive council, a legislative council, and a house of assembly of 26 members. The laws are administered by a supreme court and minor tribunals. The supreme court has a chief justice and three puisne judges. There are chancery, vice-admiralty, and probate courts. Besides an armed force maintained by the British government, a native militia of 20,000 men is kept up. The revenue of the province for the half-year ending May 31st 1853 was 65,888*l*. During 1852 there entered at the port of St. John 1524 British vessels of 219,964 tons, and 216 foreign vessels of 114,303 tons; and there cleared 1532 British vessels of 245,453 tons, and 214 foreign vessels of 117,464 tons. The number and tonnage of new ships registered in 1852 were:—ships, 87; tons, 45,123. The value of the fish exported from the province in 1850 was 27,319*l*.; in 1851 it was 38,971*l*.; in 1852 it amounted to 46,059*l*. The greater part of this increase is probably owing to the increased quantities of salmon sent to the United States.

The governor and executive council constitute a board of education for the province, and considerable attention is given to the establishment and support of common schools, normal schools, and county grammar schools. The University of King's College at Fredericton was built at the public expense, chartered as an Episcopalian institution, and endowed with 6000 acres of land and 2000*l*. per annum in money. The charter has been changed so as to admit members of all persuasions into the governing council, of which the bishop is president. The system of instruction is formed after that of Oxford and Cambridge. Connected with the college, and supported out of its funds, is a grammar school. The Baptists have a college at Fredericton, and the Methodists have one at Sackville.

The religious denominations in the province are those of the Church of England, the Roman Catholics, Presbyterians, Independents, Methodists, and Baptists. No church is distinguished by law, but the bishop takes precedence after the governor and the commander of the forces.

Till the latter part of last century New Brunswick was regarded as a portion of Acadia, and was connected with Nova Scotia, along with which it was finally ceded to Great Britain by the treaty of Utrecht in 1713. In 1762 some families from New England settled about 50 miles up the St. John River. At the end of the American war several thousands of disbanded troops were settled at Fredericton. In 1785 the province received its present name and limits. The province rapidly advanced after 1809, when the duty on Baltic timber was increased, colonial timber being left free. In 1825 the country suffered from one of the greatest conflagrations that have occurred in the history of the world. A district extending above 100 miles along the course of the Miramichi, and spreading many miles on both sides of the river, was swept by the flames under the force of a hurricane; towns were entirely consumed; many lives were lost, and a vast amount of property was destroyed. [See SUPPLEMENT.]

NEW CALEDONIA, an extensive island in the Pacific, situated between 17° 57' and 23° S. lat., 163° and 168° E. long. This island extends from north-west to south-east more than 400 miles, but is of inconsiderable width. In the broadest part it is hardly 60 miles wide. On all sides it is inclosed by coral-reefs, which connect innumerable small sandy islands or cliffs. These reefs extend in some places more than 50 miles from the shores, but they generally occur at a distance of from 4 to 10 miles from the coast. There are only two harbours in which large vessels can anchor with security; on the north-eastern shores, Port Balade, and on the south-western, Port St. Vincent. One of them has been fortified by the French, who have taken possession of the island.

From the shores the country gradually rises inland to a mountain range which traverses the island in all its length, and rises in some parts to 2000 or 3000 feet above the sea. This island is less fertile than most other islands of the Pacific. The declivities of the hills are partly bare and partly covered with coarse grass and low trees. The inhabitants live mostly on yams and fish. The sugar-cane and banana are cultivated to some extent. Cacao-nut palms, bread-fruit-trees, and mango-trees abound on the shores. Among other minerals, a kind of steatite is found, which is eaten by the inhabitants, who belong to the race of the Austral negroes. They are stoutly made, have black and curly hair, and a very dark colour. [See SUPP.]

NEW ENGLAND STATES is the term applied to the north-eastern portion of the United States of America, which was originally colonised by the Puritans from England. The inhabitants are yet principally of English descent, and possess many characteristic differences from the inhabitants of the other states of the Union. There are six of the New England states—CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, and VERMONT, all of which are fully described under their respective heads.

NEW GEORGIA ARCHIPELAGO, also called *Solomon's Islands*, constitutes one of the most extensive groups of islands in the Pacific. They extend from north-west to south-east, between 5° and 10° 50' S. lat., 154° 35' and 162° 25' E. long. They were discovered by the Spanish seaman Mendana, in 1567; visited for the second time by Carteret, and afterwards by several French and English navigators. The most northern island is Winchelsea or Anson, and the most southern Rennell. The largest islands from north to south are—Bougainville's Island, which is about 60 miles long; Choiseul, which is perhaps as long; Santa Isabella, perhaps the largest of the group; Georgia, which extends 40 miles from east to west; Guadalcanar, which is 70 miles long; and San Cristoval, which is about the same size. Besides these there are a great number of small islands. The shores are mostly very steep, and rise to a considerable height. The interior is rugged, and frequently mountainous. The hills and mountains are generally covered with lofty trees, and the valleys well cultivated and fertile. Bananas, yams, sugar-cane, and ginger are extensively cultivated. The most common fruit-trees are the bread-fruit, cacao-palms, cabbage-tree, a kind of almonds, and Indian kale (*Caladium esculentum*). The clove-tree is also found here. Fowls abound, as well as several wild birds.

NEW GRANADA, a republic of South America, extends from south to north between 0° and 12° 30' N. lat., and from east to west between 70° and 83° W. long. It is bounded E. by the republic of Venezuela; N. by the Caribbean Sea; W. by the republic of Costa Rica, and the Pacific Ocean; and S. by the republic of Ecuador. The area is about 380,000 square miles; the population in 1853 was estimated at 2,363,000.

Surface, Hydrography, &c.—The western part of New Granada is comprehended within the mountain district of the Western and Central Andes. The eastern part belongs to the great plains or llanos of the Orinoco River. The northern portion includes the low ground lying along the Gulf of Darien and the lower valley of the Magdalena; the Isthmus of Panama; and the eastern extremity of Central America bordering on Costa Rica and known as Veragua.

On the boundary-line between New Granada and Ecuador, is the mountain-knot De los Pastos, with its numerous volcanoes. North of

it extends a mountainous country, inclosing the valley of Almaguer, which is shut in on the east by that portion of the Andes which is called Paramo de Aporte and de Iscanse, but on the west by the range called Cordillera de la Costa, or Paramo de Momacondy. These two ranges are about 80 miles apart, and the mountain region between them contains the valley of Almaguer, which is about 6900 feet above the sea-level, and is drained by the Rio de las Patias, which breaks through the Cordillera de la Costa, and falls into the Pacific. About 2° 9' N. lat. both ranges are united by a transverse range, called the Sierra de Socoboni. On the north of this transverse range the great mass of the Andes separates into three great ranges, which running north and north-east, inclose the valleys of the rivers Magdalena and Cauca. They are called the Western, Central, and Eastern Cordillera of New Granada, and are described under ANDES [vol. I. col. 356].

The country west of the Western Andes and between them and the Pacific contains the basins of the rivers Atrato and San Juan, and a rather narrow tract along the sea-shore. [ATRATO.] The tract along the sea has a soft, alluvial, and very fertile soil, but being almost incessantly drenched by rains, it is nearly a continual swamp and extremely unhealthy, especially for Europeans. It has accordingly been abandoned to the native tribes and a few negroes, who are employed to wash the gold-sand which is found along the western declivity of the Andes in great abundance, and is at some places intermixed with platinum. Europeans make only hurried visits to it. That portion of New Granada which is included in the Isthmus of Panama with the contiguous district of Veragua is described under PANAMA.

The most southern of the table-lands which extend along the western declivity of the Eastern Andes, those of Bogotà [BOGOTÀ], and Tunja, are from 8000 to 10,000 feet above the sea, and on them the grains and fruits of Europe are cultivated, with the root called the araca. Those farther north are much lower, and adapted to the cultivation of tropical grains, roots, and fruits, as well as cotton, sugar, coffee, and tobacco. The low country which extends between the table-lands of Girona and Cucuta and the mountain-mass of Santa Marta is mostly covered with extensive forests, and nearly uninhabited on account of its unhealthiness, which is caused by numerous swamps, frequent inundations, and almost continual rains. It contains the extensive lake of Zapatos.

The Plains, or Llanos, of the river Orinoco comprehend the whole tract extending to the western banks of the Orinoco and to the Cassiquiare, between the Guainia, or Rio Negro, on the south, and the Apure River on the north. The northern part, as far south as the river Vichada, is a complete level, on an average 300 feet above the sea, near the mountains, and thence insensibly declining towards the Orinoco. It is quite destitute of trees, with the exception of a few palms, which occur at great intervals all over the plain. Along the river courses are some low bushy trees. The rainy season begins in April, and continues to the end of October. During this time the rain pours down in torrents, and is accompanied by violent thunderstorms, which generally occur two hours after noon. The dry season lasts from October to April, and during the months of December, January, and February, a cloud never crosses the sky. This extensive plain is quite unfit for cultivation, but innumerable herds of cattle and horses find here abundant pasture during the wet season, though they suffer much during the dry months. The mean temperature of the air is 80° Fahr.: the rainy season is seven or eight degrees hotter than the dry. That portion of the plain which is south of the river Vichada is somewhat hilly in several places, especially between the rivers Guaviare and Guainia, where steep rocks rise a few hundred feet above its level surface. It is covered with immense forests, haunted by numerous wild animals. It is two or three degrees hotter than the level plain farther north, and its air is never agitated by a breeze. Rain descends every day, except during the months of December and January, sometimes in torrents, sometimes like a dense mist, and the annual quantity is very great. The most south-eastern part of it, which is inclosed by the rivers Orinoco, Cassiquiare, Guainia, and Atabapo, is uninhabited, though covered with tall forest-trees. All this portion of the Llanos is extremely unhealthy, on account of the stagnant air and the vapours which continually rise from its rain-drenched surface. The rivers which drain the Llanos of Granada are noticed under ORINOCO. The remainder of the country is included in the valleys of the Magdalena and Cauca.

The *Rio Magdalena* rises where the two ranges of the Eastern and Central Andes begin, near 2° N. lat., and runs in a narrow valley with a rapid course as far as 3° 20' N. lat., where the valley enlarges to 40 or 50 miles in width. In this valley its course is gentle; but at 4° 40' N. lat., where the mountains approach the river on each side, and especially on the east, the current of the river becomes quicker. Below Honda eleven rapids occur, which render the navigation difficult and even dangerous, and only cease at Badillo (near 8° N. lat.). The river falls 670 feet in about 200 miles, and in this part the valley is rarely 10 miles wide, and sometimes not half so much. Below Badillo it widens to 60 miles and more, and the river divides into two branches, which inclose an island about 20 miles long and 10 miles wide. Both branches are navigable; the eastern runs with greater rapidity and is only used in descending, while the gentler current of the western branch is more favourable to ascending boats. The Rio Magdalena afterwards declines more to the north-west and meets the

Rio Cauca below Mompox; it then again turns to the north and runs through a wide plain, past Baranese, to the Caribbean Sea. About 60 miles from its mouth it divides into two branches, of which that which continues due north is the principal, and forms at its outlet the small harbour of Savanilla; but this branch is little navigated. The other branch, which turns to the north-east and is much more used, forms in its course several small lakes and terminates in the Ciénaga de Santa Marta, an extensive lagoon, or salt-water lake, with a mean depth of 6 or 7 feet, which communicates with the sea by a narrow canal some miles south-west of Santa Marta, but has a bar at its entrance. The whole course of the Magdalena River is about 1000 miles.

The valley of the Magdalena above Honda extends in a generally level plain, which has an elevation little short of 2000 feet above the sea. The river and its tributaries run in smaller valleys 3 or 4 miles wide and a few hundred feet depressed below the surface of the plain. At Passo de Guayacana, nearly due west of Bogotá, the surface of the Magdalena is still 1200 feet above the sea-level. The valleys along the rivers produce abundantly sugar, tobacco, cacao, and the common agricultural crops of the tropics, yams, mandioc, maize, batatas, and bananas. The upper plain is in some parts fertile; in others rather sterile, and covered with bushy trees. The seasons are regular. In June, July, and August not a drop of rain falls; between September and February showers are rather frequent. Heavy rains follow in February, March, and April, and the weather in May is variable. Every day a strong wind begins towards noon to blow from the south, and continues till sun-set; it causes great heat, but is regarded as healthy. The narrow part of the valley between Honda and Badillo and the wider one north of Badillo are very little elevated above the river, and therefore subject to frequent inundations. Though fertile and producing large crops, especially of rice, it is very little inhabited, on account of its unhealthiness, being subject to daily rains, and never enjoying the slightest breeze except when thunderstorms occur, which are common during the night. The vapours arising from the numerous swamps and pools render it extremely unhealthy.

The *Rio Cauca* rises in the Paramo de Guanacas, east of the volcano of Purace, and not far from the sources of the Magdalena. It runs nearly due west for about 60 miles in a narrow valley between high mountains, passing within a mile of Popayan. It then turns north, and, at the village of Quilachoa, enters a valley about 30 miles wide, and extending to the north of Cartago nearly 180 miles. The course of the river is gentle. About 30 miles north of Cartago it enters a narrow glen, formed by the high mountains on both sides; which does not contain level ground enough for a road. In this glen the river flows with astonishing rapidity, forming a succession of rapids and cataracts, from Salto de S. Antonio to Boca de Espiritu Santo about 120 miles, and within this distance falls probably not less than 2500 feet, its elevation at Cartago being about 3000 feet above the sea. Issuing from this glen it enters a wider valley, which grows still wider north of the town of Antioquia, where the river declines to the north-east and meets the Magdalena below Mompox. The whole course of the river is above 700 miles.

The wide valley of the Upper Cauca is from 3000 to 4000 feet above the sea-level, and has a healthy and not very hot climate and regular seasons. The two rainy seasons occur about the time of the equinoxes, with an interval of dry seasons between them. Along the river the plain is low and marshy, subject to periodical inundations and mostly overgrown with rushes and reeds, but at no great distance from its banks the country rises higher and extends partly in savannahs and partly in wooded plains. In many districts it is cultivated, and produces rice and maize in abundance, as well as sugar, cacao, coffee, and tobacco; but by far the greatest part serves as pasture-ground for numerous herds of cattle and horses. About Cartago the surface of the plain is undulating and less fertile. In the hills which skirt the Central Andes are thick layers of a reddish sand, which contains numerous particles of gold. In the lower part the valley of the Cauca resembles generally that of the Magdalena below Honda.

The geology of New Granada is noticed generally under **ANDES**. Its mineral riches are considerable, and mostly occur on the western declivity of the three chains of the Andes. They consist of gold, silver, platinum, mercury, copper, lead, iron, and rock-salt. Gold seems to occur along the whole western declivity of the Central and Western Andes, and is obtained by washing the sand of the rivers, or that on the foot and sides of some hills. In the Eastern Andes it is found on the table-lands of Girona and Cucuta. Silver occurs on the table-lands of Girona and Cucuta. There are also some rich mines in the mountain region north of 5° 30', between the Magdalena and Cauca. Platinum occurs on the western declivity of the Western Andes. Mercury is found in the valley of Santa Rosa, near Antioquia, and in the Central Andes near the mountain pass of Quindiu. Copper occurs in the Eastern Andes, north of Tunja and near Pamplona. Lead has been discovered in various parts of the Eastern Andes. Iron and coal are found in the mountains bordering on the table-land of Bogotá. Rock-salt in large masses occurs in some mountains north-east of Bogotá, and is worked by the government. Some salt-springs in these mountains also furnish a large quantity of salt.

Productions, Commerce, &c.—From the great diversity of surface,

soil, and climate in New Granada, the natural productions are extremely varied, including not only those of the West Indies, but also those of the temperate zone. These products are specified more particularly in noticing the several districts of the country. Here it will be sufficient to observe generally, that over the table-land of Bogotá, and the country north of it along the western declivities of the Eastern Cordillera, wheat and other European grains, potatoes, and the aracaoha-root, are the principal objects of culture; while in the valleys of the great rivers, and on the plains along the coast, maize is the chief grain raised for food, with rice, plantains, and sweet potatoes; and that cacao, cotton, tobacco, coffee, and some sugar and indigo are cultivated as articles of commerce. Many useful kinds of trees are found in the forests; but almost the only ones which are converted into articles of export are the Brazil, fustic, Nicaragua, and logwood, trees which grow most abundantly in the forests of the Sierra de Santa Marta. Cinchona is obtained in large quantities in the same region, and in various other places. Ipecacuanha is largely collected on the banks of the Rio Magdalena, and balsam of Tolu on the banks of the Rio Sinu. The llanos and plains support vast herds of cattle, which furnish tasajo, or jerked beef, and hides as articles of commerce. Horses, mules, and horned cattle are exported to the West Indies.

The manufacturing industry of New Granada is of little importance. It is limited to woollen and cotton stuffs of a coarse texture only adapted for the use of the lower classes, and mostly made by the consumers; and the commoner articles of every-day use.

The commerce of New Granada was much greater before its independence than it is now, a circumstance which is chiefly to be attributed to the effects of almost incessant internal war, and the unsettled state of its government; but the want of means of communication with the interior is a great hindrance to the commerce of the country. The greater part of the interior is in fact unable to export its produce for want of roads and other means of communication. The tracts which border on the sea being mostly covered with swamps and morasses, and consequently very unhealthy, endanger the life of those who venture to traverse them. Neither of the more healthy provinces of the republic can send its produce without great expense to any of its harbours except the valley of the Upper Magdalena. The most fertile tract is the valley of the Upper Cauca, but this is everywhere surrounded by high mountains; and as the river becomes unfit for navigation on issuing from the valley, this district is obliged to convey its produce over one of the two great ranges which inclose it. Both however are so exceedingly steep as not to admit the use of beasts of burden, and all merchandises is carried over on the backs of men. The entire imports of New Granada average in value less than 900,000*l.*; the exports, 600,000*l.* The imports from Great Britain, which usually amount to nearly three-fifths of the whole, were returned at 450,804*l.* in 1858.

Inhabitants.—The population of New Granada consists of the descendants of the Spaniards who have settled there during the three last centuries, of some native tribes, and a few negroes. The Africans and their descendants were much more numerous before the war of independence; but as they were the best soldiers that the country could furnish, the war has nearly annihilated that hardy race. The native tribes have attained very different degrees of civilisation. Those inhabiting the table-lands along the Eastern Andes had before the arrival of the Spaniards formed a political society, and made some progress in the arts of civilisation; they cultivated Indian corn and the aracaoha-root. They are still the best husbandmen of the republic; and the Indian families living in the valley of the Upper Magdalena resemble them. In the valley of the Cauca there are no Indians. In the country between the Western Andes and the Pacific the native tribes constitute nearly the whole of its scanty population. They have made only small progress in civilisation, and this little they owe to the Spanish clergy established among them. That portion of the llanos which is destitute of trees is inhabited only by the descendants of Europeans, who take care of the herds of cattle, mules, and horses. The southern wooded portion of the llanos is inhabited by different tribes of wandering Indians, still in the lowest stage of civilisation. Hubner estimates the numbers of the various races in New Granada as follows:—White Caucasians, 450,000; civilised native Americans, 301,000; Negroes, 80,000; Metis (or descendants of Spaniards and natives), nearly 1,000,000; Mulattoes, 283,000; Quadroones, 30,000; Samoyes, 120,000; Zambas (chiefly in Magdalena), 100,000.

Political Divisions, Towns, &c.—The republic of New Granada is divided into four departments—Cauca, Cundinamarca, Boyaca, and Magdalena. The population of the towns in the following notice must be taken as a rough estimate:—

1. *Cauca* extends over the Isthmus of Panama, with the contiguous province of Veragua [PANAMA], which formerly constituted the department of Istmo; the whole of the western coast from the Bay of Panama to Barbacoas, on the boundary of Ecuador; and the valleys of the rivers Atrato, San Juan, and the Upper Cauca. Its principal productions are gold and platinum, the produce of its herds in the valley of the Upper Cauca, and cacao along the coast of the Pacific. In this department is the canal of Raspadura, which unites the San Juan and Atrato rivers. [ATRATO.] The principal town is *Popayan*, population 20,000, situated not far from the sources of the Cauca River, 5000

feet above the sea, and near the two volcanoes of Purace and Sotara. It contains several superior buildings, the most remarkable being the bishop's palace and the Compañia, or College of Jesuits. Earthquakes are frequent. Farther north is *Cali*, in the vale of the Cauca, a clean and well-built town, from which the most frequented road over the Western Andes leads to Buenaventura on the Pacific. *Buenaventura* consists only of a few wretched huts built on posts, although it is the only port that supplies the valley of the Cauca and Popayan with merchandise, and has generally some foreign vessels besides coasters anchored there. On the shores of the Pacific are the small harbours of Atacames and Barbacons. In the Andes, near the boundary of Ecuador, is the town of *Pasta*, 8576 feet above the sea, on a fine plain, near the foot of a very active volcano. Population about 5000.

2. *Cundinamarca* (by which name the table-land of Bogotà was designated at the arrival of the Spaniards) contains the valley of the Lower Cauca, that of the Upper and Middle Magdalena, the table-land of Bogotà, and a small portion of the Llanos lying about the sources of the rivers Guaviare and Meta. All the vegetable productions of New Granada may be cultivated here at different places, and the declivities of the Andes are covered with extensive forests. Gold and silver are found in the Central Andes; copper, lead, coal, and rock-salt in the Eastern Andes. The river Bogotà, in its descent from the table-land, forms, at a distance of 18 miles S.W. from the town of Bogotà, the cataract of Tequendama, where the river, suddenly contracting from a breadth of 60 yards to less than 20 yards, is precipitated in an immense body of water down a fall of 650 feet. In the same part of the table-land are the natural bridges of Icononzo, or Pandi, which unite two rocks, between which a torrent roars. The uppermost consists of a rock 47 feet long and 6½ feet thick, and is more than 300 feet above the surface of the water; the lower bridge is nearly 70 feet under the first, and consists of three pieces of rock, which support one another. The capital of the department and of the whole republic is BOGOTÀ. *Honda*, population 5000, is on the left bank of the Magdalena; and at some distance N. from it is *Rio Negro*, with a population of 6000. West of Honda is *Mariquita*, a small town, near which are rich mines of gold. South of Honda is *Neyva*, with 4000 inhabitants; and still further, near the source of the Magdalena, *Timana*, with 2000 inhabitants: both places are noted for their plantations of cacao. Gold is washed near Timana. Between Neyva and Honda, but at the foot of the Central Andes, nearly 4900 feet above the sea, is *Ibague*, which has a college. In the valley of Cauca are *Antioquia*, with 4000 inhabitants; and *Medellin*, in a fine valley, containing 8000 inhabitants.

3. *Boyaca* obtained this name from the bridge of Boyaca, where Bolivar defeated the Spanish general Barreya in 1819, by which victory the independence of South America was established. It comprehends the northern table-lands of Tunja, Girona, and Cucuta, and nearly the whole of that part of the Llanos which belongs to New Granada. It has some mines of gold and copper in the table-lands, and in the northern part of the Eastern Andes. The capital is *Tunja*, on the hilly table-land of Tunja, near the Eastern Andes; population, 7000: it has some manufactures of woollen and cotton stuffs. *Socorro*, on the table-land of Bogamoso, has 12,000 inhabitants, and some manufactures of cotton and straw hats. On the table-land of Cucuta is *Rosario de Cucuta*, a considerable town, which carries on an active commerce in the products of the contiguous country, which is covered with plantations of cacao, sugar-cane, coffee, and cotton. *Pamplona*, which is in the mountains south of the table-land, has 4000 inhabitants, some good buildings, and several gold-mines in its neighbourhood.

4. *Magdalena* comprehends the whole country east of the Gulf of Darien, and extending east to the boundary of Venezuela, not far from the Lake of Maracaybo. With the exception of the mountain-mass of Santa Marta on the east, and the northern offsets of the Western Andes on the west, the whole of this department is rather level, and only contains some hilly tracts. Every kind of vegetable production peculiar to countries between the tropics is grown; but the heat and moisture of the climate, which favour vegetation in an astonishing degree, are very injurious to the health of its inhabitants; and the country is consequently thinly peopled. The capital is CARTAGENA. *Mompox*, population 10,000, a town on the left bank of the Magdalena, above its junction with the Cauca, carries on a considerable commerce, being the depôt for the produce of the table-land of Girona, and partly also of that of Cucuta. *Ocaña*, population 8000, lies E. of the Rio Magdalena, near the Sierra de Ocaña, at a considerable elevation above the level country along the river, and has a healthy climate. *Santa Marta*, E. of the Cienaga de Santa Marta, and not far from the Nevado of the same name, has a good harbour, with some commerce, and 3000 inhabitants. *Ciudad de la Hacha*, further to the east, has about 3000 inhabitants, and a small and ill-sheltered harbour. Along the coast west of this town pearls were formerly fished.

History, &c.—New Granada was discovered by Alonso de Ojeda in 1499. The first settlement was made at Santa Maria la Antigua, on the Gulf of Darien, in 1510. The interior of the country was only conquered towards the middle of the 16th century, by Benalcazar and Ximenes de Quesneda, who founded the town of Santa Fé de Bogotà in 1545. The Spaniards continued in possession of this country till

1811, when New Granada proclaimed its independence. The war, which was the consequence of this declaration, continued to devastate the different provinces of which New Granada consists to the year 1821. In 1819 New Granada and Venezuela being united into one republic, formed a constitution at the Congress of Rosario de Cuscuta in 1821, and received into the union Ecuador and Panama in 1823. This union was dissolved in 1831, and the republic of Colombia divided into the three republics of Venezuela, New Granada, and Ecuador. Like the other republics of South America, New Granada has been ever since the declaration of Independence in a very unsettled condition. At the date of the latest accounts (received in December 1854) New Granada was in a state of revolution. The government troops had been defeated; Bogotà, the capital, was in possession of the 'Constitutionalists'; and a project was to be brought before Congress for the formation of the Istmo (including Panama and Veragua) into an independent state.

(Juan and Antonio de Ulloa; Humboldt; Mollien; Hamilton; Hubner, &c.) [See SUPPLEMENT.]

NEW GUINEA. [PAPUA.]

NEW HAMPSHIRE, one of the United States of North America, lies between 42° 41' and 45° 11' N. lat., 70° 40' and 72° 28' W. long. It is bounded S.E. for about 18 miles by the Atlantic Ocean; E. by the state of Maine; N. by the British province of Lower Canada; W. by the state of Vermont, from which it is divided by the Connecticut River; and S. by the state of Massachusetts. The area is 8080 square miles, or 605 square miles larger than Wales. The population in 1850 was 317,976, or 89·6 to the square mile. The inhabitants being all free, the ratio of representation entitles the state to send three representatives to Congress. To the Senate, like each of the states of the Union, New Hampshire sends two members.

Coast-line, Surface, &c.—The coast is a low sandy beach, indented by several creeks and coves, which serve as harbours for vessels of light draft. The shore is bordered by salt-marshes, and the country, to the distance of 20 or 30 miles inland, rises imperceptibly, so as to arrest the tides within 20 miles from the sea, though they rise to about 18 feet. This flat tract has a sandy soil of inferior fertility. At the back of it the surface becomes broken and hilly; the hills gradually rising in height towards the interior, until, at a distance of about 10 miles from the banks of the Connecticut River, they constitute a continuous range, running nearly due south and north. Some of the summits attain a considerable elevation. Mount Monadnock, about 10 miles from the boundary of Massachusetts, rises to the height of 3254 feet, and Moosehillock, farther north, to 4636 feet. On approaching 44° N. lat. the chain expands into an extensive mountain-group, which projects considerably towards the east, and is known as the White Mountains. The highest summit of this group, Mount Washington, 6428 feet high, is the loftiest mountain in the United States east of the Rocky Mountains. Several other summits rise above 5000 feet: as Mount Adams, 5960 feet; Mount Jefferson, 5860 feet; Mount Madison, 5620 feet; Mount Franklin, 5050 feet; and Mount Monroe, 5510 feet. The loftier peaks of this range are covered with snow during three-quarters of the year—whence the name White Mountains. Round their bases are forests of heavy timber, which are succeeded by belts of stunted fir, above which are bushes, and then only a coating of mosses and lichens. The scenery of this mountain region is of a very grand character. From the northern side of the White Mountains the chain continues on both sides of the Androscoggin River, but it does not attain a great elevation. The country between this northern portion of the chain and the Connecticut River is hilly and rocky, and but thinly settled, on account of the severity of the climate owing to its elevation above the sea, and the barrenness of the soil. But south of the White Mountains the soil on the declivities of the lower hills and in the valleys between them is good, and that along the banks of the rivers, which is subject to be overflowed annually, is of excellent quality.

Hydrography; Communications.—The *Connecticut* rises near the northern border of the state, in Lower Canada, in several small branches, but soon begins to form the boundary-line between New Hampshire and Vermont. Though its current is considerably obstructed by falls, rapids, and shoals, the navigation has been so much improved by dams, locks, and short canals, that boats of considerable tonnage may ascend it for some distance above Haverhill, near 44° N. lat., a distance of nearly 200 miles from its mouth in a straight line. [MASSACHUSETTS.] The principal affluents of the Connecticut in New Hampshire are the Upper and Lower Ammonoosuc, the Ashuelot, and the Sugar rivers. The *Merrimac*, which rises in the White Mountains, and traverses the central districts of the state by a southern course, has also many falls and rapids, but the navigation of this river also has received great improvements, so that it is navigable from its mouth to Concord. [MASSACHUSETTS.] The *Piscataqua*, which for about 40 miles forms the boundary between this state and Maine, rises near the southern declivity of the White Mountains in a small lake, and runs south-south-east about 60 miles in a straight line. As a navigable river it is of small importance, as its course is very rapid, and the tide ascends it only a short distance from the sea; but it forms the fine harbour of Portsmouth. It only bears the name of Piscataqua from the point about 10 miles from its mouth, where several tributaries unite with the main stream. Several smaller

Rio Cauca below Mompox; it then again turns to the north and runs through a wide plain, past Baranacas, to the Caribbean Sea. About 60 miles from its mouth it divides into two branches, of which that which continues due north is the principal, and forms at its outlet the small harbour of Savanilla; but this branch is little navigated. The other branch, which turns to the north-east and is much more used, forms in its course several small lakes and terminates in the Ciénaga de Santa Marta, an extensive lagoon, or salt-water lake, with a mean depth of 6 or 7 feet, which communicates with the sea by a narrow canal some miles south-west of Santa Marta, but has a bar at its entrance. The whole course of the Magdalena River is about 1000 miles.

The valley of the Magdalena above Honda extends in a generally level plain, which has an elevation little short of 2000 feet above the sea. The river and its tributaries run in smaller valleys 3 or 4 miles wide and a few hundred feet depressed below the surface of the plain. At Paso de Guayacana, nearly due west of Bogotá, the surface of the Magdalena is still 1200 feet above the sea-level. The valleys along the rivers produce abundantly sugar, tobacco, cacao, and the common agricultural crops of the tropics, yams, mandioc, maize, batatas, and bananas. The upper plain is in some parts fertile; in others rather sterile, and covered with bushy trees. The seasons are regular. In June, July, and August not a drop of rain falls; between September and February showers are rather frequent. Heavy rains follow in February, March, and April, and the weather in May is variable. Every day a strong wind begins towards noon to blow from the south, and continues till sun-set; it causes great heat, but is regarded as healthy. The narrow part of the valley between Honda and Badillo and the wider one north of Badillo are very little elevated above the river, and therefore subject to frequent inundations. Though fertile and producing large crops, especially of rice, it is very little inhabited, on account of its unhealthiness, being subject to daily rains, and never enjoying the slightest breeze except when thunderstorms occur, which are common during the night. The vapours arising from the numerous swamps and pools render it extremely unhealthy.

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The geology of New Granada is noticed generally under ANDES. Its mineral riches are considerable, and mostly occur on the western declivity of the three chains of the Andes. They consist of gold, silver, platinum, mercury, copper, lead, iron, and rock-salt. Gold seems to occur along the whole western declivity of the Central and Western Andes, and is obtained by washing the sand of the rivers, or that on the foot and sides of some hills. In the Eastern Andes it is found on the table-lands of Girona and Cucuta. Silver occurs on the table-lands of Girona and Cucuta. There are also some rich mines in the mountain region north of 5° 30', between the Magdalena and Cauca. Platinum occurs on the western declivity of the Western Andes. Mercury is found in the valley of Santa Rosa, near Antioquia, and in the Central Andes near the mountain pass of Quindiu. Copper occurs in the Eastern Andes, north of Tunja and near Pamplona. Lead has been discovered in various parts of the Eastern Andes. Iron and coal are found in the mountains bordering on the table-land of Bogotá. Rock-salt in large masses occurs in some mountains north-east of Bogotá, and is worked by the government. Some salt-springs in these mountains also furnish a large quantity of salt.

Productions, Commerce, &c.—From the great diversity of surface,

soil, and climate in New Granada, the natural productions are extremely varied, including not only those of the West India, but also those of the temperate zone. These products are specified more particularly in noticing the several districts of the country. Here it will be sufficient to observe generally, that over the table-land of Bogotá, and the country north of it along the western declivities of the Eastern Cordillera, wheat and other European grains, potatoes, and the araca-ha-root, are the principal objects of culture; while in the valleys of the great rivers, and on the plains along the coast, maize is the chief grain raised for food, with rice, plantains, and sweet potatoes; and that cacao, cotton, tobacco, coffee, and some sugar and indigo are cultivated as articles of commerce. Many useful kinds of trees are found in the forests; but almost the only ones which are converted into articles of export are the Brazil, fustic, Nicaragua, and logwood, trees which grow most abundantly in the forests of the Sierra de Santa Marta. Cinchona is obtained in large quantities in the same region, and in various other places. Ipecacuanha is largely collected on the banks of the Río Magdalena, and balsam of Tolu on the banks of the Río Sinu. The llanos and plains support vast herds of cattle, which furnish tasajo, or jerked beef, and hides as articles of commerce. Horses, mules, and horned cattle are exported to the West Indies.

The manufacturing industry of New Granada is of little importance. It is limited to woollen and cotton stuffs of a coarse texture only adapted for the use of the lower classes, and mostly made by the consumers; and the commoner articles of every-day use.

The commerce of New Granada was much greater before its independence than it is now, a circumstance which is chiefly to be attributed to the effects of almost incessant internal war, and the unsettled state of its government; but the want of means of communication with the interior is a great hindrance to the commerce of the country. The greater part of the interior is in fact unable to export its produce for want of roads and other means of communication. The tracts which border on the sea being mostly covered with swamps and morasses, and consequently very unhealthy, endanger the life of those who venture to traverse them. Neither of the more healthy provinces of the republic can send its produce without great expense to any of its harbours except the valley of the Upper Magdalena. The most fertile tract is the valley of the Upper Cauca, but this is everywhere surrounded by high mountains; and as the river becomes unfit for navigation on issuing from the valley, this district is obliged to convey its produce over one of the two great ranges which inclose it. Both however are so exceedingly steep as not to admit the use of beasts of burden, and all merchandise is carried over on the backs of men. The entire imports of New Granada average in value less than 900,000*l.*; the exports, 600,000*l.* The imports from Great Britain, which usually amount to nearly three-fifths of the whole, were returned at 450,804*l.* in 1858.

Inhabitants.—The population of New Granada consists of the descendants of the Spaniards who have settled there during the three last centuries, of some native tribes, and a few negroes. The Africans and their descendants were much more numerous before the war of independence; but as they were the best soldiers that the country could furnish, the war has nearly annihilated that hardy race. The native tribes have attained very different degrees of civilisation. Those inhabiting the table-lands along the Eastern Andes had before the arrival of the Spaniards formed a political society, and made some progress in the arts of civilisation; they cultivated Indian corn and the araca-ha-root. They are still the best husbandmen of the republic; and the Indian families living in the valley of the Upper Magdalena resemble them. In the valley of the Cauca there are no Indians. In the country between the Western Andes and the Pacific the native tribes constitute nearly the whole of its scanty population. They have made only small progress in civilisation, and this little they owe to the Spanish clergy established among them. That portion of the llanos which is destitute of trees is inhabited only by the descendants of Europeans, who take care of the herds of cattle, mules, and horses. The southern wooded portion of the llanos is inhabited by different tribes of wandering Indians, still in the lowest stage of civilisation. Hubner estimates the numbers of the various races in New Granada as follows:—White Caucaians, 450,000; civilised native Americans, 301,000; Negroes, 80,000; Metis (or descendants of Spaniards and natives), nearly 1,000,000; Mulattoes, 283,000; Quadroons, 30,000; Samoyes, 120,000; Zambes (chiefly in Magdalena), 100,000.

Political Divisions, Towns, &c.—The republic of New Granada is divided into four departments—Cauca, Cundinamarca, Boyaca, and Magdalena. The population of the towns in the following notice must be taken as a rough estimate:—

1. *Cauca* extends over the Isthmus of Panama, with the contiguous province of Veraguas [PANAMA], which formerly constituted the department of Istmo; the whole of the western coast from the Bay of Panama to Barbacona, on the boundary of Ecuador; and the valleys of the rivers Atrato, San Juan, and the Upper Cauca. Its principal productions are gold and platinum, the produce of its herds in the valley of the Upper Cauca, and cacao along the coast of the Pacific. In this department is the canal of Raspadura, which unites the San Juan and Atrato rivers. [ATRATO.] The principal town is Popayan, population 20,000, situated not far from the sources of the Cauca River, 5200

feet above the sea, and near the two volcanoes of Purace and Sotara. It contains several superior buildings, the most remarkable being the bishop's palace and the Compañia, or College of Jesuits. Earthquakes are frequent. Farther north is *Cali*, in the vale of the Cauca, a clean and well-built town, from which the most frequented road over the Western Andes leads to Buenaventura on the Pacific. *Buenaventura* consists only of a few wretched huts built on posts, although it is the only port that supplies the valley of the Cauca and Popayan with merchandise, and has generally some foreign vessels besides coasters anchored there. On the shores of the Pacific are the small harbours of Atacames and Barbacoas. In the Andes, near the boundary of Ecuador, is the town of *Pasta*, 8576 feet above the sea, on a fine plain, near the foot of a very active volcano. Population about 5000.

2. *Cundinamarca* (by which name the table-land of Bogotà was designated at the arrival of the Spaniards) contains the valley of the Lower Cauca, that of the Upper and Middle Magdalena, the table-land of Bogotà, and a small portion of the Llanos lying about the sources of the rivers Guaviare and Meta. All the vegetable productions of New Granada may be cultivated here at different places, and the declivities of the Andes are covered with extensive forests. Gold and silver are found in the Central Andes; copper, lead, coal, and rock-salt in the Eastern Andes. The river Bogotà, in its descent from the table-land, forms, at a distance of 18 miles S.W. from the town of Bogotà, the cataract of Tequendama, where the river, suddenly contracting from a breadth of 60 yards to less than 20 yards, is precipitated in an immense body of water down a fall of 650 feet. In the same part of the table-land are the natural bridges of Leonozzo, or Pandi, which unite two rocks, between which a torrent roars. The uppermost consists of a rock 47 feet long and 6½ feet thick, and is more than 300 feet above the surface of the water; the lower bridge is nearly 70 feet under the first, and consists of three pieces of rock, which support one another. The capital of the department and of the whole republic is BOGOTÀ. *Honda*, population 5000, is on the left bank of the Magdalena; and at some distance N. from it is *Rio Negro*, with a population of 6000. West of Honda is *Mariquita*, a small town, near which are rich mines of gold. South of Honda is *Neyva*, with 4000 inhabitants; and still further, near the source of the Magdalena, *Timana*, with 2000 inhabitants: both places are noted for their plantations of cacao. Gold is washed near Timana. Between Neyva and Honda, but at the foot of the Central Andes, nearly 4900 feet above the sea, is *Ibague*, which has a college. In the valley of Cauca are *Antioquia*, with 4000 inhabitants; and *Medellin*, in a fine valley, containing 9000 inhabitants.

3. *Boyaca* obtained this name from the bridge of Boyaca, where Bolivar defeated the Spanish general Barreya in 1819, by which victory the independence of South America was established. It comprehends the northern table-lands of Tunja, Girona, and Cucuta, and nearly the whole of that part of the Llanos which belongs to New Granada. It has some mines of gold and copper in the table-lands, and in the northern part of the Eastern Andes. The capital is *Tunja*, on the hilly table-land of Tunja, near the Eastern Andes; population, 7000: it has some manufactures of woollen and cotton stuffs. *Socorro*, on the table-land of Sogamoso, has 12,000 inhabitants, and some manufactures of cotton and straw hats. On the table-land of Cucuta is *Rosario de Cucuta*, a considerable town, which carries on an active commerce in the products of the contiguous country, which is covered with plantations of cacao, sugar-cane, coffee, and cotton. *Pamplona*, which is in the mountains south of the table-land, has 4000 inhabitants, some good buildings, and several gold-mines in its neighbourhood.

4. *Magdalena* comprehends the whole country east of the Gulf of Darien, and extending east to the boundary of Venezuela, not far from the Lake of Maracaibo. With the exception of the mountain-mass of Santa Marta on the east, and the northern offsets of the Western Andes on the west, the whole of this department is rather level, and only contains some hilly tracts. Every kind of vegetable production peculiar to countries between the tropics is grown; but the heat and moisture of the climate, which favour vegetation in an astonishing degree, are very injurious to the health of its inhabitants; and the country is consequently thinly peopled. The capital is CARTAGENA. *Mompox*, population 10,000, a town on the left bank of the Magdalena, above its junction with the Cauca, carries on a considerable commerce, being the depôt for the produce of the table-land of Girona, and partly also of that of Cucuta. *Ocaña*, population 8000, lies E. of the Rio Magdalena, near the Sierra de Ocaña, at a considerable elevation above the level country along the river, and has a healthy climate. *Santa Maria*, E. of the Ciénaga de Santa Marta, and not far from the Nevado of the same name, has a good harbour, with some commerce, and 3000 inhabitants. *Ciudad de la Hacha*, further to the east, has about 3000 inhabitants, and a small and ill-sheltered harbour. Along the coast west of this town pearls were formerly fished.

History, &c.—New Granada was discovered by Alonso de Ojeda in 1499. The first settlement was made at Santa Maria la Antigua, on the Gulf of Darien, in 1510. The interior of the country was only conquered towards the middle of the 16th century, by Benalcazar and Ximenes de Quesada, who founded the town of Santa Fé de Bogotà in 1545. The Spaniards continued in possession of this country till

1811, when New Granada proclaimed its independence. The war, which was the consequence of this declaration, continued to devastate the different provinces of which New Granada consists to the year 1821. In 1819 New Granada and Venezuela being united into one republic, formed a constitution at the Congress of Rosario de Cuenta in 1821, and received into the union Ecuador and Panama in 1823. This union was dissolved in 1831, and the republic of Colombia divided into the three republics of Venezuela, New Granada, and Ecuador. Like the other republics of South America, New Granada has been ever since the declaration of Independence in a very unsettled condition. At the date of the latest accounts (received in December 1854) New Granada was in a state of revolution. The government troops had been defeated; Bogotà, the capital, was in possession of the 'Constitutionalists'; and a project was to be brought before Congress for the formation of the Isthmo (including Panama and Veragua) into an independent state.

(Juan and Antonio de Ulloa; Humboldt; Mollien; Hamilton; Hubner, &c.) [See SUPPLEMENT.]

NEW GUINEA. [PAPUA.]

NEW HAMPSHIRE, one of the United States of North America, lies between 42° 41' and 45° 11' N. lat., 70° 40' and 72° 28' W. long. It is bounded S.E. for about 18 miles by the Atlantic Ocean; E. by the state of Maine; N. by the British province of Lower Canada; W. by the state of Vermont, from which it is divided by the Connecticut River; and S. by the state of Massachusetts. The area is 8086 square miles, or 605 square miles larger than Wales. The population in 1850 was 317,976, or 39·6 to the square mile. The inhabitants being all free, the ratio of representation entitles the state to send three representatives to Congress. To the Senate, like each of the states of the Union, New Hampshire sends two members.

Coast-line, Surface, &c.—The coast is a low sandy beach, indented by several creeks and coves, which serve as harbours for vessels of light draft. The shore is bordered by salt-marshes, and the country, to the distance of 20 or 30 miles inland, rises imperceptibly, so as to arrest the tides within 20 miles from the sea, though they rise to about 18 feet. This flat tract has a sandy soil of inferior fertility. At the back of it the surface becomes broken and hilly; the hills gradually rising in height towards the interior, until, at a distance of about 10 miles from the banks of the Connecticut River, they constitute a continuous range, running nearly due south and north. Some of the summits attain a considerable elevation. Mount Monadnock, about 10 miles from the boundary of Massachusetts, rises to the height of 3254 feet, and Moosehillock, farther north, to 4336 feet. On approaching 44° N. lat. the chain expands into an extensive mountain-group, which projects considerably towards the east, and is known as the White Mountains. The highest summit of this group, Mount Washington, 6428 feet high, is the loftiest mountain in the United States east of the Rocky Mountains. Several other summits rise above 5000 feet: as Mount Adams, 5960 feet; Mount Jefferson, 5860 feet; Mount Madison, 5620 feet; Mount Franklin, 5050 feet; and Mount Monroe, 5510 feet. The loftier peaks of this range are covered with snow during three-quarters of the year—whence the name White Mountains. Round their bases are forests of heavy timber, which are succeeded by belts of stunted fir, above which are bushes, and then only a coating of mosses and lichens. The scenery of this mountain region is of a very grand character. From the northern side of the White Mountains the chain continues on both sides of the Androscoggin River, but it does not attain a great elevation. The country between this northern portion of the chain and the Connecticut River is hilly and rocky, and but thinly settled, on account of the severity of the climate owing to its elevation above the sea, and the barrenness of the soil. But south of the White Mountains the soil on the declivities of the lower hills and in the valleys between them is good, and that along the banks of the rivers, which is subject to be overflowed annually, is of excellent quality.

Hydrography; Communications.—The *Connecticut* rises near the northern border of the state, in Lower Canada, in several small branches, but soon begins to form the boundary-line between New Hampshire and Vermont. Though its current is considerably obstructed by falls, rapids, and shoals, the navigation has been so much improved by dams, locks, and short canals, that boats of considerable tonnage may ascend it for some distance above Haverhill, near 44° N. lat., a distance of nearly 200 miles from its mouth in a straight line. [MASSACHUSETTS.] The principal affluents of the Connecticut in New Hampshire are the Upper and Lower Ammonoosuc, the Ashuelot, and the Sugar rivers. The *Merrimac*, which rises in the White Mountains, and traverses the central districts of the state by a southern course, has also many falls and rapids, but the navigation of this river also has received great improvements, so that it is navigable from its mouth to Concord. [MASSACHUSETTS.] The *Piscataqua*, which for about 40 miles forms the boundary between this state and Maine, rises near the southern declivity of the White Mountains in a small lake, and runs south-south-east about 60 miles in a straight line. As a navigable river it is of small importance, as its course is very rapid, and the tide ascends it only a short distance from the sea; but it forms the fine harbour of Portsmouth. It only bears the name of Piscataqua from the point about 10 miles from its mouth, where several tributaries unite with the main stream. Several smaller

streams, though not available for navigation, furnish valuable mill-power.

This state contains several lakes; the largest is Lake Winnipisseege, which is 23 miles long, and from 2 to 10 miles wide, and has scattered over it above 350 islands. Squam Lake, N.W. of the former, is 5 miles long and 4 miles wide. In the northern districts is Umbagog Lake, through which the boundary-line between New Hampshire and Maine passes. The lake scenery of New Hampshire is very beautiful; the noble mountains of the state forming with the various lakes and falls strikingly picturesque combinations.

New Hampshire is well provided with the ordinary carriage-roads. The principal lines of railway run in a north-west and south-east direction, or from the Atlantic at Portsmouth and Boston to the Connecticut River, where they unite with the railways of Vermont, which connect them with Lake Champlain and Canada. The Great Atlantic and St. Lawrence line traverses the northern section of the state. The southern lines diverge from Concord as a centre. At the close of 1854 there were 512 miles of railway in operation in the state, and 34 miles constructing.

Geology, Mineralogy, &c.—The rocks of New Hampshire are almost entirely of the Paleozoic, or non-fossiliferous, and nearly all of the so-called primary system. Igneous, or eruptive, and metamorphic rocks, including granite, gneiss, sienite, and porphyry, occupy the chief part of the state. Crystalline limestone has been found in one or two places; and the new red-sandstone of Massachusetts is prolonged for some distance into the western portion of New Hampshire. The state is believed to possess considerable mineral wealth, though it has as yet been but little developed. Iron is reported to exist in almost every county, and some really valuable beds are said to have been recently discovered. Hitherto it has been chiefly in the northern counties that the ore has been worked. Copper and zinc have been found and worked in Grafton county, near the centre of the state. A very rich vein of tin is said to have been discovered at the foot of the White Mountains, in Coos county. The granite is of the finest texture, and in much request for building purposes; it is obtainable in blocks of any size, and the quarries are said to be practically inexhaustible. Marble is also abundant.

Climate, Soil, Productions.—The climate of the lower districts may be compared with that of the countries along the eastern shores of the Baltic. The cold sets in about the middle, and slight frosts occur towards the end of September; but intense frost does not occur till November, from which time till early spring the rivers are frozen to their sources, and the ground is covered with snow. The snow falls to the depth of from two to four feet, and does not disappear before April. In winter the prevailing wind is from the north-west, which rarely blows in summer. The winter does not last longer in the hilly and mountainous districts, but it is more severe. At Keene, in the south-western part of the state, the thermometer has sunk to 24° below zero, Fahr. The heat in summer is great, the thermometer occasionally rising to 100° Fahr.

The soils in this state are described as being generally stubborn, but repaying careful culture by abundant harvests. The grain which is grown in the greatest abundance is maize, which is cultivated in almost every district. The low lands along the rivers yield rich crops of wheat, oats, and rye, also flax, hemp, and culinary plants. Barley, buckwheat, peas and beans, large quantities of potatoes, some tobacco and hops are also grown. The uplands produce only moderate crops. Each farmer has an orchard of apple and pear-trees, and good cider is made; maple sugar is prepared to a large amount. Horned cattle are tolerably abundant, and the dairies very good. The cattle are of a large size. Sheep are very numerous, and a considerable quantity of wool is sent to market. Swine are also common. Horses are not very numerous, and they are of a small size.

On the hills and mountains are still extensive forests, consisting of pine, fir, oak, cedar, hemlock, beech, sugar-maple, balsam, poplar, birch, hickory, spruce, chestnut, and larch. In the forests the black bear, the wolf, fox, wild cat, racoon, and gray, striped, and flying squirrel, are still common; but the moose-deer, the beaver, and black squirrel have become very rare. The bays and rivers abound with various kinds of fish; and wild fowl are plentiful.

Manufactures, Commerce, &c.—New Hampshire has extensive manufactures, especially of cotton and woollen goods, carpets, iron goods, &c. In the manufacture of cotton New Hampshire is second only to Massachusetts, and makes one-seventh of the entire quantity manufactured in the United States. Upwards of 12,000 persons are employed in the cotton and 2100 in the woollen manufactures. There are numerous tanneries, grist- and saw-mills, machine shops, hardware and outlery works, carriage factories, paper-mills, powder-mills, &c.

The foreign commerce of New Hampshire is concentrated at Portsmouth, the only port of entry in the state; but the direct imports and exports have both greatly fallen off of late years; the bulk of the produce of New Hampshire being now exported and the foreign supplies received through Boston. The total direct imports for the year ending January 30, 1852, were valued at 69,458 dollars; the exports at 82,819 dollars: while in 1823 the imports were 237,705 dollars, and the exports 571,770 dollars. The cod and mackerel fisheries are pursued to some extent. In 1852, 14 brigs and schooners of the aggregate burden of 9515 tons were built in this state.

Divisions, Towns, &c.—New Hampshire is divided into ten counties. Concord is the political capital, but Portsmouth is the commercial centre, and was until recently the most populous city in the state, but the manufacturing city of Manchester appears within the last few years to have outgrown it in population. The following are some of the more important places; the population is that of 1850, but the Census Report does not distinguish between the populations of the 'villages' or 'cities,' and the 'towns' (or as we should term them townships) in which they are situated—the number of inhabitants therefore is probably in most instances greater than that of the actual city or village:—

Concord, the capital, is built on the right bank of the Merrimac, in 43° 12' N. lat., 71° 29' W. long., 474 miles N.E. from Washington: population, 8576. Since the construction of the various state railways which centre in Concord, full advantage has been taken of the great amount of water-power furnished by the Merrimac, and the village has become one of the principal seats of the manufacturing industry of New England. In and around the village are several large cotton-factories, paper-mills, boot and shoe shops, potteries, fulling-mills, &c. The chief public buildings are the state-house, state-prison, court-house, churches, schools, &c.

Portsmouth, a city and port of entry, stands on rising ground where the Piscataqua River opens into Portsmouth harbour, about 3 miles from the sea, and 41 miles E.S.E. from Concord: population, 9738. As the only seaport town in the state, Portsmouth is a place of considerable commercial activity. Shipbuilding is somewhat extensively carried on, and the port owns about 23,000 tons of shipping. The harbour is commodious and safe, well protected by headlands, and has 40 feet of water at low tide. On an island opposite the river is a United States navy yard, containing a large and costly dry dock, and three immense ship-houses. The entrance to the harbour is defended by some forts. The principal public buildings in the city are six churches, an Athenæum, academy, several schools, and a United States lunatic asylum. There are extensive cotton and hosiery factories, machine-shops, iron-works, &c.

Dover, on the left bank of the Cochecho, a tributary of the Piscataqua, 33 miles E. from Concord: population, 3196. The village is built round the lowest falls of the Cochecho, which afford immense water-power, at the head of the navigation, about 12 miles from the sea. The village possesses some shipping, has extensive cotton manufactures, and contains some good buildings. *Exeter*, on the Squamscot or Exeter River, a tributary of the Piscataqua, 32 miles E.S.E. from Concord, population 3329, is another thriving manufacturing town, containing several good public buildings, and an important educational establishment called Phillips' Academy. *Hanover*, situated on a plain about half a mile from the Connecticut River, 52 miles N.W. from Concord, population 2352, is a pleasantly-situated village, with some manufacturing establishments, but chiefly noteworthy as the seat of Dartmouth college, one of the principal collegiate establishments in New England. In 1853 it had 10 professors, 237 students, and a library of 25,000 volumes: a medical school is attached to it. *Keene*, on the Ashuelot, 43 miles S.W. from Concord, population 3392, is a busy manufacturing and commercial village, and contains some good buildings. *Manchester*, a city built on elevated ground on the right bank of the Merrimac, is rapidly rising into importance as the centre of what is becoming one of the chief manufacturing districts in New England. The township (population 13,932) contains several very extensive cotton-mills belonging to three or four incorporated companies, print-works, machine-shops, foundries, &c. The city contains a lofty town-house, several churches, schools, and other public buildings, large business establishments, hotels, &c.; and has good railway accommodation. *Nashua*, at the confluence of the Nashua River with the Merrimac, 33 miles S. by E. from Concord, population 5820, is another of the rising manufacturing towns of the state. Besides the cotton factories, which are the chief source of employment, there are steam-engine and machine shops, and manufactories of guns, locks, tools, &c. Four railways connect Nashua with the other large manufacturing and commercial towns in this and the adjoining states.

Government, History, &c.—The original constitution as framed in 1784, and amended in 1792, is still the fundamental law of the state. A new constitution was framed in 1850, but rejected by a subsequent vote of the people. The right of voting is vested in all male citizens 21 years of age, paupers and persons excused from paying taxes excepted. The legislature, styled the General Court, consists of a Senate of 12 members, and a House of Representatives of which the number of members, at present 286, is regulated by the population: members of both houses, and the governor, are elected annually. By the terms of the constitution no person can hold any public office in this state who is not a Protestant. The public debt of the state in 1853 was 75,570 dollars. The total revenue of the state for the year ending June 1, 1853, was 164,416 dollars; and the expenditure for the same period 165,418 dollars. The state militia in 1853 was composed of 31,440 men, of whom 1309 were commissioned officers.

New Hampshire was first settled in 1623, and the progress of the colony in the beginning was very slow. It had to sustain many distressing wars with the natives who inhabited its present territory. From the middle of the last century its progress was more rapid. In 1775, before the declaration of independence, the provincial convention

declared the royal government dissolved, with the view of separating entirely from Great Britain. In 1776 the first provincial congress was established, under the name of a House of Representatives. In 1784 New Hampshire assisted in establishing the Federal Union, of which it formed one of the 13 original states, and the constitution of which it ratified June 21, 1788.

NEW HANOVER. [NEW IRELAND.]

NEW HARMONY. [INDIANA.]

NEW HEBRIDES is an extensive group of islands in the Pacific, situated (if Banks's Islands are included among them) between 13° 15' and 20° 5' S. lat., 166° 40' and 170° E. long. Banks's Islands, the most northern group of the New Hebrides, were discovered by Captain Bligh in 1789; they consist of five small islands and one larger island which is more than 20 miles in circumference. South-west of these islands is the largest of the whole group, Tierra del Espiritu Santo, 70 miles long from north-north-west to south-south-east, with an average width of 25 miles, which was discovered by Quiros in 1605, and contains a wide bay with good anchorage on its eastern side. Farther south is Mallicolo, more than 60 miles long, and about 28 miles wide, which has a good harbour called Port Sandwich, on the east side near its southern extremity. The islands l'Isle des Lepreux, Aurora, Pentecôte, Ambrym, Paocom, and Apee, which are situated east of Tierra del Espiritu Santo and Mallicolo, are not so large. Farther south is the large island Erromango, 80 miles in circumference, and the smaller island of Tanna, about 20 miles long. Besides these larger islands there is a considerable number of smaller ones, which lie dispersed between and about them. These islands, or at least some of them, are of volcanic origin. An active volcano exists on the island of Tanna. These islands consist mostly of hills of moderate elevation, which however in some of them rise to the height of mountains. The valleys between these hills and also the level tracts along the coasts are very fertile. The uncultivated declivities of the hills are covered with trees. These islands are very rich in vegetable productions. The banana, sugar-cane, yam, arum, batata, and curcuma are grown in regularly divided fields, and with great care. The cocconut, bread-fruit, the cabbage-tree, a kind of figs, almonds, and oranges are common. Bamboos, pepper, and mastic are abundant, and the nutmeg-tree occurs likewise. The domestic animals are hogs, pigs, and fowls. The inhabitants eat their enemies who fall in battle. They belong to the race of Australian negroes, but have made greater advances in civilisation than most of the other tribes of that race, as the state of their agriculture evinces. Tanna is the best known, since Cook remained there some time, when he discovered most of these islands in 1774.

NEW HOLLAND. [AUSTRALIA; LINCOLNSHIRE.]

NEW IRELAND, an island in the Pacific, situated between 2° 40' and 4° 52' S. lat., 150° 30' and 152° 50' E. long., is more than 170 miles long from south-east to north-west, but on an average not much more than 12 miles wide. It is separated from New Britain by St. George's Channel, discovered by Carteret in 1767, who also discovered and named Byron's Strait, which divides it from the small island of New Hanover. Near the southern extremity of New Ireland, Cape St. George, there is a good harbour, called Port Praslin. The island has a hilly surface, and some summits rise into mountains, but all of them are covered with wood. The lower tracts produce bananas, sugar-cane, batatas, ginger, yams, bread-fruit, cocos-nuts, sago, figs, bamboos, and many other plants and trees. Dogs, pigs, and turtles are abundant. The inhabitants belong to the race of Australian negroes, and resemble in every respect their neighbours the inhabitants of New Britain. New Hanover is situated farther west, and is about 30 miles long from east to west; it is likewise very hilly, and even mountainous, but contains many cultivated tracts.

NEW JERSEY, one of the United States of North America, lies between 38° 58' and 41° 21' N. lat., 73° 58' and 75° 29' W. long. It is bounded E. by the Atlantic Ocean; N.E. and N. by the state of New York; W. by the river Delaware, which separates it from the states of Pennsylvania and Delaware; and S. by Delaware Bay. The area is 6851 square miles, or about 600 square miles less than Wales. The population in 1850 was 489,555, of whom 23,810 were free coloured persons, and 236 apprentices under the state Act for the abolition of slavery: being 71'46 inhabitants to a square mile. The federal representative population, in effect the same as the number of inhabitants, entitles the state to send five representatives to Congress. To the Senate, like each of the other United States, New Jersey sends two members.

Surface, Hydrography, and Communications.—The northern part of the state is hilly, being occupied by the extensions of several of the mountain ranges of Pennsylvania: the principal are the South Mountain and Kittatinny ridges, portions of the Appalachian chain. The remaining and larger part of the state, comprising the whole country south of a line from Staten Island to Trenton, consists of a great sandy plain, which is for the most part a dead level, the only place where it rises more than 60 feet above the sea being at the Navesink Hills, which form the southern side of Raritan Bay, and attain an altitude of 300 feet. The hills in the northern part of the state are nowhere very lofty, but some of the ranges present very picturesque features, and the beauty of the scenery and salubrity of the climate cause them to be much resorted to during summer:

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Schooley's Mountain, where are some mineral springs, is one of the most favourite resorts. Between the ranges are broad, pleasant, and fertile valleys, containing some of the best land in the Union. The entire eastern coast, from Sandy Hook, a low sandy island 3 miles long, at the mouth of Raritan Bay, to Cape May, the southern extremity of the state, consists of a succession of sandy beaches, interrupted at intervals by inlets, and inclosing shallow lagoons. These inlets are constantly changing their position, from the extension or destruction of the sand-bars: since the settlement of the state several of the old inlets have been closed and new ones formed. From the nature of this coast and its exposure to the heavy surf of the Atlantic it is very dangerous to mariners. The most available inlets for navigation are the Barnegat, Great Egg Harbour, and Little Egg Harbour; but there are several others open to small craft. A low marshy tract extends for several miles inland from this coast. The south-western coast along Delaware Bay consists chiefly of a narrow tract of salt marsh, rising gradually into the sandy plain. Along it there are several coves and inlets, but none frequented by large vessels. Raritan Bay, between Sandy Hook and Staten Island, affords a ready inlet to Amboy, up to which it has 15 feet of water.

Besides the Hudson, which on the east divides this state from New York, and the Delaware, which on the west divides it from Delaware and Pennsylvania, and which are noticed elsewhere (the Hudson under NEW YORK, and the DELAWARE in a separate article), the state has no rivers which are navigable for vessels of large size. The *Hackensac* rises in New York, and has a course of about 45 miles to Newark Bay: it is a valuable mill-stream, and is navigable for sloops to the village of Hackensac, 15 miles from its mouth. The *Passaic*, which also falls into Newark Bay, has a course of about 70 miles; it is navigable by sloops for 12 miles. The chief feature of this river is the great fall near Paterson, where the river makes a perpendicular descent of 50 feet: it has been made largely serviceable for mechanical purposes. The Raritan River, which opens into Raritan Bay at Amboy, is formed by two branches which unite in Somerset county: it is navigable by vessels drawing 8 feet of water up to New Brunswick, 14 miles from its mouth; at which place the Delaware and Raritan Canal, which continues the navigation for vessels of 100 tons burden, locks into it. The principal rivers of the southern part of this state are the Little Egg River and the Great Egg River, which open into the inlets of the same names, and Maurice River which falls into Delaware Bay, all of which are navigable by sloops for about 20 miles from their outlets.

The canals of New Jersey are the Morris Canal, which traverses the northern part of the state and unites the rivers Delaware and Hudson; and the Delaware and Raritan Canal, which unites the rivers so named: both lines are of considerable commercial importance, especially as the channels by which the anthracite of Pennsylvania and the coal of Maryland are conveyed to New York.

Like the canals the railways of New Jersey have been chiefly constructed with a view to facilitate communication between Pennsylvania and New York. The Union, a feeder of the New York and Erie line is the only one which does not run in this direction. The total length of railway completed in the state in 1854 was 437 miles.

Geology, Mineralogy, &c.—The northern or hilly and mountainous part of the state is wholly occupied by igneous and palæozoic rocks. Eruptive and Metamorphic rocks, consisting of granite, gneiss, sienite, greenstone, mica-schist, &c., occupy the greater part of the north-west; the north-western angle however contains strata of the Lower Silurian formation, which form the loftiest summits in the state. On the south the eruptive and metamorphic rocks are bounded by strata of new red-sandstone, consisting of beds of red-sandstone with layers of red clay interposed, corresponding to the new red-sandstone of England, or according to M. Agassiz more exactly to the Keuper, or variegated marls, which form the upper part of the Trias of the continent of Europe. South of the new red-sandstone, and occupying the entire middle of the state, from Staten Island to Trenton on the north, and from south of Sandy Hook to the Delaware opposite Philadelphia on the south, are strata of the Cretaceous system. The lower of these strata are composed of green-sand and green-marl, very analogous to the upper green-sand and marly-chalk of England; while the upper part is composed in a great measure of soft and easily disintegrated straw-coloured limestone. The remainder of the state, south of the cretaceous rocks, consists wholly of tertiary rocks, of the miocene and later groups. Along the eastern coast from Sandy Hook to Cape May occur raised beaches and other post-pleiocene deposits. In the drift clays in the valley between the two principal ranges in the north-west of the state, have been found many remarkable remains of animals, &c.; the most remarkable discovery being made in 1845, when no less than six skeletons of the *Mastodon giganteus* were found about 6 feet below the surface, in the rich mud at the bottom of a small pond in Warren county.

New Jersey is on the whole rich in minerals. Iron in various forms is found in both the northern and southern sections of the state. Copper is obtained in various places, but does not appear to be at present much worked. A vein of silver-ore is said to have been discovered in a copper-mine near Belleville on the Passaic. Zinc-mines of great richness have been opened in Sussex county: at present the ore is chiefly manufactured into zinc paint. Graphite (black-lead)

is found in considerable quantities in the hilly districts. Enormous masses of the irreducible mineral first observed in this state, called franklinite, are found at Franklin, whence its name, and elsewhere. Granite, limestones, and sandstones adapted for building purposes are quarried; as are also marbles of various and some of very beautiful descriptions.

Climate, Soil, and Productions.—The northern part of the state is considerably cooler than the southern, and more salubrious. The southern part is influenced by the prevalent winds from the Atlantic. In the vicinity of the low swampy districts agues and malignant fevers prevail. Cape May however, the most southern point of the state, is resorted to by invalids and others during summer as a healthy watering-place.

The soils vary considerably according to the locality and the geological character of the substratum of rocks. The hilly districts are for the most part in their natural state, only a few farms having yet been established on the hill sides. The valleys however afford excellent soils; and while the hills are covered with forests of oak, pine, hickory, poplar, &c., the valleys are clad with crops of maize, wheat, and most of the ordinary agricultural products. The most productive part of New Jersey is the central section, where all the cereals flourish, and the orchards yield large profits; the apples and cider, and also the peaches of this part of the state find a ready sale in the markets of New York and Philadelphia. The southern districts have a dry sandy soil, but it is capable of being rendered fertile by the application of manures, which are readily obtained. Stunted oaks and other trees cover a considerable portion of this southern district.

The cereals most largely raised in New Jersey are maize, wheat, oats, rye, and buckwheat; very little barley is grown. Potatoes are grown in very large quantities; a considerable quantity of sweet potatoes is also raised. Orchard products, as already mentioned, form a staple of the middle district; and some wine is made. Vegetables also form an important item in the agricultural returns. No cotton is raised, and very little tobacco. Horses are not particularly numerous. In the hilly parts and along the coast a good many horned-cattle are reared, and the dairy products are important. Sheep are pretty numerous, and a good deal of attention is given to the wool. Swine are very plentiful. The wolf, bear, deer, and other wild animals still roam in the forests of the north.

Manufactures and Commerce.—New Jersey is generally regarded as an agricultural state, but it has an important and growing manufacturing interest. At the census of 1850, out of a total of 128,740 males above 15 years of age, 32,834 were returned as engaged in agriculture, and 46,544 in commerce, trade, manufactures, mechanic arts, and mining. The principal manufactures are of cotton and woollen goods; pig, cast, and wrought-iron; machinery, leather, glass, and earthenware; bricks, paper, jewellery, fire-arms, paint, spirits, boots and shoes, hats, &c.

The direct foreign commerce of the state is small, the exports being mostly forwarded, and the imports received through the ports of New York and Philadelphia. The total shipping owned by the state in 1850 amounted to 80,300 tons. In 1852 there were 38 vessels built in the state of the aggregate burden of 3953 tons.

Divisions, Towns, &c.—New Jersey is divided into 20 counties. Trenton is the political capital; but Newark is by far the most populous city in the state. These, with some of the other more important places, we notice below; the population is that of 1850:—

Trenton, the capital of New Jersey, stands at the confluence of the Assunpink Creek with the Delaware River, in 40° 14' N. lat., 74° 46' W. long., 166 miles N.E. from Washington, 30 miles from Philadelphia, and 59 miles from New York: population, 6461. The city is regularly laid out, and contains some good buildings. The state-house is a spacious structure; the other principal public buildings are the governor's-house, court-house, state lunatic asylum, and state prison; there are several churches, schools, &c. Trenton possesses great water-power, and is the seat of extensive manufactures of paper and leather, saw-mills, grist-mills, &c. The Delaware is navigable up to Trenton by sloops and steam-boats; and the sloop navigation is continued by the Raritan Canal which here joins the Delaware. Several railways unite at Trenton. The Delaware River is here crossed by a covered bridge of five arches, erected in 1806.

Newark, a port of entry, and the principal commercial and manufacturing city of the state, on the right bank of the Passaic, 3 miles above its outfall in Newark Bay, 47 miles N.E. from Trenton, and 9 miles W. from New York: population, 38,894. The city is regularly laid out; the streets are wide, straight, and in parts bordered by large and lofty elms; and the city is supplied with good water and lighted by gas. Some of the public buildings are handsome edifices. There are 30 churches, numerous schools, three literary, and various benevolent institutions. The manufactures are on an extensive scale, the principal being of machinery, railway-cars, carriages, and waggons, zinc-paint, leather, india-rubber, paper-hangings, cutlery, jewellery, &c. The commerce is chiefly connected with the coasting-trade, but a few foreign vessels annually enter the port. Regular communication is kept up by steam-boats with New York; and by railway with the chief towns in this and the neighbouring states. Three newspapers are published daily.

New Brunswick, a city and port of entry, and the capital of Middle-

sex county, on the right bank of the Raritan, 14 miles from its mouth, 26 miles N.E. from Trenton: population, 10,019. The river is navigable for vessels drawing 8 feet of water up to the town, and the navigation is continued by the Raritan and Delaware Canal, which here locks into the Raritan. The city is the centre of a fertile district, and has considerable trade and manufactures. The oldest part of the city consists of narrow and crooked streets, built by the river-side; but the new part stands on elevated ground, and consists of broad and straight streets, in which are some good buildings. On the highest ground is Rutgers' College, founded in 1770, which in 1853 had 7 professors, 85 students, and a library of 10,000 volumes; and in the vicinity is the theological seminary of the Dutch Reformed Church.

Paterson, on the Passaic, immediately below the great falls of that river, 58 miles N.E. from Trenton, population 11,334, is the centre of the cotton-trade of New Jersey. It contains 20 extensive cotton-mills, several large woollen-mills, fulling-mills, dyeing and printing-works, machine-shops, car and carriage-factories, iron and brass-foundries, gun and pistol factories, paper-mills, and numerous other works, for which the falls, as rendered available by extensive dams, afford ample water-power. The town is well built, contains many public buildings, hotels, and trading establishments of considerable architectural pretension; numerous churches, academies, schools, a philosophical society, mechanics institute, &c. On the opposite side of the Passaic, and united to it by two bridges, is the town of *New Manchester* (population 2788), similar in character to Paterson, and in effect a suburb of it.

Burlington City, population 4586, occupies a small island on the left side of the Delaware, 13 miles S. by W. from Trenton; carries on considerable trade and manufactures, and contains some good buildings. *Camden*, on the Delaware, opposite to Philadelphia, population 9479, is a place of considerable and growing trade. The city is well built, and contains numerous churches, schools, a court-house, and other public buildings. Ships of the largest size ascend to the lower part of the city; and there is ample railway accommodation. Three ferries unite Camden with Philadelphia. Some manufactures are carried on.

Elizabeth Town, on the left bank of Elizabeth Creek, about 2 miles above its entrance into Staten Island Sound, 40 miles N.E. from Trenton, population 5583, contains a court-house and other buildings, and has some trade and manufactures: the New Jersey, and New Jersey Central railways meet here. *Jersey City*, on the Hudson opposite to New York, with which city it is connected by steam ferries, population 6856, is a very busy manufacturing town, and has incorporated with it two or three manufacturing suburbs, which swell its population to upwards of 11,000. The Cunard steam-ship dock is situated here; there are also extensive wharfs, and the railways from New York westward commence here. The chief manufactures are of iron, glass, pottery, rope, starch, soap, &c. Ship-building is carried on.

Morristown, the capital of Morris county, stands on elevated ground about 42 miles N.N.E. from Trenton, population 4992; it is regularly laid out with wide straight streets, contains the county and several other public buildings, and has somewhat extensive iron-foundries, machine-shops, paper-mills, &c. *Perth Amboy*, population 1865, on the left bank, and at the mouth of the Raritan, and *South Amboy*, population 2266, on the right bank, nearly opposite to Perth Amboy, are places of considerable trade, owing to their position at the head of Raritan Bay, and their proximity to New York. Perth Amboy has some manufactures; South Amboy has some potteries, and is the terminus of the Amboy and Camden railway, which is connected with New York by steam-boats.

Salem, on the left bank of Salem Creek, 4 miles from its confluence with the Delaware, and 59 miles S.W. by S. from Trenton, population 3052, is the oldest town in New Jersey, having been founded in 1675. It contains a court-house and other public buildings, and has some trade: vessels of 50 tons ascend to the town. *Shrewsbury*, population 3182, on the Navesink inlet, 37 miles E.N.E. from Trenton, is a place of considerable business, and is much resorted to during summer as a bathing-place by the citizens of New York and Philadelphia.

Government, History, &c.—The present constitution was framed and adopted in 1844. By it the right of voting is vested in every white male citizen of the United States 21 years of age, who has resided in the state for a year. All elections are by ballot. The legislature consists of a Senate of 20 members, elected for three years, one-third being elected annually; and a General Assembly of 60 members, elected annually. The governor is elected for three years. The judges are appointed by the governor, with the consent of the senate, for seven years. The revenue for the year ending January 1, 1853, was 171,683 dollars; the expenditure for the same period was 165,533 dollars. The debt of the state, January 1, 1853, was 71,346 dollars. The state militia comprises 81,984 men.

New Jersey was originally settled by the Dutch in the early part of the 17th century; their settlements being chiefly along the Hudson. Some Swedish settlements were made soon after, but they were taken possession of by the Dutch. In 1664 Charles II. of England, without regarding the Dutch priority of claim, granted this territory, with New York, to his brother the Duke of York, afterwards James II., who sold his patent to Lord Berkeley and Sir George Carteret. The Dutch, about 1674, regained possession of this territory; but on the conclusion of peace soon after it was restored to England. Lord

Berkeley and Sir George Carteret, at subsequent periods, sold their claims to New Jersey to William Penn and some others, and the country received considerable colonies of Quaker settlers, and of Scotchmen, at the head of whom was the Earl of Perth. The first governor of New Jersey under 'the proprietors' was the celebrated Robert Barclay, author of the 'Apology for the Quakers.' In 1702 the proprietary was surrendered to Queen Anne; and in 1786 New Jersey was definitively separated from New York. In the struggle for independence New Jersey took an early and decided part, and was one of the 13 original states. It published its first constitution as a state July 2, 1776; and ratified the federal constitution December 18, 1787.

(*Statistical Gazetteer of the United States; Seventh Census of the United States, Official Report; American Almanac, 1854; Marcou, Geological Map of the United States; Rogers, Description of the Geology of the State of New Jersey.*)

NEW LONDON. [CONNECTICUT.]

NEW MEXICO, a territory of the United States of North America, lying between 31° and 38° N. lat., 103° and 117° W. long. It is bounded S.E. and E. by the state of Texas, from which it is divided on the S. by the parallel of 32° N. lat., and on the E. by the meridian of 103° W. long.; N. by the territory of Utah; W. by the state of California; and S. by the republic of Mexico, from which it is divided by the boundary line described under MEXICO. The area of New Mexico is estimated at 210,774 square miles, or about 4000 square miles larger than France. The white population was 61,525 in 1850; or 0.29 to the square mile. The Indian population was estimated by the Commissioner of Indian Affairs in 1858 at 45,000. The territory of New Mexico was formed in 1850 out of the country ceded by Mexico [MEXICO, vol. iii. col. 795], with the addition of a portion of that claimed by Texas.

Surface, Hydrography, &c.—The territory of New Mexico, as at present constituted, consists of two distinct sections, which will probably at some future day be separated into two distinct territories or states: the one comprising the country occupied by the two great ranges into which the Rocky Mountains are in this part separated; the other the country west of those mountains. The former, or New Mexico proper, is a rugged mountainous country, with a valley about 20 miles wide, formed by the Rio Grande del Norte, traversing it from north to south. The western range of the Rocky Mountains bears various names, as the Sierras de Anahuac, de los Mimbres, de los Grullas, Mogullon, Madre, &c.; but the name now most commonly given to the greater part of it is the Sierra Madre. Many of the most northern summits of this range are covered with perpetual snow, and may be from 9000 to 12,000 feet above the sea. The southern portion is probably from 6000 to 8000 feet above the sea. The eastern range which runs nearly parallel to the other is known in the northern part as the Sierra Obscura, and in the southern as the Sierra Sacramento, though the latter name is commonly applied to it throughout. These mountains rise very abruptly from the eastern plain into lofty peaks and knobs variously disposed, with fertile valleys between them. Some of the northern summits of this ridge are also covered with perpetual snow, and the altitude appears to be on the whole somewhat greater than that of the western ridge. Pines generally grow on the higher mountains, cedars and occasionally oaks on the lower ones. The narrow tract bordering the Sierra Sacramento on the east is very elevated, and forms the western boundary of the extensive plain north-west of Texas. The narrow valleys by which the mountain streams reach the plain are often heavily timbered, and the soil appears to be fertile; but the intervening spaces have an arid soil, which is only covered with vegetation in the early part of the year.

The great valley which lies between these mountain chains forms the district known as New Mexico while the country belonged to the Mexican republic. It is a very elevated tract, the northern part being more than 5000 feet, and the most southern, where it touches the Mexican boundary, 3800 feet above the sea. Through it as mentioned above flows the Rio Grande del Norte. The surface, especially in the upper part, is greatly broken, and the soil throughout is dry and sandy; but where irrigated is generally pretty fertile. Below Santa Fé about 36° 20' N. lat. is the most fertile part, and there two crops are often obtained annually. This is the most populous and the only civilized part of the country, a large portion of it being occupied by the farms of the old settlers.

The country west of the Sierra Madre, forming nearly two-fifths of the territory, is very much varied in surface. It is drained throughout by the Rio Colorado and its tributaries. The northern part is mountainous, and a large part of the eastern boundary is formed by rugged mountains. The interior is considerably diversified, well watered, and appears to be in many parts a fine agricultural country. The middle part is occupied by a great plain drained by the Rio Gila and its affluents, much of which is sandy and barren; but the land in the immediate vicinity of the streams is frequently fertile. The whole is occupied by Indian tribes: the Apaches inhabiting the east and south-east, the Navajoes the north-east, the Pah-Utahs the north-west, and the Pinos the west and south-west.

The Rio Grande del Norte, or, as it is more commonly called, the Rio Grande or Rio del Norte, rises in the Rocky Mountains, near 40° N. lat., not far from the sources of the Arkansas and Colorado. Its course before it reaches the boundary of New Mexico is generally

south-east, but throughout this territory it is nearly south. Its direct length from its source to its mouth in the Gulf of Mexico is about 1400 miles, but its course following its windings is full 2000 miles. Throughout New Mexico it is a rapid shallow stream, and has numerous shoals and sand-bars. It appears to be scarcely navigable even by canoes, and though it is well fitted to supply mill-power, it is at present scarcely used except for irrigation. Its lower course is noticed under MEXICO. The Rio Puerco is its only tributary of any consequence in this territory; but this stream, though it runs for a considerable distance through a longitudinal valley west of the Rio Sacramento, has, owing to the arid nature of the soil, but little water. The Rio Colorado, which drains the western part of the territory, runs south by west from its source near that of the Rio Grande till it enters New Mexico, when it bears more to the west, and so continues till it quits the territory and opens into the Gulf of California. The Colorado is believed to be navigable for a great distance, but the country through which it flows has as yet been but little explored. Several of its tributaries are also believed to be navigable for considerable distances. The most important tributary in New Mexico is the Rio Gila, which drains the great plain noticed above. It rises in the most southern extremity of the western range of the Rocky Mountains, and after descending into the plain, where it is joined by the San Francisco, an affluent which rises much farther north, it flows through the plain nearly west-south-west to its confluence with the Colorado, about 32° 45' N. lat. It receives several affluents on both its banks, but none appear to be of much consequence. The other more important tributaries of the Colorado in this state are the Nabajoes and the Yaquesila.

The mountains appear to be mainly composed of eruptive and metamorphic formations; the rocks enumerated consisting chiefly of granite, sienite, basalt, porphyry, &c., but Silurian and Carboniferous strata also seem to have been recognised. New Mexico appears to be rich in minerals, though its resources have been very imperfectly developed. Gold has been found in many places. In the Santa Fé district the peasantry have long been accustomed to employ a good deal of their time in washing the river-sands for gold, and some gold-mines are worked. The Spaniards wrought several silver-mines, but none are now in operation. Copper is said to abound throughout the mountain districts, though only one or two mines are now worked. Iron is also abundant. Coal is said to have been found near the village of James south-west of Santa Fé, and in other places. Gypsum occurs in various parts. On the high lands between the Rio Grande and Rio Pecos and in other places are extensive salt-lakes, or salinas, whence all the salt used in New Mexico is obtained.

The climate differs considerably, but is, on the whole temperate; its great characteristic is its dryness. There is a rainy season, from July to October; but the rains are seldom heavy, and never of long continuance. The winters are long, especially in the north; but below Santa Fé the Colorado is seldom frozen firm enough to admit the passage of carriages. In the lower part of the valley of the Colorado the summer temperature occasionally rises to 100° Fahr., but the nights are generally cool. Epidemics are scarcely known.

The grain products are mostly confined to maize and wheat; mezquite is raised in the central valley; peas and beans, onions, red pepper, some fruit, and tobacco are also grown. Agriculture is everywhere in a most primitive state. Even in the central valley the chief dependence is on the raising of stock. Large numbers of horses, mules, cattle, and sheep are reared, there being everywhere extensive pastures; but comparatively little attention has been yet paid to the improvement of the breeds, which are generally small and inferior.

Almost the only manufactures are those for which the natives have long been celebrated—namely, those of coarse and fancy blankets, in great request for the favourite national garment called the 'serape;' and the chequered woollen-stuff called 'gorra,' used for carpets, as well as for clothing. Most of the imported articles are received by the Missouri overland route by caravans, by way of Independence, to Santa Fé.

Of the 61,525 white inhabitants, above 58,000 are the descendants of the Spanish settlers, and all of them are Roman Catholics. The settlers from the older states and territories of the United States were only 761 in 1850. The natives appear to be an indolent but contented race, partaking more of the character of their Indian than their Spanish ancestors. The more laborious work is assigned to the females; not only the household work, and a good deal of the field labour, falls to their lot, but the spinning of the blankets and woollen wares is chiefly done by them. Of the ancient inhabitants of New Mexico the vestiges are still very numerous. They are chiefly what are called Aztec ruins, similar to those described under AMERICA and AZTECS. Several are found along the banks of the Colorado and the Grande rivers and their tributaries. The most celebrated are those known as Las Casas Grandes, on the Gilas, noticed under AMERICA, vol. i. col. 303. Some of equal extent, called La Gran Quiviri, occur near the Salinas, between the Rio Grande and the Pecos, about 100 miles S.E. from Santa Fé, where, among other extensive remains, are said to be portions of an aqueduct 10 miles long.

Divisions, Towns, &c.—New Mexico is divided into seven counties. Santa Fé is the political capital, and though there are several other towns, they have necessarily so small a population as to be of little other than local consequence. *Albuquerque*, on the left bank of the Rio Grande, 76 miles S. from Santa Fé, is the only one which requires

to be mentioned. It is said to have formerly contained 6000 inhabitants, but it has now little trade or population.

Santa Fé, the capital, is situated about 20 miles E. from the Rio Grande, in 35° 41' N. lat., 106° 1' W. long., on a wide plain surrounded by mountains, and at an elevation of 7047 feet above the level of the sea: population, 4846 in 1850. It is an old town, having been founded by the Spanish settlers in 1581, and consists of narrow irregular streets, with houses of a single story, built of adobe, square in form, and having a central area. It contains two Roman Catholic churches, but no other public buildings of any note. The inhabitants are still nearly all of Spanish and Indian descent, but there are a few Americans, who have established two newspapers, one published three times a week and the other weekly. *Santa Fé* is a place of great trade, being the centre and depôt of the overland route by way of Missouri. The climate is serene and little variable, and the town is said to be very healthy.

The government of New Mexico is based upon the Act of Congress of September 9th, 1850, which established the territory, and provided that every free white male inhabitant then residing in New Mexico, and all free white citizens of the United States who should subsequently qualify by residence, should be entitled to vote in all elections. The legislative assembly consists of a Council of 13 members, elected for two years, and a House of Representatives of 26 members, elected annually. The governor, as in all the territories, is appointed by the president of the United States. A delegate to Congress is elected by the citizens.

(*Statistical Gazetteer of the United States; American Almanac, 1854; Seventh Census of the United States; Official Report; Humboldt, Essai Politique sur la Nouvelle Espagne; Pike, Exploratory Travels; Poinsett; Lyon, &c.*)

NEW MILLS. [DERBYSHIRE.]

NEW ORLEANS, the principal city and port of Louisiana, United States of North America, is situated on the left bank of the Mississippi, 105 miles above its mouth, in 29° 57' N. lat., 90° W. long., 1203 miles S.W. from Washington. New Orleans was founded by the French in 1717. It was ceded to Spain, with the rest of Louisiana, in 1763; but was restored to France in 1801, and purchased by the United States in 1803. [LOUISIANA.] Its growth has been very remarkable. It contained 17,242 inhabitants in 1810; 46,310 in 1830; 102,193 in 1840; and 116,376 in 1850, or 130,565 including Lafayette, which in 1852 was incorporated with it as a part of the city, and the whole placed under one administration. The inhabitants are of very inter-mixed races. The wealthier classes are chiefly Americans, French, and Spanish, with a few English and Germans; and English, French, and Spanish are the prevalent languages. Large numbers of Irish are among the labouring population. A large portion of the population consists of free coloured persons and slaves.

The city is built on a declivity which slopes gently from the river towards the marshy land in the rear. Being from three to nine feet below high-water mark, the city is defended from the overflow of the Mississippi by an embankment, called a levée, which forms a continuous quay, or landing-wharf, 4 miles long, and of an average width of 100 feet. The Mississippi is here half a mile wide, and from 100 to 160 feet deep, a depth which it retains to the bar at its mouth. [MISSISSIPPI.] The river here makes a broad sweep, and the city extending around the outer line for about five miles, forms a crescent of very striking appearance, whence it is generally known as 'the Crescent City.' The old city is built in the form of a parallelogram; the streets are narrow, and the houses generally of brick with a picturesque continental appearance; but the new city, which consists of the suburbs or 'faubourgs' of St. Mary's, Annunciation, and La Course, and the city of La Fayette above the old city, the faubourgs of Mangney, Dournois, and Declouet below, and Tremé and St. John behind it, is built more in the American style, with broad straight streets, and contains many spacious and costly edifices. During the summer months the city is exceedingly unhealthy, and many of the wealthier inhabitants leave it at that season; of those who remain a large proportion are carried off yearly by yellow fever: the cholera has also on several occasions made fearful ravages. The climate is however in general far more fatal to Europeans who are new comers than to natives. The extreme unhealthiness is mainly attributable to the exhalations with which the air is consequently loaded, caused by the marshy nature of the soil in which the town stands, and the heat of the temperature. Efforts have been made to remedy the evil, but owing to the low site of the city it is hardly probable that they will be more than partially successful.

The public buildings are numerous, and several of the more recent ones have considerable architectural pretensions. The most marked of the older buildings is the cathedral, a large and massive edifice with four towers, and having on its walls numerous figures of saints in niches. There are besides 18 other Roman Catholic churches, and many belonging to the Methodists (one of which is described as "a splendid copy of the temple of Theseus with a steeple 170 feet in height"), Presbyterians, Episcopalians, &c. The educational establishments are on a large scale. The principal is the University, founded in 1849, the building of which is 100 feet long and 104 feet deep, with two detached wings. It has 7 professors in the department of arts, 3 of law, and 7 of medicine. There are also colleges, academies,

numerous primary schools, and several literary institutions. Of the many benevolent institutions the principal is the Charity Hospital, one of the largest and perhaps the most important of its kind in the United States: it is noticed under LOUISIANA. There are 9 cemeteries, in all of which (except that called the Potter's Field, appropriated to coloured persons and friendless strangers) the coffins are placed above ground in tombs from one to three stories high; a mode of burial adopted in consequence of the soil being everywhere saturated with water.

The municipal buildings are close to the cathedral, and are handsome structures of the Tuscan and Doric orders. The buildings used for the sittings of the General Assembly and other state purposes while New Orleans was the political capital of Louisiana, are now variously employed. A branch of the United States mint is established here for coining gold and silver. The main building is 282 feet long, 108 feet deep, and three stories high; and has two large wings: the money coined here in 1851 amounted to above ten millions of dollars. There is also a United States land-office; but the chief federal structure is the Customs House, one of the most magnificent public buildings in the Union: it is nearly equal in size to the Capitol at Washington, and has been constructed in the most costly manner. The market-houses are very extensive and substantial structures. New Orleans is supplied with water from the Mississippi, by a company which has constructed a very large reservoir for the collecting and purifying of the water previous to its distribution through the city by pipes. There is also an aqueduct built by the municipal authorities for conveying water, especially for cleansing the streets, &c.

The hotels and theatres form characteristic features of the civic architecture. Several of the hotels are on a scale of magnitude and costliness equal to any in America: more than one has cost upwards of half a million dollars to erect. There are three large theatres, besides an arena for bull-fights, which are commonly held on Sundays, a circumstance noteworthy as marking the foreign character of the place. Gaming-houses and other places of amusement or dissipation are also numerous; New Orleans being in fact generally regarded as the most luxurious and dissolute city in the Union.

The city is in the most favourable situation for the prosecution of the trade of one of the most important parts of the North American Union, being near the mouth of the great outlet to the valley of the Mississippi. It is the emporium of the vast region which is drained by that river, the Missouri, the Red River, and their tributaries, and already one of the greatest, it appears destined to become the chief commercial city of the west. There is indeed no place in Europe or America which has equal natural facilities of internal navigation; it is said that nearly 20,000 miles of inland navigation are tributary to it. The annual value of domestic merchandise exported from New Orleans now averages more than 50,000,000 dollars; of which about two-thirds are conveyed in American vessels. In the year ending June 1851 the clearances were 645 American vessels of the aggregate burden of 292,958 tons, and 325 foreign vessels of the aggregate burden of 128,949 tons. The entrances were 643 American vessels of 195,136 tons burden, and 333 foreign vessels of 137,000 tons burden. The total entrances in the coast trade were 1227 vessels of the aggregate burden of 353,175 tons; clearances 1178 vessels of the aggregate burden of 435,892 tons. The principal exports are cotton, tobacco, flour, sugar, pork, lard, beef, and corn to foreign markets; with a large number of other articles sent coast-wise. [LOUISIANA.] The arrivals of steam-boats from the interior are about 3000 annually.

New Orleans has not attained eminence as a manufacturing city. The principal establishments are iron-works, machine-shops, sugar refineries, distilleries, tobacco factories, steam saw-mills, lumber-yards, and cotton-presses, which are on a scale of unequalled magnitude. There are some large banks possessing about 40,000,000 dollars of assets. The stores and retail trading establishments are said to surpass in style and costliness of stock those of almost every other American city. Nine newspapers are published here daily, and there are besides several weekly and monthly journals. Some of the newspapers are in the French language. Four canals and three or four railways connect New Orleans with Lake Portchartrain, and otherwise facilitate the communication with the interior; and other railways on a more extended scale and all converging to the city, are projected or in course of construction.

In the environs there are large plantations of sugar, cotton, indigo, and rice, which are cultivated in a very perfect manner. Many of the seats in the suburbs have extensive gardens filled with pomegranates, magnolias, myrtles, and orange groves, the fragrance of which when the trees are in blossom, is delicious.

On the opposite bank of the Mississippi and connected with New Orleans by a ferry is *Algiers*, 'the workshop of New Orleans,' in which are extensive yards for ship-building, and the other trades connected with the commerce of that city. Close to it is the United States Marine Hospital. *Belleville*, adjoining Algiers on the east, contains the residences of many of the wealthy inhabitants of New Orleans.

NEW PROVIDENCE. [BAHAMAS.]

NEW QUAY. [CARDIGANSHIRE.]

NEW ROSS, Ireland, a market-town and sea-port, a parliamentary borough, and the seat of a Poor-Law Union, partly in Kilkenny county, but chiefly in Wexford, is situated on the left bank of the estuary of

the Barrow, in 52° 24' N. lat., 6° 56' W. long., distant by road 24 miles W. by N. from Wexford, 84 miles S.S.W. from Dublin. The population in 1851 was 7941, besides 2028 inmates of the workhouse. The borough returns one member to the Imperial Parliament. The town is governed by 21 commissioners. New Ross Poor-Law Union comprises 39 electoral divisions, with an area of 117,570 acres, and a population in 1851 of 56,456. The town was surrounded with walls in 1269. In 1649 Cromwell, having obtained possession of the place, demolished the fortifications, of which however two gates and a small part of the wall still remain. The town was attacked by the insurgents in 1798; but, after a conflict of 10 hours' duration, they were defeated with great slaughter. New Ross obtained various charters from the reign of Henry III. till that of Charles II. It returned two members to the Irish Parliament. The older part of the town consists of a long street on the summit of the high bank of the river, and several steep streets descending from it. The modern part extends in regular and well-built streets along the level margin of the river. *Rosbercon*, a suburb on the Kilkenny side of the river, consisting principally of a single straggling street, is connected with the town by a wooden bridge 510 feet long, and a causeway of 150 feet. The town is lighted with gas, and supplied with water. The parish church, a neat edifice, occupies part of the site of an old abbey, of which some portions still exist. Rosbercon parish church is the restored chancel of a conventual church, of which the lofty tower and part of an aisle are also preserved. There are chapels for Roman Catholics, Methodists, Presbyterians, Independents, and Quakers. The other public buildings are the court-house, the market-house, the corn and fish markets, a small cavalry barrack, Trinity hospital, or almshouse, the fever hospital, lying-in hospital, dispensary, Union workhouse, and bridewell. Vessels of 200 tons discharge at the quays at all times of the tide, and those of 800 tons at spring tides. The quays are of considerable extent. Barges can ascend the river to Athy, where the Grand Canal continues the communication to Dublin on the one side, and to Limerick on the other. The number of vessels registered as belonging to the port on December 31st 1853 was 18, namely—2 of 69 tons aggregate burden, and 16 of 5756 tons. During 1853 there entered the port 236 vessels of 25,536 tons, and cleared 100 vessels of 14,880 tons. The principal exports are grain, flour, wool, butter, fowls, and bacon. A salmon fishery, above and below the town, employs 300 nets and 1200 men. There are tanyards, breweries, and a distillery. Quarter-sessions and petty-sessions are held. Fairs are held monthly, and markets on Wednesday and Saturday in each week.

NEW SOUTH SHETLAND is a group of islands situated about 600 miles S.S.E. from Cape Horn, between 61° and 63° 30' S. lat., 53° and 63° W. long. They extend from east-north-east to south-south-west over a space of nearly 300 miles, and consist of 12 islands of moderate extent, and a great number of rocks and cliffs. They were discovered in 1819 by Captain Smith, and have frequently been visited since that time for the purpose of taking fur-seals and sea-elephants, with which the shores abound. The largest of the islands from east to west are Clarence, Elephant, King George, Strachan, Mitchell, Sartorius, Livingston, Low, and Smith. The interior of these islands consists of high hills or mountains. A mountain on Smith's Island attains the height of 6600 feet above the sea. They are almost entirely covered with snow all the year round, and only after Midsummer (in January) a few tracts, which are free from snow, are overgrown with lichens and mosses, in some places intercepted with a sort of straggling grass. The only inhabitants of these cold regions are numerous sea-fowls, as the albatross, penguin, &c., and the animals above mentioned. The surrounding sea abounds in whales and fish. Most, if not all of these islands, are of volcanic origin. Port Foster, an excellent harbour in Deception Island, has doubtless been a crater. South of these islands is a wide strait, called Bransfield Strait: the coasts which constitute the southern shores of this strait appear to form an extensive country, of which portions have been named Trinity Land, Graham's Land, &c. [SOUTH POLAR COUNTRIES.] (Weddell, *Voyage*; Foster, *Voyage*).

NEW SOUTH WALES. [WALES, NEW SOUTH.]

NEW TITSCHHEIN. [MORAVIA.]

NEW YORK, the most populous and wealthy, and one of the largest of the United States of North America, is situated between 40° 45' and 45° N. lat., 71° 56' and 79° 55' W. long. It is bounded E. by the states of Connecticut, Massachusetts, and Vermont; N., N.W., and W. by the Canadas, from which it is separated by the parallel of 45° N. lat., known as the Canada line, the river St. Lawrence, Lake Ontario, Niagara River, and Lake Erie; S. by the states of Pennsylvania and New Jersey, and the Atlantic Ocean. The area is about 46,000 square miles, or about 12,000 square miles less than that of England and Wales. The population in 1850 was 3,097,394 (of whom 49,069 were free coloured persons), or 67.33 to the square mile. The inhabitants being all free the federal representative population is the same as the entire population in 1850; this, according to the present ratio of representation, entitles the state to send 33 representatives to Congress—being 8 more than any other state. To the Senate, like each of the other states, New York sends two representatives.

Surface and Soil.—The state presents a very great variety of surface, owing to its including portions of three distinct mountain ridges, all

of which however are portions of the great Alleghany or Appalachian system. These three mountain ridges are separated by wide valleys, mostly of a peculiar description, and from the lakes Erie and Ontario by a plain of considerable extent. Before they divide, near the southern border of the state, in 41° N. lat., these mountains are above 200 miles in width. The western ridges grow lower and less distinct as they approach 42° N. lat., and north of that parallel they are lost in an elevated plain or table-land, which has a hilly surface. The eastern ridges continue as distinct mountain masses eastward to 74° 40', about 30 miles from the banks of the river Hudson, where they unite with the northern extension of the Kittatinny Mountains of New Jersey; they are here known as the Catskill Mountains, or Kaatsberg. This range continues northward to 43° N. lat., where one branch turns westward nearly 50 miles, and terminates at the eastern extremity of the table-land on which the western ranges of the Alleghanies are lost. The other appears to be prolonged northward, though much broken, to the Adirondack Mountains, which inclose Lake George and extend along the western shores of Lake Champlain. West of them is an elevated table-land, which on the south terminates in the valley of the Mohawk River. The most eastern of the mountain chains of the Alleghanies, known in New Jersey under the name of the Blue Ridge, is divided from the range first noticed by the valley in which the Pawling and Wallkill rivers flow south-west and north-east. It forms on the west of the Hudson River the Mattewan Mountains or Highlands, and east of the Hudson the Fishkill Hills, which constitute the south-western extremity of the extensive mountain region which occupies a considerable portion of New England, and extends through Lower Canada to the mouth of the St. Lawrence River. The Fishkill Hills run from the banks of the Hudson north-east and north through New York until they arrive at its eastern boundary-line, where the states of Connecticut and Massachusetts meet, and where they take the name of the Taghkanic or Taconic range. From this point, continuing to the east of north, they constitute the boundary between Massachusetts and New York, until, by declining more to the east, they enter Massachusetts and proceed into Vermont, where they are called the Green Mountains. Between them and the ranges previously noticed extends the valley of the middle Hudson.

New York contains several regions, different in configuration of surface and in fertility, and to a considerable degree also in climate. The region of the Susquehanna and Delaware rivers comprises the country which is surrounded on the east and north by the Catskill range, and is drained by the upper branches of the Delaware and those of the eastern branch of the Susquehanna; it extends westward to about 76° W. long. The mountain range which surrounds it rises in its highest part to above 3000 feet, the loftiest summits being Round Top (3804 feet), High Peak (3718 feet), and Pine Orchard (3027 feet). The valleys which descend from this range, chiefly in a south-western direction, contain rather wide and extensive bottoms of great fertility, which in their natural state are overgrown with forests of sugar-maple, black walnut, elm, beech, and other trees, indicating a strong soil. The declivities of the mountains are rather steep, and their soil of inferior quality; they are mostly overgrown with pine, among which oak, chestnut, and hemlock are intermixed. When cultivated the valleys yield rich crops.

West of this region, along the boundary-line of Pennsylvania, lies the elevated table-land on which the western ridges of the Alleghanies terminate, and the western branch of the Susquehanna, the Alleghany River, an affluent of the Ohio, and the Genesee River originate. It is from 20 to 30 miles wide, has a very broken and hilly surface; is almost entirely covered with wood, mostly pine, and is but thinly settled. Some sheltered tracts between the hills exhibit a considerable degree of fertility.

From this table-land the country has a general but interrupted slope towards Lake Ontario, rising however again somewhat as it reaches the shores of the lake. The depression between the table-land and this rise, extending in the form of a trough east and west, is called the Lake Country. It contains numerous lakes, of which the most considerable are Canandaigua (685 feet above the level of the sea), Crooked Lake (700 feet), Seneca (440 feet), and Cayuga (400 feet). The surface of this depression is generally level or undulating, but the lakes lie in deep and wide chasms, and the beds of the rivers are likewise much depressed. In its natural state this country is covered with high forest-trees, and when cultivated yields most abundant crops, being indeed the most fertile portion of the state. The central portion of the Grand Canal passes through the depression, but the western part passes over the higher grounds which separate it from Lake Ontario.

The surface of the higher ground, which occurs north of this region, is uneven and broken, and the soil partly stoney and gravelly, and in general of indifferent quality. From this higher ground the country descends uniformly and gradually to Lake Ontario, except that, between Niagara and Genesee rivers, a distance of 80 miles, it is traversed in its whole length by an elevated tract of sand and gravel, known as the Ridge Road, or Alluvial Way, the former shore of the lake, but now raised 150 feet above it.

The northern region comprehends the country lying north of Lake Oneida and of the valley in which the Mohawk River flows, as far east as the mouth of the East Canada Creek. It is separated from Lake Champlain by the deep depression in which that lake lies. It

comprehends the Adirondack Mountains as well as an elevated and extensive table-land lying to the west of them, and includes about one-third of the surface of the state; a great portion of it is however uninhabited. The mountains occupy the eastern part of the region. The most elevated summit of the chain, called Mount Marcy, attains an elevation of 5467 feet. Mount MacIntyre, west-north-west of it, is 5183 feet high, Mount MacMartin 5022 feet, and several other peaks rise to between 4000 and 5000 feet. The snow does not disappear from the summit of Mount Marcy till after the middle of July. The valleys embosomed between these higher ranges are from 2000 to 3300 feet above the sea-level, and are of course uninhabitable. They are however covered with pine, spruce, and birch trees. Towards the summit of the mountains these trees become dwarfish, and are interwoven with each other by their numerous horizontal branches. On the highest summits however the trees disappear entirely, and are replaced by mosses, lichens, and small alpine plants. Much of the scenery of this mountain district is of a very grand character. The climate of this elevated region is so cold that ice is formed during the night in the beginning of August. Towards the south the valleys are much lower, and a few settlements have been made.

West of this mountain region lies a table-land of an uneven surface; a portion of it is covered with swamps, and a still greater part intersected with lakes. Numerous rivers originate on it, and descend by a succession of rapids and cataracts to the lower country. In the western declivity of this elevated region the settlements commence, about 20 or 30 miles from the shores of Lake Ontario and the St. Lawrence River. In the more sheltered valley of Black River they extend to a greater distance, but they are confined to the banks of the rivers, the remainder of the region being entirely covered with woods. The climate of these declivities is very severe, as they are exposed to the prevailing cold winds which blow from the north-west.

Lake Champlain lies along the eastern base of the Adirondack Mountains; and on the east of the lake, but at a much greater distance from it, are the Green Mountains of Vermont. The higher parts of both ranges are from 25 to 30 miles apart. The valleys and flats between the hills and on the borders of the lake are not distinguished by fertility, but give good crops when cultivated with care. From the southern extremity of Lake Champlain a glen extends between the hills which cover the country to the Hudson River below Glens Falls. The highest level of this Glen is only 140 feet above the tide-water in the Hudson River, and 50 feet above the level of Lake Champlain. Through this glen the Champlain Canal has been made, which unites the river to the lake. As the outlet of the lake, the river Chambly, falls into the St. Lawrence River, a water communication is thus opened between the St. Lawrence and the Hudson.

The vale of the Middle Hudson begins near 43° 20' N. lat., where the river, after issuing from the Adirondack Mountains, forms Glens Falls, and begins its southern course. It extends, with a width of from 60 to 80 miles, between the Tughkanic range on the east and the Catskill range on the west to where the river pierces through the Highlands near Fishkill. The slope on the east of the river is rapid but regular. The surface frequently rises into hills, but they do not attain a great elevation, and their declivities generally admit cultivation. The soil possesses a considerable degree of fertility, and to this circumstance, united to the advantages offered by a river navigable for large vessels, must be ascribed the fact that this portion of New York is one of the most populous and best cultivated. That portion of the vale which lies west of the river presents a greater variety in surface and fertility. It is traversed by the Catskill range; among the loftiest summits of which are the Round Top and other lofty mountains already noticed. On the western, as on the eastern side of the Hudson, only a few alluvial tracts occur on the banks of the river, and they are of very small extent. The country generally rises from the west banks with a rather rapid ascent to 200 feet and more, and then extends in a broken and hilly surface to the base of the mountains, though flat tracts occur in some places. The soil is in many places stoney, but it generally possesses a considerable degree of fertility, though it is somewhat inferior to that on the east side of the river. At the most south-western extremity of this region, in the valley of the Walkill, is a level marshy tract of exuberant fertility, called the Drowned Lands. Its southern extremity lies within New Jersey, but the greater portion is in Orange county, New York. It is from 35 to 40 miles in length and from 5 to 7 miles wide, and some small lakes are scattered over it. In spring it is subject to inundation.

The vale of the Lower Hudson extends from the Highlands at Newburg and Fishkill to the mouth of the river, a distance of about 60 miles. The Highlands rise to a considerable elevation, Beacon Hill attaining 1471 feet, and New Beacon, or Grand Sachem, 1685 feet above the sea-level. The Highlands, or Mattewan Mountains, west of the river, though high, do not attain so great an elevation. Both ridges terminate on the banks of the river in high and precipitous rocks, which extend on each side for about 20 miles. The prevailing character of the surface and soil of this region is rocky, especially on the west of the river. The higher lands recede to a distance from the river, and slope to the banks with a rather gentle declivity; but from Tappan to a distance of about 8 miles from the city of New York, the Palisades, as they are called, extend along the river: they consist of enormous masses of rocks, from 20 to 500

feet in height. In some places they rise almost perpendicularly from the shore, forming for many miles a solid wall of rock, diversified only by an occasional fishing-hut on the beach at their base, and sometimes by an interval of a few acres of arable land, affording an opening for a landing-place, and a steep road leading to their top. The whole tract south of the Highlands has a very rocky soil, and only a small portion of it is cultivable. The country east of the river also rises with a bold and broken shore, but it is lower and less precipitous, and the country farther back is varied by ascents and descents. It contains a much larger portion of cultivated land, but the soil is rocky and of inferior quality.

Long Island is 113 miles long from west to east, and on an average about 12 miles wide, though in some places it is 20 miles across. At the eastern extremity a shallow inlet, called Peconic Bay and Gardner's Bay, separates it into two peninsulas, of which the southern extends farthest east, and terminates with Montauk Point. A ridge of low hills extends along the northern shores of the island, and from their base to the southern shores there is an alluvial margin from 1 to 5 or 6 miles wide. Along the southern shores, and from 1 to 2 miles from it, extend long, narrow, low, and sandy islands. The intermediate space between these islands and the shores is occupied by shallow sounds. The soil is everywhere sandy and light, but within the hilly tract, especially at the western extremity, and from 20 to 30 miles eastward, it is of considerable fertility. The largest portion of the eastern districts is still covered with pine. The level tract along the southern shores is generally sterile, and in some parts not worth cultivation. The area of Long Island is about 1440 square miles. There are a few serviceable harbours along the shores of the island, but they are not much used by shipping.

Staten Island is separated from Long Island by the strait called the Narrows, which forms the entrance into New York Bay. Staten Island is about 14 miles long and from 2 to 8 miles wide, with an area of 77 square miles.

Long Island Sound, or the strait which divides Long Island from the continent, is about 100 miles long, with a varying width, increasing from about 8 miles at each end to about 20 miles in the middle. At its western extremity it contracts to between half a mile and 2 miles for a distance of 8 miles, until it joins East River. In this narrow western portion of the strait the channel is rocky and much interrupted by small islands and projecting points. Where most obstructed by projecting rocks it is known as Hell-Gate, a corruption of *Hord Gatt*, the Dutch for whirlpool; but in 1852 large portions of the rocks were removed by blasting, and the strait is now navigable by the largest vessels. Long Island Sound receives all the large rivers from Connecticut. The coasting vessels and steamers plying between New York and the New England ports generally take the Sound route.

The chief harbour of the state is that of New York, the chief commercial depôt of the state, and the finest harbour on the Atlantic sea-board: it is noticed more fully under New York City.

Hydrography and Communications.—On the elevated table-land which extends along the northern boundary of Pennsylvania all the large rivers rise which fall into the Atlantic west of the mouth of the Hudson and east of the innermost recess of Chesapeake Bay. This region contains the sources of the DELAWARE, the Susquehanna [PENNSYLVANIA], and the ALLEGHANY. On the same table-land between the upper branches of the Alleghany and Susquehanna, and within the limits of Pennsylvania, rises the *Genessee*, which runs in a general northern direction about 145 miles, of which about 125 miles belong to New York. In its middle course, which lies in the Lake Country, it traverses a deep and wide valley of great fertility, and forms at Rochester, 5 miles from its mouth, a cataract 95 feet high. But above this impediment the river is navigable about 20 miles for boats. The Genessee Valley Canal follows the course of the river, as does also a railway.

Not far from the eastern banks of the Genessee River commences that remarkable series of lakes, which extends nearly 100 miles farther eastward, and is from 20 to 30 miles distant from Lake Ontario. Lines drawn from the most northern extremity of these lakes in the direction of their length to Lake Ontario, cut the shores of that lake at right angles. The most considerable of these lakes from west to east are Lake Canandaigua, which is 14 miles long, and about 1 mile wide; Crooked Lake, 22 miles long, and about one mile and a half wide; Seneca Lake, 40 miles long, from 2 to 4 miles wide, and of great depth; Cayuga Lake, 40 miles long, and from 1 to 3½ miles wide; Skaneateles Lake, 15 miles long, and about 1 mile wide; and Oneida Lake, the most eastern, 22 miles long, and from 4 to 6 miles wide. Onondaga Lake, which lies between Skaneateles and Oneida lakes, is 8 miles long, and 2 to 4 miles wide, and remarkable for the copious and strong salt springs, which occur at a distance of a mile from its eastern banks. All these lakes, except the most western, that of Canandaigua, discharge their waters by one river, the *Seneca*. This river issues from the northern extremity of Lake Seneca, which receives the waters of Crooked Lake by a narrow channel, and winds with numerous bends through the Lake Country, running in a general north-eastern direction. Each lake discharges its waters by a separate channel into its bed. In approaching the western extremity of Oneida Lake it is met by the channel issuing

from that lake, and after their union the river is called the *Oswego River*. The united river flows for about 24 miles in a north-western direction to its outfall in Lake Ontario. Its navigation has been improved by locks and cuts, and its banks are lined with manufacturing establishments, to which its waters supply mill-power.

Black River rises on the western declivities of the Adirondack Mountains, and descends from the table-land of the northern region first by a south-western and afterwards by a north-western course. About 36 miles from its mouth it turns west, and discharges its waters into Black River Bay at the foot of Lake Ontario. This river runs about 110 miles, but in many parts of its course it consists of a series of cataracts and rapids. From the falls at Leyden the Black River Canal extends to Lake Erie. Between Leyden and Carthage it is navigable by boats.

The table-land west of the Adirondack Mountains contains many lakes, and some of considerable extent. The most eastern ridges of these mountains contain Lake George, or Lake Horicon, which extends from south-south-west to north-north-east 36 miles, with a width of from 2 to 5 miles. It is inclosed on all sides by high rocks, and contains many small rocky islands. It is 243 feet above the Hudson River; it discharges its water by a channel into Lake Champlain at Ticonderoga. Along its banks are several ruined forts. The beauty of its scenery makes it a favourite resort of tourists. Lake Champlain extends northward into Lower Canada. [CHAMPLAIN.]

The largest river of New York, and one of the most important rivers of the United States, is the *Hudson*. It is formed by two branches which rise in the mountains west of lakes Champlain and George, and unite about 40 miles from their respective sources near 43° 30' N. lat. As both branches descend from a very elevated region, their current is very rapid, and frequently interrupted by rapids and cataracts. The united river runs southward for some distance, and where it begins to turn to the east, it is precipitated over a ledge of rocks, and forms the Great Falls. Twenty miles lower down are Glens Falls, where the river turns again to the south, which direction it maintains with slight deviations to its mouth. Below Glens Falls the river becomes navigable, though the current continues to be rapid to the mouth of the Mohawk River. The tide ascends the river as far as the mouth of the Mohawk, and below this point the river has a mean breadth of nearly a mile. In some places it widens considerably and appears like a lake, as above Newburg, and still more above Tappan. About 30 miles from its mouth, which is between Sandy Hook in New Jersey and the western extremity of Long Island, the river divides into two arms, which inclose the island of Manhattan. The eastern and more narrow arm is called Haerlam River, and after it has united to Long Island Sound, East River. Where the river meets Long Island Sound is the strait already noticed called Hell-Gate. At the city of New York the East River again unites with the West River, or proper Hudson, and the spacious bay of New York is formed. But before the river enters the sea, it sends off another arm to the westward, which surrounds Staten Island, under the names of Newark Bay, the Kills, and Amboy Bay. The Hudson is navigable for large ships to Hudson, 118 miles from its mouth, and for sloops and large steamers to Albany, 145 miles from its mouth; smaller steamboats ascend to Troy, 6 miles farther. It may be ascended by boats to Glens Falls, but this navigation is now superseded by the Champlain Canal, which extends along its right bank. The Hudson railway runs for the most part along the left bank of the river, but in many places crosses it on embankments. By the Erie Canal it is connected with the great western lakes; and by the Delaware Canal with the Delaware River. The whole course of the river exceeds 300 miles. After issuing from the mountain region the Hudson is not joined by any considerable tributary, except the *Mohawk River*, which rises on the table-land west of the Essex range, near 75° 30' W. long., and runs southward. One of its upper branches, Utica Creek, forms 14 miles north of Utica, the Trenton Falls, by which the river descends 387 feet in a space of less than 5 miles. Below the village of Herkimer the Mohawk forms the Little Falls, by which the river descends more than 80 feet in the distance of a mile. About two miles above its mouth are the Cohoes Falls, 62 feet in perpendicular height. The tide ascends to the last-named falls. At Waterford the Mohawk joins the Hudson, after a course of about 120 miles. It is little used for navigation, the Erie Canal passing along its right bank.

The St. Lawrence and the Niagara rivers and lakes Ontario and Erie, which belong partly to this state and partly to Canada, are described generally under CANADA. The St. Lawrence is navigable for sloops to Odensburg, 60 miles from Lake Ontario, below which its course is so much interrupted by rapids as to render navigation difficult and dangerous. Of Lake Erie only about 60 miles of coast belongs to New York, but the commerce of this district is immense, and steadily increasing. Its harbours are Buffalo and Dunkirk, and the canals and railways which converge upon the lake afford the greatest facilities for the extension of commerce. Of Lake Ontario the whole southern coast belongs to New York, it has several good harbours, the most noted being Sacket's Harbour near the east end of the lake. It is connected with Lake Erie by the Welland Canal. The trade between the United States and Canada is chiefly carried on by Lake Ontario: it is of great and constantly growing extent.

New York has a more extensive and grander system of canals than

any other state. They extend from the Hudson to Lake Erie (by the Erie Canal, 364 miles long), with branches in all directions; from the Hudson to the Delaware (83 miles long); from Lake Champlain to Lake Ontario (64 miles) noticed under CHAMPLAIN LAKE, and towards all the other commercial centres: there are in all about 950 miles of canal belonging to this state.

The railways are still more extensive and important. On the 1st of January 1855, New York state possessed 32 lines of railway, of the aggregate length of 2625 miles; and 801 miles more were in course of construction. The total cost of these railways had been 111,882,500 dollars, or nearly twice as much as the railways of any other state of the Union. These railways traverse the state in the direction of every leading route of traffic. Plank roads, which are here greatly valued, are likewise laid down to almost every trading centre; and the ordinary carriage roads are ample in number and everywhere well kept.

Geology, Mineralogy, &c.—The rocks of New York are almost entirely igneous and palaeozoia. Eruptive and Metamorphic rocks occur in two great groups, and occupy together nearly one-third of the state. The larger group is nearly circular in form, and comprises the Adirondack Mountain district, in the northern part of the state. The second group occupies a smaller district in the south-eastern part of the state, including Putnam and Westchester counties, the larger part of New York, &c. The rocks include granite, serpentine, primary limestones, greenstone, trap, porphyry, sienite, gneiss, hornblende, mica-schist, talcose slate, steatite, &c. Silurian rocks also prevail over a wide area. Lower Silurian strata occur in the northern end of the state, from the head of Lake Champlain to the St. Lawrence, and form throughout the banks of this river. The head of Lake Ontario is also surrounded by Lower Silurian strata, which thence cross the state to the Hudson, with a mean breadth of about 20 miles. The banks of the Hudson, down to the Highlands, likewise belong to this formation. The strata consist in the ascending series of a hard brown sandstone, gray limestones, light green shales, a sandstone of very beautiful appearance and great durability, known as Potsdam Sandstone; then a calciferous sand rock; then hard and very fossiliferous limestones, but varying considerably in character in different localities, and thence known as Bird's-Eye, Chazy, Trenton, and other limestones, and surmounting all are various shales and roofing slates, known as Lorraine Shale, Utica Slate, &c. Upper Silurian strata occupy the entire southern side of Lake Erie, and thence follow on the south and west, in a narrow band, the course of the Lower Silurian rocks through the state. These rocks consist of gray-sandstones and conglomerates, above which are various sandstones and limestones, known as the soft green and variegated Medina sandstone, Oneida group, Water-lime group, pentamerus, encrinural green-shaly, and Oriskany limestones, with saliferous and gypseous rocks, known as the Onondaga salt group. The Devonian formation comprises the basin of Lake Erie, and so much of the state as lies between the Silurian rocks and Pennsylvania. It is composed of numerous and very deep strata, the whole formation here attaining, it is said, a depth of 14,000 feet. Very fossiliferous sandstones, known as the Oriskany sandstone, Schoharie grit, &c., form the lowest beds; then occur various limestones, known as the Helderberg, &c., with a great extent of marl and black schistose clay; the whole being crowned by a very deep red-sandstone, corresponding to the Old Red-Sandstone of Great Britain; this is the prevalent rock of the Catskill Mountains, or Kaatsberg, and hence has been denominated by the state geologists Kaatsberg sandstone. The Carboniferous basin of Pennsylvania does not appear to extend into New York; nor are there any of what are called Secondary strata. Long Island consists wholly of Tertiary and recent deposits; and raised beaches and recent deposits occur along the shores of the lakes and larger rivers. The most important of the raised beaches is a lofty bank of sand and gravel, known as the Ridge Road, which extends along the whole southern coast of Lake Ontario, at a distance of from 6 to 8 miles from it. It is from 100 to 150 feet high, and forms a natural highway. At one period it evidently formed the bank of the lake.

New York is rich in minerals. Iron abounds in various parts. In the primary rocks of the Adirondack Mountains it occurs in enormous quantities as a magnetic oxide. As a specular oxide it occurs largely in the north-western part of the state. As hematitic ore it is very widely spread through the middle and southern districts. Among the recent strata it occurs in considerable quantities in the form of argillaceous or bog ore. Graphite is found in the primary rocks both in the north and south. Lead occurs in enormous quantities in St. Lawrence county, in the north-west of the state; and is also found, though not so abundantly, in other parts. Copper, zinc, arsenic, barytes, and strontium are likewise obtained, though not largely. Alum is found in several places. Gypsum is obtained in the Onondaga group of Upper Silurian strata noticed above. Soapstone, talc, carbonate, hydrate, and sulphate of magnesia, asbestos, &c., with garnet, beryl, chrysoberyl, tourmaline, and various other minerals are found throughout the state. As will have been noticed in our sketch of the geology of the state, the most prevalent rocks are limestones and sandstones; and these, with the primary rocks, furnish a remarkably varied and almost inexhaustible supply of excellent building stone. Coal, as already mentioned, does not occur, except indeed some layers of

anthracite a few inches thick which are of no practical value. New York is dependent mainly upon Pennsylvania for its coal. Chalybeate springs occur at Saratoga; sulphur springs at Avon, Chittenango, and Rochester; and brine springs in several parts of the north-west. Oil springs occur in Cattaraugus and Alleghany counties; nitrogen springs at New Lebanon and Hoosic; and the village of Fredonia and the lighthouse of Barcelona, on the border of Lake Erie, are lighted by 'natural gas' from springs of carburetted hydrogen; similar springs occur in several other places.

Climate.—The mean annual temperature of the city of New York is between 52° and 53°, which is only 2 or 3 degrees higher than that of London, though it is more than 10 degrees nearer to the equator. But this city has a milder climate than any other part of the state, except Long Island. The mean average temperature of the whole state is 46° 49' Fahr. The vale of the Hudson River is much colder than any part of Great Britain. In December the cold increases gradually, and the winter lasts to the end of March. In January and February the thermometer sometimes sinks to 2° Fahr. Snow lies on the ground several feet deep, and the river is passed on the ice. The spring months are raw, chilly, and damp. In summer the thermometer ranges, in general, between 60° and 80°; it sometimes rises to 85°, and for a few days to 90°, but rarely higher. Night frosts begin to occur in October, and towards the end of November snow falls; but the temperature is subject to great and sudden variations, amounting to 20° and even 30° Fahr. in the same day. In the vicinity of the mouth of the Mohawk River the cold is much more severe, which is ascribed to the prevalence of the north-western winds, which blow with considerable force through the valley of the Mohawk. The Lake Country enjoys a milder climate, its temperature being generally at least 3 degrees higher than that of the valley of the Mohawk; but it is subject to dense fogs, and is considered the most unhealthy portion of the state. The northern region has very severe winters, so that during six months the country is covered with snow and the rivers are frozen. In the high valleys of the Adirondack Mountains it freezes even in August. The average annual quantity of rain for the whole state is about 49 inches.

Productions.—The cultivated cerealia are maize, wheat, rye, barley, oats, and buckwheat. About one-third of all the buckwheat, two-thirds of the barley, one-fourth of the rye, one-sixth of the oats, and one-eighth of the wheat grown in the United States are raised in New York. Artificial grasses are largely cultivated in some parts. Potatoes and turnips are generally cultivated. Immense quantities of melons are raised. Peas and beans succeed very well. Apples, peaches, and cherries are plentiful, but pears and plums are not so abundant. Currants and strawberries are cultivated near New York. In some parts flax and hemp are grown, but their culture is decreasing. Only a small quantity of tobacco is grown.

Forests of vast extent still occupy the uncultivated regions of the north and west. They consist chiefly of pines, of which the most numerous are pitch pine, white pine, hemlock, spruce, black spruce, white spruce, balsam fir, and tamarack, together with the red and white cedar, yew, and arbor vitae; white, black, scarlet, and numerous other oaks, yielding valuable timber; beeches, &c. Over the interior of the state the most abundant trees are the valuable sugar maple, from which sugar is made in immense quantities, cane sugar being now seldom used by the farmers of the interior; chestnut, hickory, ash, elm, walnut, &c. Medicinal plants abound.

All the domestic animals of Europe are reared; but less attention appears to be given to them than formerly. A great deal of wool is sent to market, and the dairy products are very valuable. Wild animals are still numerous. The panther is now rare, except in the Adirondack Mountains, which also contain the moose-deer. Deer are still frequent in the western and northern regions. Other wild animals are, black and gray wolves, black bears, gray and red foxes, woolverines, wild cats, racoons, skunks, opossums, weasels, pine martins, minks, beavers, otters, squirrels, musk-rats, marmots, rabbits, and hares. The wild turkey has become rare, even in the western districts, but prairie hens, partridges, grouse, with swans, wild geese, canvass-back and other ducks, and pigeons are abundant. The turkey buzzard, golden and bald eagle, various hawks, and other birds of prey are numerous. The sea and the lakes abound in fish. Turtle are taken on the coast.

Manufactures, Commerce, &c.—New York at the Census of 1850 was the first state in regard to both its manufacturing and agricultural population, having 312,697 persons returned as employed in commerce, trade, manufactures, mechanic arts, and mining, while Pennsylvania the next in rank had only 266,927 persons so employed. The persons employed in agriculture were still more numerous; being 313,980, or 43,618 more than Ohio, the next in numerical rank as to agriculture. The most numerous and important manufacturing establishments are cotton and woollen factories; iron-works; steam-engine and machine-shops; manufactories of fire-arms; distilleries and breweries; tanneries; sugar refineries; glass-houses and potteries; soap- and tallow-works; carriage- and waggon-factories; saw- and grist-mills; and manufactories of all the usual articles of domestic consumption and luxury.

The commerce of New York far exceeds that of any other state in the Union. In the year ending June 30, 1852, the exports amounted to 87,484,456 dollars, of which 74,042,581 dollars were of domestic

produce. The imports during the same period amounted to 132,329,306 dollars, or nearly 100,000,000 dollars above those of any other state. Of these, imports valued at 101,746,789 dollars, were carried in American, and 30,582,517 dollars in foreign vessels. The number of entrances of ships in the state in 1850 was 7969, of which 3165, of the aggregate burden of 1,145,835 tons, entered at Atlantic ports (almost wholly at that of New York), and 4804 vessels of 1,131,885 tons entered at Lake ports. The clearances during the same period numbered 7303, namely, at Atlantic ports 2612 vessels of 983,239 tons burden, and at Lake ports 4691 vessels of 1,165,807 tons burden. The shipping belonging to the state exceeds 1,000,000 tons. The inland and coasting trade is far greater than even the foreign commerce. As a ship-building state New York exceeds every other except Maine. The number of vessels built in the state in 1851-2 was 179, of the aggregate burden of 72,072 tons; of these 26 were ships, 56 schooners, and 45 steam-vessels.

Divisions, Towns, &c.—New York is divided into 59 counties, 45 in Northern and 14 in Southern New York. Albany is the political capital. Including the capital and New York, the great commercial centre of the Union, there are 12 incorporated cities in the state; of these ALBANY, NEW YORK, BROOKLYN, and BUFFALO form the subject of separate articles; the others, with some of the more important towns, or villages, as they are here termed, we notice below: the population is that of 1850:—

Hudson, on the left bank of Hudson River, and at the head of ship navigation, 30 miles S. from Albany, population 6286, is one of the oldest cities in the state, but its progress has been of late comparatively slow. It is regularly laid out, well built, contains a large and handsome court-house and other county buildings, several churches, a lunatic asylum, &c.; carries on a large whale-fishing and river-trade; and has considerable manufactures.

Oswego, on both sides of the Oswego River, at its outfall in Lake Ontario, 150 miles W.N.W. from Albany: population, 12,205. The river is not navigable, but its mouth, around which the city is built, forms one of the best harbours on the south side of the lake, and its capabilities have been much increased by the carrying out of piers. Oswego is the chief American depot for the Canadian trade passing by way of the Welland Canal, and it is connected by branch lines with the Central railway and the Erie Canal. The import and export trades are both very large and rapidly increasing. The chief articles received from Canada are lumber, wheat and flour, potatoes, and other provisions. The exports include all the leading articles of domestic and foreign produce. The two sides of the city are connected by a bridge 700 feet long. The city is regularly laid out with streets 100 feet wide, and contains a court-house, several churches (some of considerable architectural pretensions), schools, a large railway terminus; several hotels, commission houses, and warehouses of large size; and numerous extensive manufactories. The city is defended by a strong fort.

Rochester, on both sides of the Genesee River, 7 miles above its outfall in Lake Ontario, and 252 miles, by railway, W. from Albany, population 36,403 (20,191 in 1840). The city contains a large and handsome court-house, a post-office and public-hall or 'arcade,' built of marble, 30 churches, Rochester university, a Baptist theological college, an atheneum, numerous schools, an orphan asylum, and other benevolent institutions, and several spacious hotels and business establishments. The rapid rise of Rochester is mainly due to the immense supply of water-power here afforded by the falls of the Genesee, which within the city limits has a descent of 268 feet by three successive perpendicular falls, and 105 feet by two rapids. This vast power has been rendered available to the fullest extent for manufacturing purposes. The chief establishments are the flour-mills, at which three million bushels of flour are ground annually; there are also extensive iron-foundries, machine-shops, cotton- and woollen-factories, and large manufactories of cabinet-ware, &c. Rochester has ample canal and railway accommodation, and the river is navigable to Lake Ontario.

Schenectady, on the right bank of the Mohawk, and on the line of the Erie Canal, 17 miles N.W. from Albany, population 8921, is one of the oldest cities in the state; contains a city-hall, court-house, lyceum, several churches, a college, and other public buildings; and has some manufactures, especially of flour, paper, cotton goods, iron, and brooms.

Syracuse, on the Onondaga Creek, a short distance above its entrance into Onondaga Lake, 148 miles by railway W.N.W. from Albany: population, 22,271 (6500 in 1840). The city contains some large and handsome churches and public buildings; its hotels, Syracuse having become a great centre of railway traffic, are celebrated for their size and style. The chief manufactures are of salt, of which enormous quantities are prepared from springs in the immediate vicinity; flour; iron-castings, and machinery. The Erie and Oswego canals, and several lines of railway pass through or terminate in the city.

Troy, on the left bank of the Hudson, 6 miles N.E. by N. from Albany, population 28,785, is one of the chief business places of the state. The city is finely situated, well built, and has a more than usually pleasing appearance. Its chief public buildings are the court-house, a spacious marble edifice of the Doric order, several churches and educational institutions, a museum of natural history, &c. The

principal manufactures are of various branches of the iron trade, machinery, hardware, and cutlery; but there are also extensive cotton and woollen factories, railway-car works, paper-mills, tanneries, flour-mills, lumber-yards, &c. The shipping trade with New York is very large. Numerous railways, as well as the Erie and Champlain canals, connect Troy with all parts of the state and with Canada.

Utica, on the right bank of the Mohawk River and on the Erie Canal, 95 miles by railway W.N.W. from Albany: population, 17,565. The city stands on rising ground; is regularly laid out with streets 100 feet wide; contains 20 churches, several schools, two orphan asylums, the state lunatic asylum, a very large and handsome building with extensive grounds, and other public buildings; and has large manufactories of iron, machinery, carriages, leather, flour, &c.

Williamsbury, on the east bank of East River, Long Island Sound, nearly opposite to New York city, with which it is connected by a steam ferry, and of which it is in fact a suburb: population 30,780. The city, which was incorporated in 1852, stands on an elevated site, is regularly laid out, contains many fine buildings, including 30 churches, and numerous extensive manufacturing and business establishments, and resembles in character and general arrangements the parent city, with the fortunes of which it is closely united.

Auburn, at the outlet of Owasco Lake, 175 miles W. from Albany, population 9548, is a busy manufacturing village, and contains the state prison, a Presbyterian college, &c. *Canandaigua*, on the west side of Canandaigua Lake, 200 miles W. from Albany, population 6143, is a place of considerable business, and a station of three lines of railway. *Catskill*, on the right bank of the Hudson, at the confluence of Catskill Creek, population 5454, contains the county buildings, several churches, schools, hotels, &c.; possesses considerable manufactures; and has a large river trade. *Elmira*, at the confluence of Newton's Creek with Chemung River, 160 miles W. by S. from Albany, population 6212, has considerable manufactures, a large trade in lumber, and is amply provided with canal and railway facilities. *Flushing*, at the head of Flushing Bay, Long Island Sound, 125 miles S. from Albany, population about 2500, is a place of considerable resort in summer for bathing. In the village are several good churches, and near it is St. John's Episcopal College. Large quantities of vegetables are raised in the neighbourhood for the New York market. *Geneva*, at the north-western angle of Seneca Lake, 160 miles W.N.W. from Albany, population about 4500, is celebrated for the beauty of its site, and as the seat of Geneva College and Medical School. It contains several residences of a superior class, and carries on some manufactures. *Ithaca*, on both sides of Cayuga inlet, about a mile above its entrance into Cayuga Lake: population, 6909.

Canal boats ascend to the town, which possesses unusual water-power, which has been rendered largely available in working cotton, woollen, flour, paper, and plaster mills; there are also iron-works, machine-shops, &c. The village is regularly laid out, contains some good buildings, and has ample railway accommodation. *Lansingbury*, on the left bank of the Hudson, at the head of sloop navigation, 10 miles N.N.E. from Albany, population about 4500, is a busy and flourishing manufacturing and trading town, and contains several churches, schools, and public buildings. It is connected with Waterford, on the opposite bank, by a bridge, and with most of the leading towns in the state by railways. *Lockport*, on the Erie Canal, and on the Canandaigua and Niagara railway, 250 miles W. by N. from Albany, and 23 miles from the Falls of Niagara, population 12,323, is one of the most prosperous and rapidly-increasing villages in the western part of the state. It contains a court-house, jail, and other county buildings, 18 churches, several schools, &c.; and has extensive cotton and woollen factories, iron-furnaces, machine-shops, agricultural implement manufactories, flour, saw-, and plaster-mills, &c. *Newburg*, on the right bank of the Hudson, 55 miles S. by W. from Albany: population, 11,415. The village is finely situated on elevated ground, and contains the usual county buildings, churches, schools, &c., and a theological seminary. It has extensive manufactories of machinery, carriages, chairs, cordage, flour; with iron-foundries, tanneries, lumber- and stone-yards, &c. A large trade is carried on in forwarding by the river to New York vegetables and other agricultural produce received from the interior. *Niagara Falls*, population about 1000, is so called from the famous Falls of Niagara, close to which it is situated. It contains flour- and paper-mills, iron-furnaces, and several large hotels. *Plattsburgh*, at the head of Cumberland Bay, on the west bank of Lake Champlain, 150 miles N. from Albany: population of the township, 5618. The village contains some good buildings, has considerable trade and manufactures, and possesses good railway accommodation. *Poughkeepsie*, on the left bank of the Hudson, about midway between Albany and New York: population, 13,944. The town is large, regularly laid out, and contains many spacious and handsome public buildings; among them are the court-house, jail; 17 churches, a college, and numerous schools; a lyceum; two market-houses, &c. The manufacturing establishments are numerous, and some are on a very large scale: the principal are locomotive- and machine-shops, iron- and brass-works, carpet factories, cotton- and silk-mills, oil- and candle-works, breweries, tanneries, gunsmiths, &c. A large trade is carried on with the back country; and the river trade is very great. *Rome*, on the right bank of the Mohawk, 109 miles by railway W.N.W. from Albany, population of township 7918, contains a United States

arsenal and workshops, and has some manufactures. *Sackett's Harbour*, on Black River Bay, at the east end of Lake Ontario, is considered to be the best harbour on the south side of the lake; but though a good deal of trade is carried on the place has not advanced nearly so fast as some others in this part of the state. It contains a United States barrack for 2000 men, a ship-yard, and naval stores. The village has some manufactures. *Sag Harbour*, between Gardiner's and Great Peconic bays, Long Island, population 3650, is extensively engaged in the cod and whale fisheries, and the manufacture of salt. There is also a very large clock factory. Some ship-building is carried on. *Seneca Falls*, population 3045, is a busy manufacturing village, situated on Seneca River and Canal, and on the Rochester and Syracuse railway, 185 miles W. from Albany. *Watertown*, at the falls of the Black River, 145 miles W.N.W. from Albany, population of township 7201, has extensive cotton, woollen, paper, and flour mills, iron-works, &c., and is a place of considerable trade. *West Troy*, on the right bank of the Hudson, where the Erie Canal locks into it, 6 miles N. by E. from Albany, population 7564, has rapidly risen into importance as a trading and manufacturing town. The river and canal trade is very large; and, in addition to its private ship-yards and factories, West Troy is the seat of the largest arsenal of construction belonging to the United States. A bell-foundry here is the largest in the Union.

Government, &c.—The original constitution was framed in 1777; its present amended form was adopted in 1846. By it the right of voting is vested in every free white male citizen, 21 years of age, who shall have resided in the state for one year; but free coloured men must have been resident three years in the state, have possessed a freehold to the value of 250 dollars, free of all encumbrances, for one year, and have paid taxes thereon, before becoming entitled to vote. The legislature consists of a Senate of 32 members, elected for two years, and an Assembly of 128 members, elected annually. The total absolute and contingent debt of the state in 1852 was 24,323,838 dollars. The total receipts from all sources in the year ending September 30, 1852, was 6,818,947 dollars; and the total expenditure, 6,716,847 dollars. The General Fund revenue, 'on which are charged the ordinary expenses of government,' for the same period, was 1,153,477 dollars (including a surplus of 15,753 dollars from the previous year); and the expenditure, 1,841,821 dollars.

Great attention is paid to education in the state. Besides the primary schools established in every township, and the academies and upper schools, there are in the state 20 colleges, including theological, medical, and legal schools, with 185 professors and about 1500 students.

The original discovery of the Bay of New York is believed to have been made by Verrazano, a Florentine in the service of France, in 1524. But the discovery remained without fruits till 1609, when Hudson, an Englishman in the Dutch service, sailed up the river, which now bears his name, as far as the site of Albany. The Dutch continued for some time to send vessels to trade with the Indian possessors of the soil before founding any settlement—the earliest having been made in 1614. The number of settlements or trading stations rapidly increased, and armed forts were erected; and in 1621 the territory was transferred by charter to the Dutch West Indian Company. A few years later English traders settled in some places; and in 1627 the Plymouth Colony set up a claim to a portion of the territory. Disputes and enmity continued for years, the English continually increasing in numbers and strength, until in 1645 they wrested the colony from the Dutch and changed its name to New York, in honour of the Duke of York, afterwards James II., who had obtained from Charles II. a grant of the territory as governor. The colony was re-conquered by the Dutch in 1673, and its name changed to New Orange; but at the conclusion of peace in the following year it was ceded by treaty to England, and its former name was restored. In the war of independence New York played a prominent part; and it formed one of the 13 original states of the Union.

(O'Callaghan, *History of the State of New York*; *Statistical Gazetteer of the United States*; *Geology of New York*; *Reports of State Geologists*; *Marcou*; *Seventh Census of the United States*; *American Almanac*, &c.)

NEW YORK, City of, State of New York, the largest city and the commercial capital of the United States of North America, is situated on the southern end of Manhattan Island, at the head of New York Bay, and at the confluence of East Strait, or River, with Hudson River. The City Hall is in 40° 42' 45" N. lat., 74° 0' 3" W. long., 226 miles N.W. by W. from Washington. The population, which was only 60,489 in 1800, was 312,710 in 1840, and 515,547 in 1850. The government of the city is vested in a mayor, recorder, and a common council of 38 members, consisting of one alderman and one assistant-alderman elected by each of the 19 wards into which the city is divided.

The island upon which New York stands is 13½ miles long, and from 1 mile to 3 miles broad. The city extends along the Hudson above 2 miles, and along the East River, which divides it from Long Island, about 4 miles. The south-west part of the town, which was the earliest built, is ill arranged; but the more modern parts are regularly laid out in parallel avenues 100 feet wide, which are crossed by straight streets 80 feet wide; the whole is well paved and lighted. Broadway, the principal street, which runs through the centre of the town, is nearly 3 miles long and 80 feet wide. It contains several handsome churches, many of the principal hotels, and a great variety of elegant shops.

Wall-street, which branches off from Broadway, contains the Exchange, the Custom-house, and most of the city banks, as well as the greater part of the merchants' and brokers' counting-houses, and the insurance-offices. The city is deficient in public grounds. There are indeed 18 so-called parks, but they contain altogether only about 170 acres. The favourite as a resort is that called the Battery, at the southern end of the city. New York contains some magnificent and costly buildings. The City Hall, the front of which is of white marble, is 216 feet long, 106 feet wide, and 51 feet high; in it are offices and places of meeting for the municipal bodies. The building was begun in 1808, and finished in 1812, at the cost of 500,000 dollars. The New City Hall, erected in the rear of this, is occupied by the law courts and public offices. The Custom-house is constructed of white marble as a copy of the Parthenon; it is 200 feet long, 90 feet wide, and 80 feet high. It was finished in 1841, and cost 1,195,000 dollars. The Merchants' Exchange, erected in the place of one destroyed by the great fire of the 16th of December, 1835, is the most magnificent edifice in the city. Its front in Wall-street is 198 feet long, 77 feet high, and it is surmounted with a dome 124 feet high. It is constructed entirely of Quincy granite, and cost 1,800,000 dollars. The great portico has 18 columns, each 38 feet high and 4 feet 4 inches in diameter, and formed of a single block of granite 43 tons in weight. The Hall of Justice, a sombre pile, 253 feet long and 200 feet deep, is in the 'Egyptian style.' The City Penitentiary, the New State Arsenal, and the Post-office, are among the other larger civic edifices. The churches are above 250 in number, and some of them are among the most splendid buildings in the city. Trinity, Grace, St. George's, St. John's, St. Patrick's, and St. Peter's Episcopal and Roman Catholic churches, with one or two of the Presbyterian, Baptist, Dutch Reformed, and Unitarian churches, are of the greatest architectural celebrity. The educational establishments, which are extremely numerous, include Columbia Episcopal College, a spacious and very handsome edifice; New York University, one of the architectural ornaments of the city; the College of Physicians; University Medical College; New York Medical College; the General Theological Seminary, and the Union Theological Seminary; besides numerous academies and high schools. Among the chief literary institutions and libraries are—the New York Historical Society; the Geographical and Statistical Society; the New York Law Institute; the New York Society Library; the Mercantile Library Association; the Apprentices Library; the American Institute; the Typographical Library, free to printers; the New York Lyceum, and Lyceum of Natural History; and the noble Astor Library, founded by John Jacob Astor, at a cost of 400,000 dollars. The hospitals and asylums, and other religious and benevolent institutions, are exceedingly numerous, and some of their buildings are very spacious and handsome structures. There are 6 theatres, an opera house, a metropolitan hall capable of accommodating 4000 persons, and numerous other places of amusement; but none are of very high architectural rank.

New York is supplied with water by the Croton aqueduct, a vast work commenced in 1837 and completed in 1842 at a cost of 14,041,584 dollars. The water is brought from a lake or pond, 5 miles long, at Croton River in Westchester county, by a covered aqueduct 40 miles long, capable of discharging 60,000,000 gallons of water in 24 hours. Immense reservoirs within the limits of the city receive the water, which is distributed from them by means of iron pipes.

The situation of New York as a commercial port is admirable. New York Bay, which is completely landlocked, is about 8 miles long and from $1\frac{1}{2}$ to $5\frac{1}{2}$ miles wide, and affords a perfectly safe anchorage. It is easy of approach, and is very rarely closed by ice. The entrance between Long Island and Staten Island, by a channel called the Narrows, is protected by forts, while the approach to it is facilitated by lighthouses, one of which is placed on a long tongue of land on the New Jersey shore called Sandy Hook; two others are erected about 4 miles south from Sandy Hook, and their lights, being 250 feet above the level of the sea, can be seen in fair weather at 40 or 50 miles distant. A fourth lighthouse is placed on Staten Island, at the narrowest part of the entrance to the harbour. The bay contains several small islands, which have been surrendered to the general government as sites for fortifications. The wharfs and docks have an aggregate length of 7 miles. On each side there are about 60 piers averaging from 200 to 300 feet in length, and 50 to 60 feet in width; and at these there is sufficient depth of water, both in the Hudson and East rivers, for ships of large burden to load and unload. But the amount of shipping has so greatly increased that it has been found necessary to form docks for their accommodation, as well at Brooklyn and Jersey City as in New York itself. Besides the vast amount of tonnage engaged in the foreign trade, there are generally about 2000 coasting vessels lying in the harbour at the same time. The commercial intercourse with the interior and with the western states of the Union is secured by means of the Hudson river, and the very complete system of railways and canals. No less than 11 lines of railway diverge from New York, placing it in direct communication with all the more important trading centres of the Union. There are also 'avenue railways' running through all the principal thoroughfares of the city.

The commerce of New York has, with occasional fluctuations, been steadily progressive, and now ranks among the first in the world.

The imports from foreign countries in 1852 amounted in value to 117,739,457 dollars, the exports to 44,187,329 dollars. The disparity between the value of the imports and exports here exhibited is compensated by disparity in the opposite direction, in the commercial dealings of other parts of the American Union. A great part of the returns from foreign countries for the produce of Louisiana, Alabama, Georgia, Carolina, and Virginia, which is shipped direct from the ports of those states, is made through New York. The coasting and internal trade greatly surpasses that with foreign countries. Nearly half the value of the foreign imports consists of 'dry goods,' as woollens, cottons, silks, &c. The imports of bullion in 1852 amounted to 2,523,391 dollars, the exports to 37,273,703 dollars. The entrances to the port of New York in 1851 amounted to 1,148,768 tons, of which 953,879 tons were American; and the clearances to 1,230,082 tons, of which 793,229 tons were American. Of 3888 vessels which cleared, 2331 were American, 966 British, and 133 Bremen. The shipping owned by New York in 1851 amounted to 931,198 tons, of which 504,304 tons were registered. The vessels employed in the coasting-trade amounted to 426,747 tons; steam-vessels to 121,541 tons, but these have since largely increased. There were in 1853 in New York 16 ocean steam-ship companies, owning 76 steam-ships of the aggregate burden of 129,010 tons: these of course include the famous lines of New York and Liverpool steamers. Ship-building is largely carried on. In 1851, 208 vessels of the aggregate burden of 71,214 tons were built in the district of New York; of which 26 were ships, 56 schooners, and 47 steamers; the rest being chiefly sloops and canal-boats.

There are in the city 40 banks, with capitals amounting in the aggregate to 35,834,950 dollars. There are also 37 fire-insurance companies, with capitals amounting in the aggregate to 6,654,010 dollars, and 6 life-insurance companies, whose united capitals amount to 5,060,000 dollars. The total value of property in 1852 was returned at 351,706,796 dollars.

New York, though mainly distinguished by its vast commerce, is at the same time to be regarded as the greatest manufacturing city in the United States. At the Census of 1850 the persons employed in 'productive or manufacturing' establishments were nearly one-sixth of the entire population of the city: the number of establishments was 3387, the capital invested was returned at 34,332,822 dollars, and the number of persons employed was 83,620, of whom 29,917 were females. The larger establishments were iron-foundries and machine-shops, which are on a scale of great magnitude; breweries, distilleries, sugar-refineries, brass-foundries, carriage-factories, hardware-works, with manufactories of pianofortes, furniture, jewellery, and all the usual branches of useful and ornamental goods required for ordinary use or luxury in a wealthy metropolis.

The publishing trade of New York is also of very great importance. The wholesale stores and warehouses are very extensive establishments, and many of the retail shops rival those of Europe in appearance and costliness of stock. In connection with the trading establishments we ought not to overlook the hotels, which form so remarkable a feature in the civic architecture and economy. Many of the hotels of New York are on a scale of magnitude and costliness almost unequalled elsewhere; several of them contain from 300 to 400 rooms, and some are fitted up with remarkable splendour, and have cost from 300,000 to little short of 1,000,000 dollars.

Fourteen or fifteen daily, and about 60 weekly newspapers are published in New York: in all, including newspapers, magazines, and reviews, 125 periodicals are published here.

Two good-sized cities, Brooklyn and Williamsburg, lying within a short distance of New York, are so closely connected with it in business, &c. as to form in effect almost parts of it: they are noticed, BROOKLYN in a separate article, and Williamsburg under NEW YORK State. To these may be added Jersey City, on the opposite side of the Hudson, which is noticed under NEW JERSEY.

NEW ZEALAND. [ZEALAND, NEW.]

NEWARK-UPON-TRENT, Nottinghamshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on an arm of the Trent, in 53° 5' N. lat., 0° 49' W. long., distant 20 miles N.E. from Nottingham, 124 miles N.N.W. from London by road, and 147½ miles by the North-Western and Midland railways. The population of the borough in 1851 was 11,330. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns 2 members to the Imperial Parliament. For sanitary purposes it is under the management of a Local Board of Health. The living is a vicarage in the archdeaconry of Nottingham and diocese of Lincoln. Newark Poor-Law Union contains 49 parishes and townships, with an area of 93,834 acres, and a population in 1851 of 30,373.

Newark Castle, of which there are still some remains, was built or perhaps enlarged by Alexander, bishop of Lincoln, in the early part of the 12th century. The castle came into the possession of the crown, and in the reign of John was besieged by the barons. John, coming to its relief, died at Newark in 1216. The town was incorporated by Edward VI. In the civil war of Charles I. the townsmen zealously supported the king.

Newark is irregularly laid out, and consists of several streets, with a market-place near the centre of the town. It extends about a mile

along the bank of the river. It is well paved, lighted with gas, and is well supplied with water.

The parish church is one of the largest and, of its kind, most elegant in the kingdom. It was in great part rebuilt in the time of Henry VI. and Henry VII.; but there are in it some remains of a previous edifice of Norman character. It is cruciform, and consists of nave and chancel, with large aisles, transepts, and some chapels, with a tower at the west end, surmounted with an elegant spire 240 feet high. The Wesleyan Methodists and Baptists have places of worship. Magnus's Endowed Grammar school, founded in 1529, had 76 scholars in 1852. There are National and Infant schools, and a savings bank. There is a neat bridge over the river of seven semi-circular arches, built of brick and faced with stone. The approach to Newark from the north is by a causeway a mile and a half long, carried over the flat island formed by the main channel of the Trent and the Newark branch, and leading to the bridge: in this causeway are several bridges and arches, to give free passage to the waters when the floods are out. In the town are a court-house, where the quarter-sessions for the division are held; a handsome town-hall for the corporation business, the borough sessions, and assemblies; and St. Leonard's hospital or almshouses, built about the time of Charles I. The principal trade of Newark is in corn, malt, flour, coal, cattle, and wool. The market for corn and provisions is on Wednesday. There are six yearly cattle-fairs. A county court is held. Large quantities of gypsum and limestone are obtained in the neighbourhood. There are brick- and tile-works and large iron- and brass-foundries. The arm of the Trent which passes by Newark is navigable.

NEWBERRY. [CAROLINA, SOUTH.]

NEWBIGGIN. [NORTHUMBERLAND.]

NEWBLISS. [MONAGHAN.]

NEWBOROUGH. [ANGLESEY.]

NEWBRIDGE. [GLAMORGANSHIRE; KILDARE.]

NEWBURG. [NEW YORK.]

NEWBURGH. [ABERDEENSHIRE; FIFESHIRE.]

NEWBURY, Berkshire, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Newbury, is situated on the right bank of the river Kennet, in 51° 24' N. lat., 1° 19' W. long., distant 17 miles W.S.W. from Reading, 56 miles W. by S. from London by road, and 52½ miles by the Great Western railway. The population was 6574 in 1851. The borough is governed by 4 aldermen and 12 councillors, one of whom is mayor. The living is a rectory in the archdeaconry of Berks and diocese of Oxford. Newbury Poor-Law Union contains 18 parishes and townships, with an area of 42,956 acres, and a population in 1851 of 20,815. As early as the time of William the Conqueror the place, then called Newbir or Newbyrig, was granted by the Conqueror to Ernulph de Hesdin. The principal streets are broad and well paved, and the town is lighted with gas. The church is a plain stone building, erected in the reign of Henry VII. The Wesleyan Methodists, Independents, Baptists, and other dissenters, have places of worship. The Free Grammar school, which has an income of 100*l.* a year from endowment, had 50 scholars in 1851. In the town are a literary institute, a dispensary, and a savings bank. The weekly market is held on Thursday. Fairs are held six times in the year. The Kennet and Avon Canal passes through the town.

NEWBURYPORT. [MASSACHUSETTS.]

NEWCASTLE, Limerick county, Ireland, a post- and market-town, and the seat of a Poor-Law Union, is situated on the Arra, an affluent of the Deel, in 52° 28' N. lat., 9° 4' W. long., distant by road 25 miles S.W. from Limerick, 144 miles S.W. by W. from Dublin. The population in 1851 was 2518, besides 3297 inmates of the workhouse. Newcastle Poor-Law Union comprises 26 electoral divisions, with an area of 148,024 acres, and a population in 1851 of 36,267. The town has a neat rural appearance. It mainly consists of four principal streets and a spacious square, containing some well-built houses. The parish church is a handsome structure, built in 1777 by Viscount Courtenay. In the town are a Roman Catholic chapel, the Courtenay Free school, an ancient foundation, and a National school. A fever hospital and dispensary stand on an eminence near the town. There are a large town-hall, a neat market-house, an infantry barrack, and a Union workhouse. Some coarse cloths are manufactured. Quarter and petty sessions are held. Saturday is the market-day. The town took its name from a castle erected by a community of Knights Templars in 1184. The remains of the building have been in part fitted up as a residence by the Earl of Devon.

NEWCASTLE. [DELAWARE; NEW BRUNSWICK.]

NEWCASTLE EMLYN, Caermarthenshire, a market-town, and the seat of a Poor-Law Union, in the parish of Kenarth, is situated on the left bank of the river Teifi, in 52° 2' N. lat., 4° 28' W. long., distant 16 miles N.W. by N. from Caermarthen, and 229 miles W. by N. from London. The population of the hamlet of Newcastle-in-Emlyn was 1083 in 1851. For parliamentary purposes the town of Newcastle is united with Adpar on the opposite bank of the Teifi, in Cardiganshire; the united borough called Adpar, is contributory to Cardigan in returning one member to the Imperial Parliament, and had a population in 1851 of 1746. The living of Newcastle-Emlyn is a perpetual curacy in the archdeaconry of Cardigan and diocese of St. David's. Newcastle Poor-Law Union contains 22 parishes and

townships, with an area of 113,346 acres, and a population in 1851 of 20,178.

Newcastle was anciently called Dinas Emlyn (city of Emlyn), and took its name of Newcastle from its fortress being rebuilt by Sir Rhys ap Thomas, in the reign of Henry VII. The remains of this castle, on a sort of peninsula formed by a bend of the Teifi, present a very picturesque appearance. Newcastle Emlyn and Adpar are usually considered as one town, and both are commonly included under the name of Newcastle. The houses are in general well built. The parochial chapel at Newcastle is a neat modern building. There are chapels for Baptists and other Dissenters, a school with a small endowment, and a savings bank. The town forms a centre for the sale of cattle for the English market. There are 11 cattle fairs in the year. A county court is held.

NEWCASTLE-UNDER-LYME, Staffordshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated in 53° 1' N. lat., 2° 13' W. long., distant 16 miles N. by W. from Stafford, 150 miles N.W. from London by road, and 147 miles by the North-Western and North Staffordshire railways. The population of the borough in 1851 was 10,569. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The living is a rectory in the archdeaconry of Stafford and diocese of Lichfield. Newcastle-under-Lyme Poor-Law Union contains nine parishes and townships, with an area of 26,718 acres, and a population in 1851 of 20,814.

Newcastle was a corporate town as early as the reign of Henry II. A castle was erected here by Edmund, earl of Lancaster, second son of Henry III.; the town has returned members to Parliament since the 27th Edward III. Newcastle is situated about 2 miles from the right bank and near the source of the Trent. It consists of several streets irregularly laid out, but well paved, and lighted with gas. There are a guildhall with a market-place beneath, a public office for the mayor and magistrates, two churches, of which one was rebuilt early in the last century, but has a lofty square tower of much greater antiquity, built of red-sandstone; chapels for Roman Catholics, Independents, Baptists, Unitarians, and several branches of Methodists; National and Infant schools, and an Endowed school. The Free Grammar school, founded in 1602, which has an income of 97*l.* 10*s.* a year, had 34 scholars in 1853. A range of almshouses for 20 poor females was founded by Christopher Monk, duke of Albemarle, son of the celebrated George Monk.

The chief manufacture in Newcastle-under-Lyme is that of hats, which are prepared here, and finished in London. There is also a considerable manufacture of shoes. There are silk-, cotton-, and paper-mills, and pottery-works. Markets are held on Monday and Saturday. Five fairs and five moveable cattle markets are held in the course of the year. A branch canal communicates with the Trent and Mersey Canal at Stoke; and a canal from the coal-mines at Apedale, about 3 miles N.W. from Newcastle, affords facilities for conveying a supply of coals to the town.

NEWCASTLE-UPON-TYNE, the chief town of Northumberland, a town and county of a town in itself, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated at the southern extremity of the county on the river Tyne, 8¼ miles from its confluence with the German Ocean, in 54° 59' N. lat., 1° 37' W. long., 15 miles N. from Durham, 117 miles S.E. from Edinburgh, and 273 miles N.N.W. from London by road, and 303¼ miles by railway. The population of the borough of Newcastle in 1851 was 87,784. The borough is governed by 14 aldermen and 42 councillors, of whom one is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Northumberland and diocese of Durham. Newcastle Poor-Law Union contains 11 parishes and townships, with an area of 7102 acres, and a population in 1851 of 89,156.

Newcastle appears to have derived its origin from Pons Ælii, the second station from the eastern extremity of the Roman wall. Several Roman remains furnish evidence that it occupies the site of a station. Many coins were found in the piers of the old bridge thrown down by a flood in 1771, and the remains of a Roman well, two altars, fragments of walls, and large quantities of pottery, in digging the foundations of the county court-house in 1810. Previous to the Conquest the place went by the name of Monkchester, from the number of monastic institutions. The town was also the resort of numerous pilgrims who came to visit the holy well of Jesus' Mount, now Jesmond, a mile north-east of the town. One of the streets in Newcastle is still called Pilgrim-street. It was from a fortress built by Robert, eldest son of William the Conqueror, to which the name of the 'New Castle,' was given, that the town derived its present name. In the rebellion of Mowbray, earl of Northumberland, against William Rufus, this fortress was taken by the king. In the reign of Stephen it was held for a while by the Scots. In the reign of Edward I., John Baliol did homage at Newcastle for his crown of Scotland. The town had been early incorporated, probably by William Rufus, but the first mayor was appointed in the reign of Henry III., 1251. In the wars with Scotland, Newcastle was a frequent place of rendezvous to the English forces, and it was the scene of several diplomatic meetings. In 1636 above 5000 persons are said to have died of the plague at Newcastle, an indication of the extent and population of the town.

In the contest between Charles I. and the Parliament the town was finally taken by storm in 1644 by the Scots, who had come to the support of the Parliamentarians.

The town is situated on the summit and declivities of three lofty eminences, rising from the left bank of the Tyne. It extends about 2 miles along the bank of the river. The town of Gateshead, in the county of Durham, occupies the opposite bank, and may be regarded as a sort of suburb of Newcastle. [GATESHEAD.] Within the last 10 or 12 years the old part of the town has undergone a thorough change; new streets have been opened, and old ones widened, for which purpose all the gates of the old wall, with the greater part of the towers, as well as many curious old buildings, have been swept away. In the upper and more modern parts of the town are spacious streets and squares, with ranges of elegant buildings. The whole is well paved, and lighted with gas. The principal improvements have been on the northern side of the town, where the corporation have erected a new market-house, and entire streets have been built of shops and houses of a superior description. The additions to the town eastward, along the bank of the river, are chiefly for commercial or manufacturing purposes. For its improvements Newcastle is greatly indebted to the skill and enterprise of Mr. Grainger, a builder of Newcastle, who, in the space of five years, planned and constructed streets and buildings of an estimated rental of nearly 1,000,000*l*.

Newcastle is connected with Gateshead by a stone bridge of nine elliptic arches, erected in 1781, and widened in 1801. A short distance east of this bridge is the High-Level Bridge, one of the most remarkable features of Newcastle. This vast work was constructed in order to connect the railways on the opposite sides of the Tyne, and at the same time to form a roadway that should avoid the steep and dangerous approaches to the Tyne by Gateshead and Dean-street, which had so long been an obstruction to the free communication between the towns. The roadway is carried at a sufficient elevation above high-water level to admit of vessels passing beneath it. The bridge is supported by six massive stone piers, 125 feet apart, four rising 130 feet from the bed of the river, and one at each side. The bridge is a double one, carrying a road for foot passengers, horses, and ordinary carriages, and 25 feet above that a railway. The extreme length of the bridge is 1375 feet; the waterway is 512 feet. The height from high-water to the roadway is 86 feet; to the railway, 112 feet; to the parapet of the bridge, 132 feet. The cast and wrought iron employed in constructing the bridge weighed 5050 tons. The cost of construction was 234,450*l*.

The church of St. Nicholas, in the centre of the town, is a large and handsome cruciform church, 245 feet in length: it is chiefly of decorated English character, having been rebuilt in 1359. The steeple, which is at the west end, 193 feet high, is late perpendicular. At the corners of the tower are bold buttresses, crowned by octagonal turrets with crocketed pinnacles; from the base of these turrets spring four flying buttresses, crocketed and peculiarly graceful in their forms; and on the intersection of these is placed a lantern crowned with a crocketed spire, and four crocketed pinnacles at the corners. This steeple has been imitated in those of St. Giles at Edinburgh, and St. Dunstan's in the East, in London, and in other places; but the imitations fall far short of the original. In the interior are several interesting monuments; the east window has a painting of Christ bearing the cross; and there is an altar-piece by Tintoretto, representing Christ washing his disciples' feet. St. Andrew's church, on the north-west side of the town, is partly of Norman architecture. St. John's, near the Westgate, is a large cruciform church, chiefly of early English character, with a square embattled tower. All Saints' church, near the centre of the town, is of Grecian architecture, with a steeple 202 feet high. The interior is an ellipse 86 feet by 72 feet. The Roman Catholic church of St. Mary, erected in 1843, is a magnificent building, in the early English style. The Wesleyan, Primitive, New Connexion, and Reform Methodists; Independents; Baptists; English, Scotch, United, and Reformed Presbyterians; Swedenborgians; Unitarians; Quakers; Roman Catholics; and Jews, have each places of worship. In March 1851 the number of places of worship in Newcastle was 51, and the total number of sittings provided was 28,806. The Royal Grammar school, founded in 1599, had 120 scholars in 1853. The Newcastle Grammar school has had a rather unusual number of distinguished pupils. Among others are Bishop Ridley, Mark Akenaide, Sir Robert Chambers, lords Collingwood, Eldon, and Stowell. The Royal Jubilee school was established in 1810. There are numerous National, British, Ragged, and Infant schools. The total number of day schools in Newcastle in March 1851 was 115, of which 26 were public schools with 5328 scholars, and 89 were private, with 3761 scholars. The number of Sunday schools was 41, of which 15 were supported by Methodists, 8 by Episcopalian, 6 by Baptists, 5 by Presbyterians, 4 by Independents, 2 by Unitarians, and 1 by Quakers. The total number of Sunday scholars was 6821. There were 5 evening schools for adults, with 407 scholars. There is a savings bank. Two public baths have been formed on an extensive scale.

The Exchange buildings form a spacious Ionic structure of semi-circular form, and including the Guildhall, Exchange, and Merchants' Court. Among the other public buildings of note are the corn-exchange, theatre, lecture-rooms, assembly-rooms, literary and philosophical institution, branch bank of England, and the royal arcade.

The town and county jail is a massive stone building of modern erection. The moot-hall, or county court-house, erected in part of the precincts of the ancient castle, is a building of elegant proportions, adorned with a fine portico of six doric columns on the south front, and a similar portico of four columns on the north front. The other courts are the town-hall, burgess's court of record, non-burgess's court, new county-court, and court of guild.

The benevolent institutions comprise the infirmary, dispensary, a lying-in hospital, asylums for lunatics, for the deaf and dumb, and for the blind; an eye infirmary; the keelmen's hospital for poor keelmen; Jesus hospital for decayed freemen, their widows and children; the Trinity almshouses, and the Westgate hospital, founded in commemoration of the peace of 1814. The Literary and Philosophical Society, instituted in 1793, occupies a handsome building of Doric architecture, erected in 1825, comprehending a museum, a library, and other apartments. The library contains about 25,000 volumes. Adjoining the library of the Literary and Philosophical Society are the rooms and museums of the Natural History Society of Northumberland, Durham, and Newcastle. The Antiquarian Society of Newcastle, founded in 1813, holds its meetings in the keep of the old castle. The mechanics institute, in Blakett-street, has a library of 8500 volumes. The government school of design had 90 scholars in 1851. There are also a botanic and horticultural society, and a farmers' club in the town. Extensive barracks are on the north-west of the town. In the vicinity are several large cemeteries.

The commercial importance of Newcastle arises from its situation on a river navigable thus far by sea-borne vessels. The Tyne forms the haven, and is under the care of the corporation. The river side is lined with warehouses and extensive quays. The chief business has always been in the shipment of coals, the produce of the surrounding coal-pits. The coal-field is estimated to extend 44 miles in length, with an average width of 21 miles; and to lie at an average depth of 18 feet. Throughout the greater part of this coal-field, which consists of alternating beds of coal, sandstone, and clay-slate, the seams of coal number about 25; they are of varying thickness, lie at various depths, and are separated by more or less numerous earthy beds. The coals are brought down the river in broad vessels called keels. The boatmen are called keelmen. The imports are wine, spirituous liquors, and fruit from the south of Europe, with sulphur, and mundic-stone, now used by some of the chemical manufacturers as a substitute for sulphur; corn, timber, flax, tallow, hides, tobacco, and various other articles. The gross receipts at the custom-house, for the year ending January 5th 1851 were 331,961*l*.

The principal manufactures of Newcastle and the Tyne are the chemical, glass, iron, and lead. There are several iron-smelting furnaces in the neighbourhood, large iron-foundries, and very extensive steam-engine and locomotive manufactories. On the banks of the river are numerous chemical works. The preparations chiefly manufactured are alum, alkali, chloride of lime, sulphuric acid, &c. The lofty chimneys of these works, reaching to a height of from 150 feet to above 300 feet, form a striking feature of the town, and from the flatness of the surrounding country are seen at a great distance. Glass-works were established in Newcastle in 1619. The manufacture has ever since been carried on, but since the repeal of the duty on glass the trade has been greatly extended. Plate, crown, and flint-glass and bottles are chiefly made. There are several extensive potteries and lead-works. The lead-ore is smelted and wrought into sheet-lead, pipes, shot, red- and white-lead, &c. Many other branches of manufacture are carried on; soap-factories, oil-mills, works for painters' colours, roperies, both hemp and wire, tanneries, paper-mills, fire and common brick-works, and yards for ship-building both in wood and iron. The combustible character of some of the materials used in the manufactures of Newcastle and Gateshead occasioned a great destruction of life and property in both places, but chiefly in Gateshead, by an explosion which took place on October 6th, 1854.

The number and tonnage of vessels registered as belonging to the port of Newcastle on December 31st 1853 were:—Sailing-vessels under 50 tons 107, tonnage 8164; above 50 tons 695, tonnage 147,782; steam-vessels under 50 tons 89, tonnage 1624; above 50 tons 9, tonnage 2226. During 1853 there entered and cleared at the port, in the coasting-trade, sailing-vessels, inwards 2182, tonnage 163,440; outwards 11,172, tonnage 1,502,813; steam-vessels, inwards 399, tonnage 81,886; outwards 429, tonnage 97,154. In the colonial and foreign trade there entered 2555 sailing-vessels of 350,190 tons, and 70 steam-vessels of 17,248 tons; and there cleared 5396 sailing-vessels of 864,291 tons, and 70 steam-vessels of 17,248 tons.

The inland trade of the town is considerable. Markets are held on Tuesday, Thursday, and Saturday. The corn-market is important. The markets for meat, poultry, butter, vegetables, &c., are all held under one roof. The building is in form an oblong parallelogram, 340 feet long by 250 feet wide, and covers an area of nearly two acres; it is one of the finest as well as largest market-houses in the kingdom. At the cattle-market the amount of business done is very great. General fairs are held on the second Wednesday in August and the last Wednesday in October (and eight following days); horse and cattle fairs on March 26, and the last Wednesday in November; hirings for farm servants are held on the first Tuesday in May and November.

Until the construction of the High-Level Bridge the railway accommodation was very incomplete. When that was erected, and the various railways on both sides of the Tyne were connected with each other, the town was placed in direct communication with most of the ports and principal towns of England and Scotland. A central terminus for all the lines was at the same time built, on a magnificent scale, in a convenient part of the town. The building is a Roman Doric edifice of polished stone, having a principal front nearly 600 feet long, with a portico in the centre 200 feet long.

NEWCHURCH. [LANCASHIRE.]

NEWENT, Gloucestershire, a market-town, and the seat of a Poor-Law Union in the parish of Newent, is situated in 51° 55' N. lat., 2° 24' W. long., distant 8 miles N.W. from Gloucester, and 110 miles W. by N. from London. The population of the liberty of Newent town in 1851 was 1547. The living is a vicarage in the archdeaconry of Gloucester and diocese of Gloucester and Bristol. Newent Poor-Law Union contains 18 parishes and townships, with an area of 45,281 acres, and a population in 1851 of 12,575. The parish church is ancient, but has been much altered at various times. The Independents have a chapel, and there are National schools. Coal abounds in the vicinity. The Hereford and Gloucester Canal passes the town. The market is held on Friday: fairs are held on the Wednesday before Easter, Wednesday before Whitsuntide, and August 12th.

NEWFOUNDLAND, an island belonging to Great Britain, is situated in the Atlantic Ocean, between 46° 40' and 51° 37' N. lat., 52° 25' and 59° 15' W. long. It forms a sort of barrier across the greater part of the entrance to the Gulf of St. Lawrence. The northern extremity of the island is separated from Labrador by the Strait of Belle Isle, which is 60 miles long and 12 miles wide, and affords a deep and safe passage to and from the Gulf of St. Lawrence. Cape Rays, the south-western point of the island, is about 70 miles from the North Point, in Cape Breton, and the wide expanse of water between these two points forms the opening from the Gulf of St. Lawrence to the Atlantic on the south side of the island. The area is estimated at about 60,000 square miles. The population in 1853 was estimated at 106,000, all of whom with the exception of about 3000 are fishermen and fishing servants and labourers, with a small number of families engaged in agriculture. The population is composed in nearly equal proportions of Protestants and Roman Catholics.

The shores are rocky and high, and indented by broad and deep bays, which enter from 40 to 60 miles into the body of the island. The lands adjacent to the sea are rugged and bare, but at the heads of the bays and near the mouths of the rivers there are plains of some extent covered with trees. The interior of the island seems to contain many lakes, and to be full of swamps and bogs. The hills do not form ridges, but are isolated, and towards the eastern coast they are low, and covered with trees of small growth. The most elevated part is the northern peninsula which lies along the Strait of Belle Isle. The inhabitants are mostly established on the south-eastern coast, especially on the peninsula of Avalon, which is united to the main body of the island by a low isthmus little more than three miles wide. This isthmus separates Trinity Bay from the Bay of Placentia. The settlements on the other coasts are few and at a considerable distance from one another.

The climate of Newfoundland is much influenced by its geographical position, by its exposure to the atmosphere of the Atlantic, and by the large fields of ice which, during March, and the two succeeding months, are on their way from the polar regions towards the south, and cover the sea adjoining the island to a great extent. Great humidity prevails whenever the wind blows from the Atlantic. The cold in winter is great, but it is not quite so severe as it is on the opposite continent. During the summer months the days and nights are generally pleasant.

Considerable attention has of late years been paid to agriculture; wheat, oats, barley, potatoes, and turnips, have been produced of the best quality. Large supplies of seed (wheat, barley, and oats) have been imported by the local government, as well as vegetable and garden seeds, and have been distributed among the cultivators of the soil; prizes have also been given for the best crops and the best specimens of cattle. Roads are being constantly extended; 900*l.* having been spent on them in 1852, and a provincial act was passed in 1852 for the establishment of an electric telegraph company, the line to extend across the island from east to west, and to be connected by a submarine cable with the continent of America.

Deer and foxes are numerous, but beavers have become scarce. Fishing is almost the only occupation of the inhabitants. Seals are taken, for the sake of the skins and the oil produced from the fat, either by means of nets along the shores or by vessels proceeding to the floating fields of ice in the spring. About 360 vessels, of an aggregate tonnage of about 35,000 tons, and carrying about 18,000 men, are employed in catching the seals. A large number of other persons find employment in preparing the skins and extracting the oil. The estimated value of the seals caught in the spring of 1852 was about 250,000*l.* The cod fishery is prosecuted in the summer along the eastern and southern shores of the island, on the coasts of Labrador, and on the Great Bank. The cod-liver yields a large quantity of oil, which is extracted by merely putting the livers into casks, and when they are fully decayed drawing off the oil. The

shores of Newfoundland swarm with herrings from March to December, but the curing is not well attended to, and the fishery is in consequence of much less value than it might be. The salmon fishery is of considerable importance. A great number of the salmon are sold on the coasts of Labrador and parts of Newfoundland to American traders, the remainder are cured and packed in barrels for exportation.

The native tribes seem to have left the island, or have become extinct. The last was the Micmac tribe.

Newfoundland, together with the Bahamas, forms a Church of England bishopric. The Protestants on the island include Episcopalians, Wesleyan Methodists, Presbyterians, Independents, and some others. There is no state provision for the support of any particular religious denomination. For educational purposes a grant of 8400*l.* a year is made by the legislature, and is distributed, according to their numerical proportions, between Protestants and Roman Catholics.

St. John's, the capital of Newfoundland, is situated in a bay on the south-east side of the island, in 47° 33' N. lat., 52° 43' W. long. The entrance to the harbour is narrow, and has only 12 feet of water in mid-channel, but the harbour itself is spacious, is sheltered on all sides by high rocks, and is defended by several forts. The town suffered severely from a conflagration in June, 1846. The damage was estimated at 1,000,000*l.* sterling. A new custom-house, a building for the meetings of the legislature, and a Protestant cathedral have since been built; two large tanks have been constructed in the centre of the town, and rendered frost-proof, so as to afford at all times a supply of good fresh water; besides which a water company has been established, and also a gas company; and a cemetery has been formed outside the town. The population is about 27,000. The town next in importance to St. John's is *Harbour Grace*, on the west side of Conception Bay, 20 miles N.W. from St. John's, which has a well-sheltered harbour.

The Great Bank, on the south-east side of the island, is the most extensive submarine elevation known to exist in any ocean. It is 600 miles long, and in some places 200 miles wide. The whole appears to be a mass of rock, with abrupt edges, which deepen suddenly from 25 to 90 fathoms. There are about 4 fathoms of water on the shoalest parts. The principal fishing grounds are over the Bank, between 42° and 46° N. lat.

The affairs of the colony are administered by a governor, a legislative assembly, and an executive council. The total revenue in 1850 was 82,625*l.* 8*s.* 8*d.*; in 1852 it was 80,479*l.* 19*s.* 10*d.*, and the total expenditure 102,536*l.*, the customs duties having fallen off from a diminution of imports, and the expenditure having been increased by the necessity of affording extensive relief, in consequence of the failure of the cod-fishing and of the potato crop. The estimated value of the imports in 1850 was 867,316*l.*; in 1852 it was 795,758*l.* The imports consist chiefly of provisions, coals, woollen, cotton, linen, and silk manufactures, cordage, fishing-tackle, and various other necessary articles, from Great Britain, the British colonies in North America, and the United States. The estimated value of the exports in 1850 was 975,770*l.*, the exports from the fisheries alone amounting to 928,427*l.*, the remaining articles of export being chiefly molasses, sugar, and wine, which are imported for subsequent exportation to Great Britain and the British colonies in North America. In 1852 the exports were somewhat more than 980,000*l.* The number of ships inwards in 1850 was 1220 (138,628 tons); the number of ships outwards was 1102 (129,832 tons). The amount of the customs duties in 1850 was 64,524*l.* 7*s.*, but in 1852 there was a considerable decline.

Newfoundland was first discovered before the year 1000 by the Norwegians who sailed from Greenland on a voyage of discovery, and visited several parts of the coast of North America. It was again discovered June 24th 1497 by John Cabot, then in the service of England. The name Newfoundland was given by him to the whole of the territories which he discovered, but was subsequently restricted to the island to which it is now applied. After several attempts had been made to form settlements without success, Sir George Calvert, afterwards Lord Baltimore, in 1623 formed a colony on the south-eastern part of the island, which he called Avalon, and appointed his son governor. He and his followers were Roman Catholics. Other colonies were established in 1633 by Lord Falkland, and in 1654 by Sir David Kirk. In 1708 the French attacked and obtained possession of nearly all the colonies, but by the treaty of Utrecht the island was declared to belong wholly to Great Britain, the French being allowed a certain limited right of fishing.

NEWHAVEN, Sussex, a small sea-port town, and the seat of a Poor-Law Union, in the parish of Newhaven, is situated on the right bank of the navigable river Ouse, near its mouth, in 50° 47' N. lat., 0° 3' E. long., distant 8 miles S. from Lewes, 56 miles S. by E. from London by road, and 56½ miles by the Brighton and South Coast railway. The population of the parish of Newhaven in 1851 was 1358. The living is a rectory in the archdeaconry of Lewes and diocese of Chichester. Newhaven Poor-Law Union contains 16 parishes and townships, with an area of 28,462 acres, and a population in 1851 of 5248.

Newhaven was formerly called Meeching. The parish church stands on a hill to the west of the town: the nave is modern, but the chancel is of Norman date. There are a chapel for Baptists and a National school. The harbour is the best tidal harbour between Portsmouth and the Downs. It has been considerably improved of late years. The railway is carried down to the quay. Since

the opening of the railway to Newhaven the traffic of the place has steadily increased. The mouth of the river is protected by a battery on the heights near Castle Hill. The river is crossed by a drawbridge erected in 1784. There are a ship-building yard and large bonding warehouses. The chief imports consist of coals, timber, corn, wine, and spirits, and there is a good coasting-trade in flour and butter. The exports are limited, most of the vessels going out in ballast. The number of vessels registered as belonging to the port of Newhaven, on December 31st 1853 was 25, of an aggregate tonnage of 2621, of which 10, under 50 tons each, amounted to 216 tons. During 1853 there entered the port 301 sailing-vessels, of 33,310 tons, and 273 steam-vessels of 42,020 tons; and there cleared 61 sailing-vessels of 6116 tons, and 280 steam-vessels of 42,202 tons. Steam-vessels, in connection with the Brighton and South Coast railway, ply between Newhaven and Dieppe and the Channel Islands.

NEWHAVEN. [CONNECTICUT; EDINBURGSHIRE.]

NEWMARKET, partly in Cambridgeshire and partly in Suffolk, a market-town and the seat of a Poor-Law Union, is situated in 52° 14' N. lat., 0° 25' E. long., distant 13 miles E. by N. from Cambridge, 61 miles N. by E. from London by road, and 64 miles by the Eastern Counties railway. The town is under a Local Board of Health. The population of the town in 1851 was 3356. The livings are in the archdeaconry of Sudbury and diocese of Ely. Newmarket Poor-Law Union contains 29 parishes and townships, with an area of 97,373 acres, and a population in 1851 of 30,655. The town is built in the bottom and along the sides of a valley. The main street is three-quarters of a mile long, wide, and well lighted. There is a neat market-house. Besides the two parish churches there are chapels for Independents and Wesleyan Methodists, a National school, and a savings bank. The greater part of the town was destroyed by fire in 1623, and again in the early part of the last century. Horse-racing, now the principal source of prosperity, does not appear to have been introduced here till about the close of the 16th century. Soon after the accession of James I. to the English throne horse-racing became a fashionable diversion, and a house was erected at Newmarket for the accommodation of the king and his court. Adjoining the remaining portion of this house are the extensive stables formerly used for the royal stud. The building of the Jockey Club and other large mansions are close by. The race-course extends four miles in length, and is considered the finest in the world. The training-ground is on a gentle acclivity on the southern side of the town, and for its purpose is quite equal to the race-course. The races which take place during the year are seven in number, and never fail to attract a large number of visitors. The market-day is Tuesday. The fairs are held on Whit-Tuesday and on the 8th of November. Malting and brewing are carried on. A county court is held.

NEWMARKET. [CORK.]

NEWMILNS, Ayrshire, Scotland, a village and ancient burgh of barony in the parish of Loudoun, is situated on the right bank of the Irvine Water, in 55° 36' N. lat., 4° 20' W. long., distant 7 miles E. from Kilmarnock, 41 miles S. by W. from Glasgow by the South-Western railway, and 57 miles S.W. by W. from Edinburgh by road. The population of the burgh in 1851 was 2211. Many of the inhabitants are employed in hand-loom weaving. The village contains the parish church, a chapel for United Presbyterians, the parochial school, a school for girls, and a subscription library.

NEWNHAM. [GLOUCESTERSHIRE.]

NEWPORT, Monmouthshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, in the parish of St. Woollos, is situated on the right bank of the river Usk, about 4 miles from its mouth, in 51° 55' N. lat., 2° 59' W. long., distant 24 miles S.W. by W. from Monmouth, 148 miles W. from London by road, and 158½ miles by the Great Western and South Wales railways. The population of the borough in 1851 was 19,323. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and, in conjunction with Monmouth and Usk, returns one member to the Imperial Parliament. The living is a vicarage in the archdeaconry of Monmouth and diocese of Llandaff. Newport Poor-Law Union contains 40 parishes and townships, with an area of 110,255 acres, and a population in 1851 of 43,472.

The town of Newport has much increased in importance of late years. Extensive iron-works have been established, and the docks, opened in 1842, have afforded increased accommodation for shipping. The town-hall and the post-office are modern erections. The parish church was originally of Norman architecture: the nave and a very fine western archway remain in good condition. There are also—St. Paul's church, built within the last 15 years; a new church in the suburb of Pillgwenly, adjacent to the docks; a large and handsome Roman Catholic chapel; chapels for Welsh and English congregations in connection with Wesleyan and Calvinistic Methodists, Independents, and Baptists; National, British, and Infant schools; an Athenæum; a mechanics institute; a working man's institute; a dispensary; and a savings bank. Nails and iron spikes are extensively manufactured. The exports of iron and coal from Newport are of large amount. Newport was anciently the port of the city of Caerleon, about 3½ miles farther up the river. The number of vessels registered as belonging to the port on December 31st 1853 was 78, namely:—Sailing-vessels, 19 under 50 tons, tonnage in all 562; and 59 above 50 tons, tonnage

11,378: steam-vessels 8, tonnage 119. During 1853 there entered the port 1967 sailing-vessels of 149,777 tons aggregate burden, and 31 steamers of 2366 tons; and there cleared 7660 sailing-vessels of 587,111 tons, and 24 steam-vessels of 1763 tons aggregate burden. The docks cover an area of 4½ acres. The dock-gates have a clear opening of 62 feet. The rise of spring tide is from 36 feet to 40 feet. The Usk is navigable for shipping up to the stone bridge. A short distance above the stone bridge the South Wales railway crosses the river on a bridge constructed of timber and iron. The Monmouthshire Canal communicates with Pontypool and Brecknock. The market-days are Wednesday and Saturday. Commodious barracks stand about a mile from the town. Newport Castle, of which the only remains are a square tower and a portion of the great hall, now used as a brewery, commanded the passage of the Usk. Newport was the scene of the Chartist outbreak in November, 1839.

NEWPORT, Shropshire, a market-town and borough, and the seat of a Poor-Law Union, in the parish of Newport, is situated in 52° 46' N. lat., 2° 28' W. long., distant 17 miles E.N.E. from Shrewsbury, 142 miles N.W. from London by road, and 144 miles by the North-Western and Shropshire Union railways. The population of the town in 1851 was 2906. The living is a perpetual curacy in the archdeaconry of Salop and diocese of Lichfield. Newport Poor-Law Union contains 16 parishes and townships, with an area of 47,477 acres, and a population in 1851 of 15,620.

The corporation of Newport existed in the reign of Henry III. A portion of the parish church appears to be of the 15th century, and the interior bears traces of great beauty; but the side-aisles having been rebuilt with brick, the building presents a most incongruous appearance. The Independents and Roman Catholics have places of worship. The Free Grammar school has three masters, and several exhibitions for Oxford University. The number of scholars in 1851 was 53. There are another Endowed school for boys, a National school for girls, and a savings bank. A county court is held. The market-day is Saturday. The manufacture of stockings furnishes some employment.

NEWPORT, Isle of Wight, Hampshire, the capital of the island, a market-town and municipal and parliamentary borough, in the parish of Newport, is situated in 50° 42' N. lat., 1° 17' W. long., distant 82 miles S.S.W. from London. The population of the borough in 1851 was 8047. The borough is governed by 6 aldermen and 18 councillors, and returns two members to the Imperial Parliament. The living is a curacy annexed to the vicarage of Carisbrooke, in the archdeaconry and diocese of Winchester.

Newport is situated in a valley near the centre of the island, on the left bank of the Medina River, which is navigable to Newport. Vessels of considerable burden can ascend to the quay with high tides. The town is built on an easy ascent, and is well paved, lighted with gas, and clean. The town-hall and market-house form a neat and commodious structure. There are a public library and reading-room, called the Isle of Wight Institution; a mechanics institute; a Free Grammar school, which had 42 scholars in 1852; a small theatre; and two assembly-rooms. The church was built in 1172, but has been frequently repaired and altered. There are chapels for Wesleyan Methodists, Independents, Baptists, and Roman Catholics; National and Infant schools; Blue-coat and Gray-coat schools for girls; and a savings bank. A county court is held. The House of Industry, in the vicinity of Newport, is a spacious building, with 80 acres of land attached to it, divided into fields and gardens, and cultivated by the inmates. The Albany barracks were built in 1798, and were much employed during the last war: they have a good military hospital, and grounds attached to them. Farkhurst prison, for juvenile convicts, is in the neighbourhood of Newport.

The market is on Saturday, and is much frequented, Newport being a central depot, from which corn and other agricultural produce are shipped, and which imports articles of manufacture, coals, provisions, &c., for the interior and south side of the island. The lace manufacture employs several hundred persons. An annual fair is held on Monday, Tuesday, and Wednesday in Whitsun week; at Michaelmas are three Bargain-Fair Saturdays, when the country men-servants and maid-servants meet at separate parts of the town to be hired, and this is the great season for rustic sports. There are some fine walks in the neighbourhood of Newport.

NEWPORT. [ESSEX; KENTUCKY; PEMBROKESHIRE; TIPPERARY.]

NEWPORT PAGNELL, Buckinghamshire, a market-town and the seat of a Poor-Law Union, in the parish of Newport Pagnell, is situated near the junction of the rivers Ouse and Ousel, in 52° 5' N. lat., 0° 43' W. long., 28 miles N. by E. from Aylesbury, 50 miles N.W. by N. from London by road. The population of the town in 1851 was 3812. The living is a vicarage in the archdeaconry of Buckingham and diocese of Oxford. Newport Pagnell Poor-Law Union contains 45 parishes and townships; with an area of 68,051 acres, and a population in 1851 of 28,093.

The town of Newport Pagnell is divided into two unequal parts by the river Ousel, over which there is an iron bridge, erected in 1610. The parish church is a spacious building of considerable antiquity, with a handsome square tower and pinnacles, and stands upon an eminence from which there is a fine view of the surrounding country. There are chapels for Independents, Baptists, and Wesleyan Methodists;

National, British, and Infant schools; a Charity school for 20 girls; a school for girls, supported by Mrs. Vanhagan; a literary and scientific institute; and a savings bank. There is here an academy for educating young men for the ministry, in connection with the Independents. The principal charities of the place are Revis's almshouses and Queen Ann's hospital, or almshouse—so called from Ann, consort of James I., by whom it was refounded. The manufacture of bone-lace is carried on to some extent. There is a good carrying trade in coal, and timber. The market is held on Saturday, and seven fairs, chiefly for cattle, are held in the year. A county court is held.

NEWPORT, or NEWPORT-PRATT, county Mayo, Ireland, a market-town and sea-port, and the seat of a Poor-Law Union, is situated at the head of Clew Bay, on the Newport River, in 53° 53' N. lat., 9° 31' W. long., distant by road 11 miles W.N.W. from Castlebar, 170 miles W.N.W. from Dublin. The population in 1851 was 934. Newport Poor-Law Union comprises 10 electoral divisions, with an area of 159,510 acres, and a population in 1851 of 15,879. The town contains a neat parish church, chapels for Roman Catholics and Methodists, and several National schools. There are also a court-house, some large storehouses recently erected, and a Union workhouse. The harbour admits to the quays vessels of 400 tons. The principal trade is the export of grain. Petty sessions are held monthly. Tuesday is the market-day. Fairs are held June 8th, August 1st, November 11th, and December 20th. The neighbourhood is strikingly diversified by the numerous islands around the head of Clew Bay, and the lofty mountains skirting it on either side, and those overhanging Newport Vale.

NEWRY, Ireland, a sea-port town, parliamentary borough, and the seat of a Poor-Law Union, partly in county Armagh, but chiefly in county Down, is situated on the Newry River, in 54° 10' N. lat., 6° 20' W. long., distant by road 88 miles S.S.W. from Belfast, 63 miles N. from Dublin by road, and 74 miles by the Dublin and Drogheda, and Dublin and Belfast Junction railways. The borough returns one member to the Imperial Parliament. Its population in 1851 was 13,191, besides 883 inmates of the workhouse. Newry Poor-Law Union comprises 23 electoral divisions, with an area of 187,785 acres, and a population in 1851 of 84,576.

The town grew up around a monastery, which was founded in 1158, and soon after a castle was built in the place, by John de Courcey, one of the Anglo-Norman conquerors of Ulster. The castle was destroyed by Edward Bruce, in his invasion of Ireland. Being rebuilt, it was again destroyed in the rebellion of Shane O'Neil; but was a second time restored by Bagnal Marshal, of Ulster, who also rebuilt the town, and re-peopled it with Protestant settlers. Newry suffered in the civil war of 1641, and was destroyed by the army of James II., in their retreat from the north in 1689, only the castle and six houses being left standing. The borough was incorporated by James I., and till the Union returned two members to the Irish Parliament. The corporation is extinct. The town is under the management of 21 commissioners. Four stone bridges over the river Newry connect the two parts of the town, and four drawbridges cross the canal, which runs along the right bank of the river. The town contains many handsome houses. It is lighted with gas, well-paved, and supplied with water.

The parish church, a handsome structure in the early English style, with a tower and spire 190 feet high, was erected in 1811. Of two chapels of ease, one, formerly the parish church, was built in 1678, and restored in 1680. There are two Roman Catholic chapels, one of them the diocesan chapel of the Bishop of Dromore; a nunnery; a school, preparatory to the college of Maynooth; chapels for Presbyterians, Independents, and Methodists; National schools; and a savings bank. Among the public buildings are the new court-house, the town-hall or market-house, a spacious assembly-room, a neat custom-house, a large infantry barrack, the fever-hospital, dispensary, Union workhouse, and two bridewells. Along the quay are large and well-built warehouses. The manufactures of the town are linen, cotton, glass, and cordage. There are also iron and brass foundries, coach and car manufactories, tan-yards, breweries, a distillery, and corn- and flour-mills. Newry communicates with Carlingford, 5 miles distant, by a ship canal and the Newry River; and with Lough Neagh, 32 miles distant, by a boat canal and the river Bann. Vessels drawing 15 feet water ascend to Albert Basin, at the town. The port of Newry, which extends to Carlingford Bay, admits vessels of 1000 tons to Warrenpoint, 6½ miles below the town. The principal exports are grain, provisions, cattle, eggs, and butter. Two steamers sail twice a week to Liverpool. There is a considerable trade with North America, the Baltic, and the Levant. On Dec. 31st 1853 there were registered as belonging to the port, 117 sailing-vessels, of 7694 aggregate tonnage, and three steamers, of 873 tons. During 1853 there entered the port 773 sailing-vessels of 55,873 tons, and 145 steam-vessels of 40,886 tons aggregate burden; and there cleared 224 sailing-vessels of 18,097 tons, and 135 steam-vessels of 38,266 tons aggregate burden. Quarter and petty sessions are held in the town. Fairs are held on the first Monday after Easter week, and on October 29th. In Ballybot, a part of the town within the county of Armagh, fairs are held on the Tuesdays after the 18th day of March, June, September, and November. The market-days are Tuesday, Thursday, and Saturday.

NEWTOWN-IN-THE-WILLOWS. [LANCASHIRE.]

NEWTOWN, or NEWTON ABBOT, Devonshire, a market-town, and the seat of a Poor-Law Union, is situated on the little river Lemon, at the head of the Teign estuary, in 50° 32' N. lat., 3° 38' W. long., distant 15 miles S. by W. from Exeter, 188 miles S.W. by W. from London by road, and 214 miles by the Great Western and Bristol and Exeter railways. The population of the town of Newton in 1851 was 3147. The livings are in the archdeaconry of Totnes and diocese of Exeter. Newton Abbot Poor-Law Union contains 89 parishes and townships, with an area of 117,896 acres, and a population in 1851 of 52,306.

Newton Abbot is finely situated on rising ground on the right bank of the Lemon. On the left bank is that part of the town called Newton Bushel. The town has been considerably improved of late years. The town-hall is a neat building. Besides the parochial chapel there are in Newton Abbot chapels for Independents and Baptists. The Wesleyan Methodists have a chapel in Newton Bushel, and there are National schools. The market-days are Wednesday and Saturday. Fairs are held on June 24th, September 11th, and November 6th. It was at Newton Abbot that William, prince of Orange, afterwards William III., made his first public declaration after landing at Torbay in 1688.

NEWTOWN. [GLAMORGANSHIRE.]

NEWTOWN STEWART. [TYRONE; WIGTONSHIRE.]

NEWTOWN-UPON-AYR. [AYR.]

NEWTOWN, Montgomeryshire, a market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Newtown, is situated in a beautiful valley on the right bank of the Severn, in 52° 38' N. lat., 3° 8' W. long., distant 8 miles S.W. from Montgomery, and 175 miles W.N.W. from London. The population of the parliamentary borough of Newtown, which is contributory to Montgomery in returning a member to the Imperial Parliament, was 6371 in 1851. The living is a rectory in the archdeaconry of Montgomery and diocese of St. Asaph.

Newtown is the chief seat of the flannel manufacture in Montgomeryshire. A spacious flannel hall has been recently erected. The church is a new building; there are chapels for various bodies of Dissenters, a National school, and a mechanics institute, with a library of 300 volumes. A county court is held. There are several potteries, tan-yards, and malt-kilns. Machinery of various descriptions is manufactured. The Montgomery Canal commences at this town. Around the canal basin, or along the banks of the canal, are lime-kilns, and wharfs and yards for landing and storing coals, bricks, slates, timber, and other articles. Markets are held on Tuesday, Thursday, and Saturday. There are several yearly fairs, one of them a considerable fair for sheep and pigs.

NEWTOWN. [CONNECTICUT; WIGHT, ISLE OF.]

NEWTOWN-BARRY. [WEXFORD, County of.]

NEWTOWN-BUTLER. [FERMANAGH.]

NEWTOWN-FORBES. [LONGFORD, County of.]

NEWTOWN-LIMAVADY, county of Londonderry, Ireland, a market-town, and the seat of a Poor-Law Union, is situated on the right bank of the Roe, and on the Londonderry and Coleraine road, in 55° 3' N. lat., 6° 56' W. long., distant by road 15 miles E.N.E. from Londonderry, 148 miles N. by W. from Dublin. The population in 1851 was 3206, besides 408 inmates of the workhouse. Newtown-limavady Poor-Law Union comprises 19 electoral divisions, with an area of 152,392 acres, and a population in 1851 of 33,899. Newtown-limavady contains a large parish church; a Roman Catholic chapel; an Independent, a Methodist, and five Presbyterian chapels; a National school, an Infant school, and a savings bank. There are also a market-house, a dispensary, the Union workhouse, and bride-well. Large sales of flax and of general farm produce are made at the markets, which are held on Monday, Tuesday, and Friday. Quarter and petty sessions are held. Fairs are held March 28th, June 18th, and October 29th. Newtown-limavady, then named the Dog's Leap, was the ancient seat of the O'Callans. The town shared in most of the important warlike events of which Londonderry county was the scene in the period subsequent to the conquest. It was incorporated by James II. and returned two members to the Irish Parliament.

NEWTOWN-HAMILTON. [ARMAGH.]

NEWTOWARDS, County Down, Ireland, a market-town, and the seat of a Poor-Law Union, is situated near the head of Lough Strangford, on the Belfast and Donaghadee road, in 54° 36' N. lat., 5° 54' W. long., 12½ miles E. from Belfast by the Belfast and County Down railway, which is opened to the town. The population in 1851 was 9567, besides 508 inmates of the workhouse. Newtownards Poor-Law Union comprises 16 electoral divisions, with an area of 93,851 acres, and a population in 1851 of 56,861. The town, pleasantly situated in the midst of hills, is neat, regular, and well built. In the Market-square and principal street are many good houses. The parish church is a handsome building, erected in 1817. There are chapels for Roman Catholics, Presbyterians, and Methodists, and three National schools. The old parish church, erected in 1632, a large building with a handsome spire, is now used as a court-house. There are a market-house, a bride-well, and a Union workhouse. The weaving and embroidering of muslin afford a considerable amount of employment.

Quarter and petty sessions are held. Fairs are held on the second Saturday of every month, and on January 23rd, May 14th, and September 23rd. Near the centre of the town is an octagonal structure, with canopied niches, forming the pedestal of a cross, erected in 1636. Newtownards was incorporated by James II., and returned two members to the Irish Parliament.

NEWTYLE. [ENGLAND.]

NGAMI, LAKE. [AFRICA.]

NIAGARA. [CANADA.]

NICÆA (*Nicaia*), an ancient ruined city in Bithynia, in the north-west of Asia Minor, the site of which is marked by the Turkish village of Is-nik. It stood on the eastern shore of the Lake Ascania, and was built or restored by Antigonus, son of Philip, after whom it was called Antigonæa. The name was subsequently changed by Perdiccas in honour of his wife, Nicæa, daughter of Ptolomæus, king of Egypt. The city became early the seat of a Christian bishop. It was destroyed by an earthquake in the latter end of A.D. 325, but it was restored under the emperor Valens in 368. Aided by the Greek Nicephorus Melissenus, the Turks, under Solyman I., took the city (1080), which was made their head-quarters till 1097, when Godefroi de Bouillon, at the head of the Crusaders, took it after a siege of 35 days, and it was again united to the Greek empire. Two years after the establishment of the Latin empire in Constantinople (1204) Theodore Lascaris made Nicæa the Greek capital, which it continued to be till 1261, when, in the reign of Michael Palæologus (who was crowned at Nicæa the year before), Constantinople was recovered by the Greeks. In 1383, after an obstinate and bloody siege, the Turks, under Orkan, again took Nicæa, which they made their capital. After the battle of Angora (June 30, 1402) it was taken and pillaged by the followers of Tamerlane. In 1422 it joined in a conspiracy to put Mustapha on the throne of his brother, Amurath II., whereupon the latter reduced the city to obedience, and had his brother and the chief conspirators strangled in his presence.

Sir Charles Fellowes, who visited the site of Nicæa, says that the walls form a circuit of four miles. These walls are strengthened with towers. One part is built or repaired with materials of great elegance from an ancient temple; another part is built with Roman brick; a third with marbles of a late age, marked with the sign of the cross and ill-out inscriptions, shewing the repairs made in Christian times; the remaining parts are built of immense stones cut to fit into each other in the cyclopean style. Four large majestic gateways with arched entrances still exist in an almost perfect state, but the inscriptions that once covered them have been nearly altogether effaced. Among the existing remains are many inscribed stones, copies of which are given in Sir Charles Fellowes's 'Asia Minor'; ancient bas-reliefs; a few statues; and ruins of an early Greek theatre, "of extremely good workmanship, and colossal, the stones being some nine and others fourteen feet in length." Ruins of mosques, baths, and houses are seen among the gardens and corn-fields which cover a great space within the ancient walls. In the village of Is-nik, which stands in the centre of the ruins there is a small church, used by the Greeks for their worship, with mosaic floor and ceiling of the Byzantine age. Every fence, trough, or paving-stone in the village and its neighbourhood is derived from this quarry of art, and many fragments of good sculpture are built into the houses. A Roman aqueduct still conveys water to the town from the neighbouring mountains. In the lake, the waters of which are of transparent clearness, are the remains of an ancient landing-place.

In the history of the church Nicæa is memorable as the place in which the first and seventh œcumenical or general councils were held. The first, held in 325 (June 19 to August 25), in presence of the emperor Constantine, and presided over by Osius, representative of Pope Sylvester, condemned the doctrines of Arius, maintained the divinity of Christ, and declared the consubstantiality of the Son of God with his Father to be an article of faith. The creed founded upon these decrees was drawn up by Osius; it is the *Symbolum Nicænum*, that is, Nicæne or Nicæne Creed, still in use. This council also passed decrees for celebrating the festival of Easter on the same day throughout Christendom. A proposal forbidding priests who were married before receiving holy orders, to live with their wives, was rejected. The council was attended by 318 bishops from all parts of the Roman empire.

The seventh general council, held in 787 (September 24 to October 23), and attended by 377 bishops, condemned the Iconoclasts, and explained the worship of images.

(Fellowes, *Asia Minor*; *Art de Vérifier les Dates*.)

NICARAGUA, Republic of, Central America, occupies the hilly and volcanic region extending from Salinas Bay to the Bay of Conchagua on the Pacific, and back to the Mosquito territory. It may be taken generally as lying between 10° 45' and 14° 10' N. lat., 84° and 87° 40' W. long.; and as bounded E. by the Mosquito territory; N. by the republic of Honduras; N.W. by that of Salvador; W. by the Pacific Ocean; and S. by the republic of Costa-Rica: but the eastern boundary is really undefined, Nicaragua refusing to acknowledge the right of the King of Mosquito to the tract lying along the Caribbean Sea. The area consequently is not agreed upon: that really under the authority of the republic does not probably exceed 35,000 square miles, but that claimed is of course much greater. The population may be about

250,000: the chief part of whom are ladinos, or mulattoes, and native Indians.

The coast along the Pacific from Salinas Bay to the Gulf of Conchagua bears nearly north-west. It is throughout rocky and has some harbours of much value. That which may just now be regarded as the most important, from its being the Pacific port for the Nicaragua route connecting the Atlantic and Pacific Oceans, is San Juan del Sur, north of Salinas Bay, which is formed by two promontories between 400 and 500 feet high, having an entrance above 3000 feet across. The harbour is small, but well sheltered, and affords anchorage in from 2 to 10 fathoms water. About a mile from it is the nearly similar harbour of Nacascolo. Port Realejo, towards the northern end of the state, is also a very good and much larger harbour, and is that which prior to the opening of the Nicaragua transit route received most of the foreign vessels trading with the republic. There is a very narrow tract of tolerably level land along a good part of the coast.

Along the western side of the republic, at a few miles from the coast, extends a ridge of low volcanic mountains, highest at the southern end, and generally decreasing in altitude as we proceed northward: though one or two of the isolated peaks in the northern part are among the most elevated. Several of these volcanoes appear to stand alone or to have scarce any connection with the main ridge, though standing in its general line of direction. The highest summits appear to be Omotepec, which forms an island in Lake Nicaragua (5100 feet above the sea); Momotomba, at the northern extremity of Lake Managua, about the same height; Mombacho, between Lake Nicaragua and the Pacific (4500 feet); Nindirí, between Managua and Masaya; Felica; El Viejo, and one or two others. Several of these are active volcanoes. Another mountain tract, a part of the mountain system of Honduras, extends along the northern part of the country. This part of Nicaragua is traversed by several ridges, some of whose summits attain a considerable altitude. Between the ridges extend many good-sized valleys, the principal being those of the Rio de Segovia, and the Rio Escondido. The remainder of the state belongs to the plain of Nicaragua, of which however the larger portion forms the Mosquito territory. This plain is but little elevated above the level of the sea; the Lake of Nicaragua which occupies a large part of the Nicaragua section of it being only 122 feet above the Caribbean Sea. Along the rivers it is wooded; the rest of the plain forms extensive savannahs, covered with a rich verdure, and presenting occasionally a clump of high trees. The climate being excessively hot and moist the white races have not formed any settlements on this plain, and it is only inhabited by independent aboriginal tribes.

The few rivers which in Nicaragua fall into the Pacific are of short extent and of little consequence. Those falling into the Atlantic are longer and more important. Two considerable streams rise, as already mentioned, in the northern part of the republic, the Segovia and the Escondido; the sources of some of their upper branches are not very distant, but their outlets are far apart—that of the Escondido being near the southern, and that of the Segovia towards the northern end of the Mosquito coast. The Segovia flows past the town of the same name, but both rivers belong more to Mosquito than to Nicaragua. The most important river of this republic is the *San Juan*, which forms the boundary between Nicaragua and Costa-Rica, and falls into the Caribbean Sea, near 11° N. lat. It is by means of this river and the Lake of Nicaragua, that one of the two great lines of communication is proposed to be opened between the Atlantic and Pacific oceans. The river San Juan is the only channel by which the Lake of Nicaragua discharges its waters into the Atlantic. The Lake or Lagoon of Nicaragua is an inland sea, of a lengthened form, being about 100 miles long and 40 miles broad where widest, without narrowing much at either end. It is the reservoir of a great extent of mountainous country, and is deep enough to be navigated by vessels of considerable size, having about 100 yards from the beach generally a depth of about 2 fathoms; and at a greater distance from 5 to 15 fathoms of water along the southern and western banks. It is only very shallow along the north-east shore for a mile and upwards into the lake. It contains several islands, among which that of Omotepec, near the south-western bank between Granada and Nicaragua, is remarkable for a high volcano, and for its fertility and population, being inhabited by a numerous and industrious tribe of Indians, who have a small town, Moyagalpa, possess cattle, and raise maize, rice, &c. The river issues from the south-eastern extremity of the lake; its breadth varies from 100 to 400 yards. About the middle of its course the San Juan receives from the south the Rio San Carlos, and lower down the Serapiquí. About 25 miles from its mouth the river divides into two arms, of which the southern and wider is called Rio Colorado; the other enters the sea near the harbour of San Juan del Norte. [MOSQUITO KINGDOM.] The depth of water in the upper part of the course of the San Juan varies from 9 to 20 feet, but in some places it is so shallow that rapids are produced, and it contains numerous islands. The lower portion of the river, below its bifurcation, is generally shallow. The mouth of the San Juan has a bar with seldom four feet of water upon it. The winding course of the river is somewhat under 100 miles. On the Pacific side there are however greater obstacles to the communication between the two oceans than that presented by the channel of the San Juan. At the narrowest part the distance between the Lake and the Pacific is only about 15 miles, and on the coast

there is here the good harbour of San Juan del Sur, but the hills upon it rise to between 400 and 500 feet, presenting a formidable barrier to the construction of a canal, while the difference of level between the lake and the sea is 129 feet, and therefore locks would be necessary. The hills might perhaps be in a measure avoided, but the canal would of course be longer. Whether such a canal will ever be formed it would be hard to predicate; especially since the completion of the railway across the Isthmus of Panama has provided so much more rapid a route. But even in the absence of the canal this route has been largely adopted. As noticed under MOSQUITO KINGDOM the governments of England and the United States concluded a treaty in 1850 by which they agreed to co-operate in the establishment of a secure and neutral line of communication between the two seas by way of the San Juan River and Lake Nicaragua, to be open on equal terms to all nations, with a free port at each end of the line. A company as there mentioned was formed for constructing a canal, improving the navigation of the San Juan, and working the communication by steam-boats. The Nicaragua Transit Company have been unable even to attempt to carry out the first and most arduous part of their task, but they have established steam-boats of light draught to navigate the river, and organised a line of carriages to convey the passengers and goods from Nicaragua to San Juan del Sur on the Pacific. During 1854 a very large number of passengers to and from California adopted this route, and we find it asserted in some of the advertisements of the line published in New York, that not only is "the Nicaragua Transit route the shortest, safest, and by far the most comfortable and healthful," but that passengers by it "have to travel but 12 miles of land carriage over a good macadamised road." Long before the establishment of this route communication had been maintained between the Atlantic and the towns of Granada and Nicaragua, by the river San Juan and Lake Nicaragua, by means of flat-bottomed vessels called piraguas, of from 5 to 10 tons burden. The passage from Granada to San Juan, or Greytown, is usually made by the piraguas in about 8 days, whilst the return passage being against the stream, occupies from 12 to 15 days. It has been proposed by some as more advantageous to unite the Lake of Managua by a canal with the harbour of Realejo. The country between them is nearly level, and of a firm soil, without being rocky. Besides this, the canal would terminate in the port of Realejo, one of the best harbours on the west coast of America, while that near Nicaragua would end in the smaller harbour of San Juan del Sur. But this canal would be more than twice as long as the other; in addition to which, the Tepitapa, which unites the Lake of Nicaragua with that of Managua, must be rendered navigable. The Lake of Managua is 35 miles long, and 15 miles broad in its widest part. It is deep enough for vessels of considerable size; but the Rio Tepitapa, which brings down the water from the Lake of Nicaragua, and is about 25 miles long, has falls which, in the dry season, are from 6 to 8 feet high, and also several shoals. These obstacles could only be avoided by a canal cut through the level ground on the northern side of the Rio Tepitapa.

The climate of the Plain of Nicaragua, as stated above, is hot and moist, and so unhealthy as to have caused it to be left to the undisturbed occupation of the native races. The thickly-wooded banks of the San Juan River are no exception to this observation. The shores of the Pacific, where the population is densest, are also very hot and somewhat humid, but do not appear to be particularly unhealthy, except in the vicinity of the Bay of Conchagua, where however there are comparatively few inhabitants. The hilly districts between the coast and the western banks of the lakes are much milder and more salubrious, as is also the mountainous country of the north. There are regular dry and rainy seasons, as in other parts of Central America [COSTA-RICA, &c.], the only difference being that the rains last somewhat longer, and fall in larger quantities. In the hilly country west of the lakes occasional showers also occur out of the regular rainy season.

The soil throughout the occupied districts appears to be very fertile, but agriculture is in a rude state; the roads are almost everywhere insufficient, ill made, and ill kept, and oxen are almost the only animals of draught. Although therefore Nicaragua might with a peaceful and industrious people furnish vast quantities of agricultural produce for other countries as well as for the supply of a greatly increased population, it really affords little more than suffices for domestic consumption. Maize and frixoles are raised in considerable abundance, and form the staple food of the people. Some wheat is grown in the north, chiefly for use in the cities. Sugar, indigo, cotton, coffee, cocoa, and tobacco are all grown, but, except indigo, not to any great extent. A great variety of fruits, including several native kinds, with oranges, lemons, &c., ripen well; and garden vegetables flourish, but little attention is paid to them except by the Indians, who cultivate them for sale in the cities. Indigo, Nicaragua, and Brazil wood, and some other timber and dye-woods and hides, are at present the chief articles exported. Cattle are among the principal sources of wealth, very large numbers of them being kept on the plains along the eastern sides of the lakes. Fish are plentiful in the lakes, in which also crocodiles are common. Along the coast pearls used to be found. The mineral resources of Nicaragua have not been very diligently explored. Gold and silver have been found and worked, but not extensively; copper has also been found.

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The manufactures are nearly confined to the coarser goods required for home consumption. The chief articles made are coarse cotton and woollen cloths; the cotton being dyed of a purple colour, obtained from a shell-fish caught in the vicinity of San Juan del Sur, is in great request among the Indians, who prefer it to any European dyed goods on account of the greater durability of the colour.

Nicaragua is divided into five departments, which are named after their respective capitals:—Segovia comprises the north-eastern part of the territory; Leon the north and north-western; Managua the district south of Leon; Granada that south of Managua; and Nicaragua the most southern part bordering on Costa-Rica. Leon is the political capital. The following are the principal towns; the populations are merely a loose approximation:—

Leon, the capital of Nicaragua, contained not many years ago a population of 32,000 inhabitants, but the civil contentions within the town have reduced it to half that number, and destroyed a large proportion of its best buildings. It is situated on the road which leads from the best cultivated districts of the state to the harbour of Realejo, in 12° 26' N. lat., 86° 52' W. long. The city occupies a considerable area, and contains a cathedral, several churches, a university, Tridentine college, &c., but all in a very neglected condition.

Granada, on the north-western bank of the Lake of Nicaragua, population about 12,000, carries on some trade with Jamaica by means of the river and harbour of San Juan; contains several churches and convents; but has no features requiring further notice.

Managua, on the south bank of Lake Managua, is a considerable place, containing 10,000 inhabitants. *Masaga*, some little distance S. of Managua, has a population nearly equal to it, but almost all Indians, who are engaged in commerce with the adjacent populous country, and in the manufacture of the various articles of domestic requirement in which they display much skill.

Nicaragua, about 2 miles from the west bank of Lake Nicaragua, contains, with the suburb of San George, some 15,000 inhabitants, and is surrounded by a district noted for its fertility, especially in cacao and grapes.

San Juan del Sur, on the Pacific, S.W. of the town of Nicaragua, contained but few inhabitants previous to its selection as the Pacific port for the Nicaragua line of communication between the two oceans. The harbour, as already mentioned, is small but convenient, and possesses good anchorage.

Segovia, on the Rio de Segovia, is a small place, whose only claim to notice is that of being the capital of the department of Segovia, the least populous section of the republic. The country around is fertile and healthy, and its mineral wealth is believed to be considerable.

Nicaragua is nominally a republic with a senate and a chamber of deputies, but the government is really vested in a dictator with the title of Supreme Director. After the declaration of independence, and the formation in 1842 of the republic of Central America [GUATEMALA; HONDURAS], Nicaragua formed one of the federal states until the dissolution of the union, when, like the other states, it became an independent republic; and, like them, all hopes of its progress have been since arrested by constant internal discord. [See SUPPLEMENT.]

NICASTRO. [CALABRIA.]

NICE, or NIZZA, an administrative division of the Sardinian States, bounded W. by France, from which it is separated by the Var, S. by the Mediterranean, E. by the division of Genoa, and N. by the main ridge of the Maritime Alps, which divide it from Piedmont, and send out numerous branches southward, that cover about two-thirds of the whole territory. The Col-di-Tenda, a high pass over these mountains, rises about 5900 feet above the sea, and is traversed by the main road from Nizza to Turin. The mountain slopes and high valleys afford good pasture, and the loftiest uplands are covered with forests. The soil in the mountains is ill-adapted for cultivation; but in the valleys and lower slopes of the south the soil is good and the vegetation luxuriant. Maize, barley, and a little wheat are the principal grain crops. Olives, figs, grapes, oranges, lemons, almonds, citrons, some dates, and various other fruits are abundantly produced. The palm, the aloe, rose-laurel, myrtle, and other odoriferous and tropical plants flourish throughout the year; and it is not uncommon at the end of December to see some trees in blossom and others covered with fruit. The forests afford good timber. The mulberry is extensively cultivated. Cattle are numerous, and bees are carefully tended. The fisheries along the coast are very productive. There is an argentiferous lead-mine near the town of Tenda. Spun silk, coarse woollens, soap, paper, and perfumes are the chief industrial products. These articles, together with oil, raw silk, wine, honey, timber, and the fruits before-named, are the principal exports. The chief rivers are the Var (which receives the Vesubia and the Tinea), the Paglion, the Roja, the Taggia, and the Impero. Sheltered by the Alps from the north winds, the division has a delicious but rather a dry climate; the sea breezes moderate the heat of summer; in spring and autumn however the sirocco and the mistral are sometimes felt. A good road, affording a series of the most delightful and magnificent views, runs along the coast from Nizza to Genoa.

The administrative division of Nizza lies between 45° 40' and 44° 20' N. lat., 6° 40' and 8° 8' E. long. Its length from north-east to south-west is about 75 miles; the mean breadth is about 23 miles.

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The area is 1623 square miles, and the population in 1848 was 242,990. The language of the people is a mixture of old Provençal French and Italian.

The administrative division of Nizza, which consists of the former county of Nizza and the western portion of the old republic of Genoa, is now divided into 3 provinces, 28 mandamenti, and 194 comuni. The area and population of these provinces are as follows:—

Provinces.	Area in Square Miles.	Mandamenti.	Population in 1848.
Nizza . . .	1179	14	118,377
Oneglia . . .	174	6	60,072
San-Remo . . .	365	8	64,541
Total . . .	1618	28	242,990

The principal towns in the province of Nizza, are—*Nizza* [NICE]; *Sospello*, 17 miles N.E. from Nizza: population, 4394; *Scorgio*, on the left bank of the Roja: population, 2639; *Tenda*, at the foot of the Col-di-Tenda: population, 2441; *Villa-Franca*, 2 miles E. from Nizza, which has a good harbour, docks for the Sardinian navy, and a population of about 3000, who ply the tunny fishery along the coast, and trade in oranges, lemons, wine, silk, corn, and hemp; and *Briga*, 25 miles N.E. from Nizza: population, 3729. The province forms the see of the Bishop of Nizza.

Of the province of Oneglia, situated between that of Albenga on the east, and San Remo on the west, the chief town is *Oneglia*, which stands 45 miles E. from Nizza, on the sea-coast, at the mouth of the Impero, and has 5500 inhabitants. It has some fine churches, a college, and a small harbour, by which wine, fruits, and oil are exported. Oneglia is the birthplace of Andrea Doria. The other towns are—*Porto-Maurizio*, a well-built busy little sea-faring town, with a population of 6481 in the commune; and *Pieve*, N. by W. from Oneglia, in the valley of the Aroschia: population of the commune, 3093. The province of Oneglia is included in the see of Albenga.

The province of San-Remo, situated west of Oneglia, and east of the province of Nizza and the principality of Monaco already noticed [MONACO], has for its chief town *San-Remo*, which is built on the slope of a hill rising from the sea-shore, 30 miles E. from Nizza, and has 9854 inhabitants. It is sheltered from the north winds by a semicircular group of mountains, the lower slopes of which are planted with olive, lemon, orange, fig, almond, and pomegranate trees. The town, which is well built, has a handsome church, college; and a gallery of good paintings; it is supplied with water by an aqueduct of modern erection. The inhabitants trade with Marseille and Genoa in the produce of the country, and in dried fruit and salt provisions. The port of San-Remo admits small craft only. *Ventimiglia*, a well-built town at the mouth of the Roja, a few miles W. of San-Remo, has 5894 inhabitants. It gives title to a bishop, whose see is the province of San-Remo. The cathedral and the church of San-Michele are handsome structures, said to be constructed with the remains and on the sites of two Roman temples. There are several Roman inscriptions in this town. *Taggia*, situated in a rich wine district on the right bank of the Taggia, 5 miles N.E. from San-Remo, has a population of 3880. *Triora*, 10 miles N. from San-Remo, is situated among the mountains on the left bank of the Taggia, and has 4346 inhabitants in the commune.

NICE, or NIZZA, the ancient *Nikaia*, the capital of the Sardinian province and administrative division of Nizza, is situated on the Mediterranean coast, about 10 miles E. from the mouth of the Var, 96 miles S. by W. from Turin, in 43° 41' N. lat., 7° 16' E. long., and has 85,195 inhabitants, including the garrison and foreign visitors. It is pleasantly situated, being bounded on the north by the Maritime Alps, and open on the south to the sea. The citadel of Mont-Albano, on a high and pointed rock, overhangs the town, and the Paglion, a mountain torrent, passes it on the west side, separating it from the suburb called La-Croix-de-Marbre. In this suburb the houses are painted externally in fresco, and surrounded with gardens containing orange- and lemon-trees. The town itself is divided into two parts, distinguished respectively as the old and new towns. The streets of the former are narrow; the latter is better laid out, and the houses are painted in fresco. There are two handsome squares, one of them surrounded with porticoes. Adjacent to one of these is a raised terrace, which serves for a defence of the town against the sea and for a public walk. The ramparts of the town on the land side form another promenade. The cathedral of Santa-Reparata is the chief public building. The climate of Nice has been much celebrated for its mildness, but has been probably over-praised. The neighbourhood of the Alps, and the prevalence of the 'Vent de Bise,' a keen searching wind, render the air frequently very cold and even frosty in winter and spring; and the heat in summer is excessive. It is however much resorted to by invalids and other strangers, especially English. The walks and rides in the neighbourhood of the town are agreeable. The rocky eminence crowned by Fort Montalban, which divides the town from Villa-Franca, has a lighthouse at the extremity, and commands a very extensive view stretching from Antibes to Monaco, and

comprising in clear weather the island of Corsica, which is 90 miles distant. There are a theatre, baths, good inns, caffès, and a public library. The town has silk-, cotton-, and paper-mills, a great number of oil-mills, and a tobacco manufactory. Soap, liqueurs, essences, superior turnery, inlaid tables, boxes, trays, and perfumery are also made. The port, which is protected by a mole, is spacious and secure. Vessels of 300 tons can enter it. The chief trade is in silk, oranges, fruit, and the manufactures of the town. The roadstead would afford anchorage to 100 vessels of the line. The town gives title to a bishop, whose see is the province of Nizza. Foreign consuls reside in Nice. Steamers ply regularly between Marseille and Genoa.

Nikaia was founded by the Greeks of Massilia, and fortified by them to repress the neighbouring tribes and secure the navigation of the adjacent sea. It continued subject to the Massilians after the establishment of the Var as the boundary of Gaul and Italy. In the middle ages it was the capital of a county, and a strong fortress. It was besieged in 1543 by the French and Turks, taken and plundered, except the citadel, which held out. The town was again taken by the French in 1691, 1706, and 1744. It was seized by the French, without resistance, in 1791, and annexed to the republic, being made the capital of the department of Alpes Maritimes. In 1814 it reverted to Sardinia.

NICHOLAS, ST. [FLANDERS, EAST.]

NICOBAR ISLANDS, THE, are situated in the Indian Ocean, between 6° 50' and 9° 20' N. lat., 92° 50' and 94° 10' E. long. They consist of nine larger islands and some smaller ones. The two most southern are called Great and Little Nicobar. Great Nicobar is more than 20 miles long and 8 miles across in the widest part. Little Nicobar is not half as large. Farther north are six smaller islands. The best known are Noncowry and Camorta, or Nicovari, which are separated from one another by a strait, forming one of the safest harbours in India, in which ships of all sizes may ride with the greatest security; and as it is open at both the east and west, two ships may get in and out either with a north-east or south-west monsoon. The most northern island is much farther to the north, and is called Car Nicobar. The surface of these islands is hilly, and the hills in some places are rather high. They are in general covered with wood, and only a few tracts along the shores are cultivated. The dense forest with which the hills are covered are considered to be the cause of the great unhealthiness of these islands to Europeans. The soil is very fertile and capable of producing all the fruits and vegetables of inter-tropical countries. The islands abound in cocoa-nuts, papayas, bananas, limes, tamarinds, betel-nuts, and the mellori, a species of bread-fruit; yams and other roots are cultivated. The mangosteen-tree and the pine-apple grow wild in the woods. The animals are hogs, dogs, and fowls. The woods contain timber in plenty, and some of it supplies excellent materials for building or repairing ships. The sea abounds with exquisite fish, shell-fish, and turtle. Ambergris and the edible bird's-nest are common, and supply the only articles of exportation; the Chinese and Malays annually visit these islands to procure them. The inhabitants belong apparently to the Malay race, and probably do not exceed 3000 or 4000. In the interior of the island of Great Nicobar a tribe is said to exist which differs from the other inhabitants; they are probably the aborigines, and belong to the race of Australian negroes. The Danes twice tried to form a settlement in the harbour of Noncowry, in 1756 and 1768, but they abandoned it after a few years, on account of the unhealthiness of the climate. Some missionaries remained there till 1792, but as they did not succeed in the conversion of the natives they returned to Tranquebar. (Hamilton; Fontana; Colebrooke, in *Asiatic Researches*.)

NICOLSBURG. [MORAVIA.]

NICOMEDIA (*Nικουμήδεια*), a city of Bithynia, at the head of the Gulf Astacenus (Gulf of Ismid), was founded by Nicomedes I., B.C. 264. According to Pausanias this city was originally called Astacus (v. 12, § 5); but Strabo informs us that Astacus was another city on the same gulf, which was founded by the Megarians and Athenians, and afterwards destroyed by Lysimachus; on which occasion its inhabitants were removed to Nicomedia (xii. p. 563, Casaub.).

Under the Roman emperors Nicomedia became one of the chief cities of the empire. Pausanias speaks of it as the principal city in Bithynia (v. 12, § 5); but under Diocletian, who chiefly resided there, it increased greatly in extent and populousness, and became inferior only to Rome, Alexandria, and Antioch. (Liban., 'Orat.,' viii. p. 203; Lactant., 'De Morte Persec.,' c. 17.) It was almost entirely destroyed by an earthquake during the reign of the emperor Julian, but it was again rebuilt with great splendour and magnificence, and recovered nearly its former greatness. (Amian. Marcell., xxii. 9; xxii. 13; xvii. 7.) It is called at the present day *Is-nic-mid*, or more usually by abbreviation *Ismid*, and is still a town of considerable importance; but it contains few remains of antiquity. The ancient walls still exist in part; they inclose many a ruined heap, and a much larger space than the town of Ismid. One of the ruins is still recognisable as a Christian church. The persecution of the Christians under Diocletian commenced at Nicomedia. The modern town contains about 3000 houses, and is the residence of a pasha. Steamers ply regularly to Constantinople.

NICOPOLI, NIKOPOL, in Turkish *Tchingani-Kall*, the ancient *Nicopolis ad Istrum*, a city in Bulgaria, in European Turkey, and the

capital of a pashalic, is situated on the right bank of the Danube, 80 miles S.W. from Bukharest, 280 miles N.W. from Constantinople, and has about 10,000 inhabitants. The Osmas on the Bulgarian side, and the Aluta on the Wallachian, join the Danube just above the town. The city, which occupies one of the finest sites in the world, consists of two parts. The fortress and Musulman town, crowned by many shining minarets, stand on the summit of a lofty limestone cliff above the Danube, several hundred feet high, and surrounded by a ravine. It is a place however of little real importance as a fortress, for it is commanded by heights around it. On the opposite or eastern slope the houses of Bulgarians, Wallachs, and Jews rise in white clusters one above another like an amphitheatre. The Turkish town is defended on every side by batteries and by a stout parapetted rampart, for the protection of infantry; it is further defended by a castle or citadel. There are some large well-built houses, several mosques, and baths, but in general the town is ill built. The neighbourhood of Nicopoli, especially on the eastern side, towards Sistova, is very beautiful; much of the ground about the town is laid out in gardens. Nicopoli gives title to a Greek archbishop and a Catholic bishop. Its situation on the Danube makes it a place of some trade.

Nicopoli was founded by Trajan; several patches of the ancient walls still remain. The sultan, Bajazet I., at the head of the Janissaries, defeated the Hungarians, commanded by their king, Sigismund, and aided by the choicest troops in Europe, under the walls of Nicopoli, Sept. 28, 1396. Sigismund had besieged the town for six days before the arrival of the Turks. The town has often suffered from the Russians.

NICOSIA. [CATANIA; CYPRUS.]

NICOTERA. [CALABRIA.]

NIE'MEN is the Polish name of a river, which by the Germans is called *Memel*, and by the Lithuanians *Niémona*. It rises in the swampy region which, between 51° and 56° N. lat., forms the watershed between the rivers that run into the Baltic and Black seas. It originates between 58° and 54° N. lat., and near 27° E. long., and runs in its upper course about 180 miles westward. At the town of Grodno it suddenly turns to the north, and continues in that direction about 100 miles. It then turns again to the west, and soon afterwards is joined, at Kowno, by the Wilia, the largest of its affluents, which flows about 180 miles in a western direction. The remainder of its course is to the west. From Grodno to its entrance into Prussia it forms the boundary-line between Russia and Poland. Its course through Prussia amounts to about fifty miles. About eight miles below Tilsit the river divides into two arms, which branch off respectively to the north-west and south-west. The northern arm, called Russ, divides again, about two miles from its mouth, into two arms, the Atmat and Skirwieck. The southern arm is called the Ghilghe. Both arms empty themselves into the Curisches Hafl. The delta included between the Russ and Ghilghe, called the island of Kaukehnen, is alluvial and of great fertility, but it is swampy towards the lake. Though impeded by shoals at several places, the river is of great importance for the exportation of the produce of the adjacent countries. Large though clumsily-made river-barges, called 'wittinnes,' bring the produce of Lithuania (governments of Wilna and Grodno) and of a portion of Poland to Königsberg and Memel. These barges go up the Niemen to Grodno, and up the Wilia to Wilna. They bring down all kinds of oorn, hemp, flax, hides, bacon, and some minor articles. All the timber exported from Memel is floated down from the interior of Russia. As the wittinnes were formerly often lost owing to the westerly and north-westerly gales, which prevail on the Curisches Hafl, two canals have been made along the shores of that lake, by which the Ghilghe is united to the Deime, and thus to the Pregal river, on which the commercial town of Königsberg is built. The Oginsky Canal, cut in the middle of the 18th century, establishes a water-communication between the Niemen and the Dnieper, which runs into the Black Sea. This canal, 34 miles in length, unites the Szcza, a tributary of the Upper Niemen, and the Yasolda, an affluent of the Prypeck, a feeder of the Dnieper.

There is perhaps no river in Europe whose floods rise to such a height and whose inundations are so destructive as the Niemen. Snow to the depth of from four to six feet falls every winter on the country which is drained by it; and as the course of the river in general lies from east to west, this immense quantity of snow, being dissolved in so short a time as ten or fourteen days, causes the river to rise twenty or thirty feet above its general level; and as the fall of the river is in all its extent very inconsiderable, and its current slow, the water can only be carried off in a much longer time, and hence it accumulates in its bed and inundates the adjacent lands to a distance of several miles in many places, and causes great damage.

NIENBURG. [HANOVER.]

NIEUPORT. [FLANDERS, WEST.]

NIEVRE, a department in the centre of France, lies between 46° 40' and 47° 35' N. lat., 2° 50' and 4° 10' E. long., and is bounded N. by the department of Yonne, E. by Côte-d'Or and Saône-et-Loire, S. by the department of Allier, and W. by those of Cher and Loiret. The greatest length of the department, from north-west to south-east, is 79 miles; the greatest breadth, at right angles to the length, is 65 miles. The area is 2632 square miles. The population in 1841 was 305,246; in 1851 it was 327,161, giving 124.3 inhabitants to a square mile, or 50.28 below the average per square mile for the whole of

France. The department is formed from the old district of Nivernais, and is named from one of its rivers, the Nièvre.

The heights which separate the basin of the Loire from that of the Seine traverse the department from north-west to south-east; in the south-east part they are called the mountains of Morvan, being included in the district of that name, which comprehends the eastern side of the department. [MORVAN.] The east of the department is the more rugged portion, and consists chiefly or wholly of primitive rocks, granitic or schistose; the western part is covered by beds of the secondary strata, which intervene between the red marl and the chalk; the valleys of the Allier and the Loire, in the southern extremity of the department, and the valley of the Loire, in the north-western extremity, are occupied by the supracretaceous formations. The portion of the department that belongs to the basin of the Seine consists of hills separated by deep valleys; it is drained by the YONNE and its feeders, and has a general inclination towards the north. The larger division of the department lies on the south side of the watershed, and consists of extensive and sandy but tolerably fertile plains, sloping down to the the LOIRE, which crosses the south-western angle of the department, receiving the Aron and the Nièvre, a small stream that gives name to the department, on the right bank, and the ALLIER on the left. The western boundary of the department is formed by the Allier and the Loire. The Allier, the Loire, and the Yonne are navigable; the two last are joined by the Canal-du-Nivernais, which leaves the Loire at Decize, runs up the valley of the Aron, and, crossing the watershed between the Loire and the Seine, enters the Yonne 3 miles S. from Corbigny. There are about 400 ponds in the department, most of which become dry in summer. The department is traversed by 9 state and 12 departmental roads. The continuation of the Orléans-Bourges railway runs for a short distance along the left bank of the Allier, in the south-west of this department; a short branch connects the town of Nevers with this line.

Though the soil of the department is in general poor, yet corn more than enough for the home consumption is raised by careful husbandry. The mountains supply abundant pasture, and a large number of cattle is reared. In the arrondissement of Château-Chinon, in the east of the department, where the soil is decidedly bad, the only produce is rye, oats, or buckwheat. In the arrondissement of Clamecy, and in the districts that belong to the basin of the Loire, the produce includes wheat, wine, fruits, hemp, leguminous plants, &c. The arrondissement of Nevers, which occupies the south-west of the department, produces corn, wine, and pasture. The north-western districts, forming the arrondissement of Cosne, are fertile in corn and wine. The hilly country is in many parts covered with extensive forests of oak, maple, and beech trees. Timber forms one of the principal sources of wealth to the inhabitants, and is conveyed by water to Paris and other large towns. The quantity of wine produced in average years is about six millions of gallons, about one-third of which is exported, chiefly from Pouilly-sur-Loire. The climate is temperate and healthy, but rather damp. Several iron-mines are worked, and the ore is smelted and converted into malleable iron in a great number of iron-works, the most important of which are those of Pont-St.-Ours, Imphy, and Fourchambault. Coal-mines are worked near Decize. The iron, coal, and timber trades are important, and are continually improving in consequence of the great facilities for transit afforded by river and canal navigation and railways. The manufactures are—woollen-cloth, linen, hardware, inferior cutlery, fiddle strings, porcelain and pottery, paper, and glass. The chief articles of the commerce of the department are its agricultural and industrial products, hides, steel, copper, sheet-iron, tin-ware, oak-staves, wood charcoal, mill-stones, vine-poles, cattle, fire-wood, &c. About 370 fairs and markets are held in the year.

The department is divided into four arrondissements, which, with their subdivisions and population, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Nevers	8	108	105,484
2. Château-Chinon	5	55	69,083
3. Clamecy	6	97	77,038
4. Cosne	6	68	74,956
Total	25	326	327,161

1. Of the first arrondissement, and of the whole department, the capital is NEVERS. Decize, a town of 3358 inhabitants, is built on a rocky island in the Loire at the junction of the Aron with that river, and at the head of the Nivernais Canal. The only remarkable building is the old castle of the dukes of Nevers, which stands on the highest part of the island. The town communicates with both banks of the Loire by a good stone bridge and by a suspension-bridge. Iron is manufactured, and also tin; fuel-wood, charcoal, coal, oak-staves, vine-poles, hoops, &c., are the chief articles of trade. *St.-Pierre-le-Moutier*, a town of 2319 inhabitants, which owes its name and its origin to a suppressed Clunian monastery, stands near a small lake 15 miles S. from Nevers. A kind of sand in request for the manufacture of porcelain is found at this place, and exported to Paris and Rouen. *Pougues*, famous for its mineral spring, is a small village of

about 1200 inhabitants, a few miles N.N.W. from Nevers. *St.-Saulge*, situated N.E. of Nevers, in a valley between two wooded hills, has a population of 2147.

2. In the second arrondissement the chief town, *Château-Chinon*, is situated near the source of the Yonne, 37 miles S. from Nevers, on a high hill surrounded by still loftier heights which are covered with forests. It has a tribunal of first instance and 2925 inhabitants, who manufacture coarse woollens and leather, and trade in fuel-wood, charcoal, hides, wool, wheat, wine, and cattle. *Luzy*, on the Haine, a feeder of the Aron, is situated in the south-east of the department, and has a population of 2273, and some trade in wood, charcoal, pigs, and cattle. *Moulins-Engilbert*, at the foot of the Morvan Hills, a few miles S.W. from Château-Chinon, has an ecclesiastical school and 2867 inhabitants, who manufacture coarse woollens, serge, linen, and leather.

3. In the third arrondissement the chief town, *Clamecy*, stands at the junction of the Beuvron with the Yonne, and has 6002 inhabitants in the commune, who manufacture woollen-cloth, pottery, and leather, and trade largely in wood and charcoal. The town was formerly fortified and defended by an old castle. From 1168 to 1793 it was the residence of a bishop, who took his title from Bethlehem in Palestine, the original see having been suppressed by the Saracens. Clamecy has tribunals of first instance and of commerce, and a college. *Corbigny*, a town of 2124 inhabitants, situated in a well-wooded hilly country, 15 miles S. by E. from Clamecy, and near the confluence of the Anguisson with the Yonne, has cloth factories, tan-yards and a considerable trade in wood. *Lormes*, N.E. of Corbigny, formerly a fortified town defended by a strong castle still remaining, has a population of 3214. *Varsy*, 10 miles S.W. from Clamecy, is situated in a pretty valley at the foot of a high hill covered with vines, and has a population of 3132, who manufacture linen, leather, and pottery. In the neighbourhood there are several iron forges and furnaces. The town has a college, an hospital, and a town-house.

4. The fourth arrondissement takes its name from its chief town, *Cosne*, or *Cône*, the ancient *Condatis*, which stands on the right bank of the Loire, here crossed by a suspension-bridge, 32 miles N. by W. from Nevers, and has a tribunal of first instance, a college, and 6245 inhabitants. The little river Nohain, which here enters the Loire, drives the machinery of several iron-works and forges, in which anchors for the French navy are manufactured. The town is in general well built. It trades in corn, wine, nails, cutlery, timber, hemp, cattle, &c. *La-Charité*, 14 miles N. by W. from Nevers, prettily situated at the foot of vine-clad slopes on the right bank of the Loire, has a population of 6052, who manufacture cutlery, ironmongery, files, steel, bar-iron, and metal buttons. There are iron-forges, glass-works, and potteries in the neighbourhood. The town is clean, but on the whole an ill-built place. The bridge over the Loire is the most remarkable object. *Pouilly*, also situated on the banks of the Loire, a few miles below Cosne, in a rich wine district, has 3169 inhabitants. *Prémery*, N.E. of Nevers, on the Nièvre, has iron forges and foundries, tile and brick-works, and 2103 inhabitants. *Donsy*, E. of Cosne, on the Nohain, has a population of 3791, who manufacture bar- and sheet-iron, and trade in these products and in wood.

The department forms the see of the Bishop of Nevers, is included in the jurisdiction of the High Court of Bourges, within the limits of the University-Academy of Dijon, and belongs to the 19th Military Division, of which Bourges is head-quarters. It returns two members to the Legislative Assembly of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

NIGER, or QUORRA, a large river flowing through the interior of Central Africa, and entering the Gulf of Guinea by several mouths between the bights of Benin and Biafra. There seems no reason to doubt that the ancient Niger is identical with the Quorra. Herodotus (ii. 32) gives an interesting account of five young men of the Libyan tribe of Nasamonæ, which dwelt on the coast of the Greater Syrtis, who proceeded on a journey of discovery into the interior. After traversing in a southern direction the inhabited region, and next to it the country of the wild beasts, they crossed the great sandy desert in a western direction for many days, until they arrived at a country inhabited by men of low stature, who conducted them through extensive marshes to a city built on a great river which contained crocodiles and flowed towards the rising sun. This information Herodotus derived from the Greeks of Cyrene, who had it from Etearchus, king of the Ammonii, who said that the river in question was a branch of the Egyptian Nile, an opinion in which the historian acquiesced. Strabo seems to have known little of the interior of Africa and its rivers.

Pliny ('Hist. Nat.,' v. 1) gives an account of the expedition into Mauritania of the Roman commander Suetonius Paulinus, who (A.D. 41) led a Roman army across the Atlas, and, after passing a desert of black sand and burnt rocks, arrived at a river called Ger, in some manuscripts Niger. The Ger, or Niger, of Suetonius Paulinus was probably the Ghir which runs through Sejelmesa. But besides the Ger, or Niger, of Suetonius, Pliny in several places (v. 8, 9, and viii. 21) speaks of another apparently distinct river, the Nigris of Ethiopia, which he compares with the Nile, "swelling at the same seasons, having similar animals living in its waters, and, like the Nile, producing the calamus and the papyrus." In his extremely confused account, which he derived from the authority of king Juba II. of Mauritania, he

mixes up the Nigris and the Nile together with other rivers, as if all the waters of Central Africa formed but one water-course.

Throughout all these confused notions of the hydrography of interior Africa entertained by the ancients, one constant report or tradition is apparent, namely, that of the existence of a large river south of the great desert, and flowing towards the east. It is true that Herodotus, Strabo, Pliny, and their respective authorities thought that this river flowed into the Nile, but Mela, seems to have doubted this, for he says that when the river reached the middle of the continent, it was not known what became of it.

Ptolemy, who wrote later than the preceding geographers, and seems to have had better information concerning the interior of Africa, after stating the boundaries of Libya Interior, proceeds to enumerate various positions on the coast of the ocean, after which he mentions the chief mountains of Libya and the streams that flow from them to the sea. He then adds, "In the interior the two greatest rivers are the Geir and the Nigeir; the Geir unites Mount Usargula (which he places in 20° 20' N. lat., 38° E. long.) with the Garamantic pharanx (the name of a mountain which he has before stated to be in 10° N. lat., 50° E. long.). A river diverges from it at 42° E. long., 16° N. lat., and makes the Lake Chelonides, of which the middle is in 20° N. lat., 49° E. long. This river is said to be lost under ground and to reappear, forming another river, of which the western end is at 16° N. lat., 46° E. long. The eastern part of the river forms the Lake Nuba, the site of which is 15° N. lat., 50° E. long." The positions here assigned to the Geir and the direction of its main stream, from the Garamantic Mountain to Mount Usargula, being south-east and north-west, seem to point out for its representative either the Shary of Bornou and its supposed affluent the Bahr Kulla of Browns, or perhaps the Bahr Misselad of the same traveller, called Om Teyman by Burckhardt, who says that its indigenous appellation is Gr. a large stream coming from about 10° N. lat., and flowing north-west through Wadai, west of the borders of Dar-Fur. The Misselad is supposed to flow into Lake Fittre; we do not know whether any communication exists between Lake Fittre and the Tschad. From the exploration of Dr. Barth it appears that Lake Fittre is the bottom of a distinct basin, and that it is fed by the Batha, which he says receives all the smaller water-courses descending from the more elevated country at the western foot of Jebel Marah. Several streams, besides the Bahr Kulla and the Bahr Misselad, all coming from the south, flow in a north-west direction through the countries lying between Bornou and Dar-Fur, and the Geir of Ptolemy may have been the representative of any or all of them. Linant was informed by some Takrousi pilgrims from Dar-Sille that they travelled two months on the Bahr-al-Abiad before they arrived at Sennar; and that before arriving at the Abiad they followed the course of another river upwards; and that the Abiad had its rise in a country called Bahr-el-Lesse, from which some of the waters flow towards Marok, that is to say, to the north-west.

We now come to Ptolemy's Nigeir, which he makes quite a distinct river from the Geir, and places it to the westward. He says that it joins the mountain Mandrus, 19° N. lat., 14° E. long., with the mountain Thala, 10° N. lat., 38° E. long. Its course is thereby defined as much longer and in a less oblique line to the equator than the Geir. In fact it would correspond tolerably well with the actual direction of the course of the Joliba and that of the Rima or River of Sakkatoo, supposing that river to form a communication with Lake Tschad, as Ptolemy says that the Nigeir has a divergent to the Lake Libye, which he places in 16° 30' N. lat., 35° E. long.; and the words of the text seem to express that the water ran into the lake, so that the course of the Nigeir, according to Ptolemy, as well as his predecessors, was easterly, as the Joliba or Quorra actually runs for a great part of its course. "The Lake Libye," observes a distinguished geographer, "to which there was an easterly divergent, I strongly suspect to have been the Lake Tschad, notwithstanding that the position of Libye falls 300 geographical miles north-westward of this lake, for the name of Libye favours the presumption that it was the principal lake in the interior of Libya; it was very natural that Ptolemy, like many of the moderns, should have been misinformed as to the communication of the river with that lake, and that he should have mistaken two rivers flowing from the same ridge in opposite directions, one to the Quorra and the other to the Tschad (I allude to the Sakkatoo and the Yec rivers), for a single communication from the Quorra to the lake." (Leake in 'Royal Geographical Journal,' vol. ii.)

But Ptolemy, after all, may not have been so much misinformed with respect to a communication existing between the lake and his Nigeir, if, as is now strongly suspected, the communication really exists, though in an inverse direction from that which Ptolemy appears to have understood. Captain Allen ('London Geog. Journal,' vol. viii.) surmises that the river Tschadda, which at its junction with the Quorra, just above the beginning of the delta, is larger than the Quorra itself, receives an outlet from the lake somewhere about the town of Jacobah. The Arabian geographers of the middle ages, Edrizi, Abulfeda, and Leo Africanus, state that the Nil-el-Abid, or 'River of the Negroes,' flowed from east to west. The Tschadda then would be the river of the Arabian, and the Joliba, or Upper Quorra, that of the Greek and Roman geographers. Both were ignorant of the real termination of their respective streams. "It is nevertheless remarkable,"

says Leake, in the paper already quoted, "that the distance laid by Ptolemy between his source of the river and the western coast is the same as that given by modern observations; that Thamondocana, one of the towns on the Niger, is exactly coincident with Timbuktu, as recently laid down by M. Jomard from the itinerary of M. Caillié; that the length of the course resulting from Ptolemy's positions is nearly equal to that of the Quorra as far as the mountains of Kong, with the addition of the Tchadda or Shary of Funda, and that his position of Mount Thala, at the south-east extremity of the Niger, is very near that in which we may suppose the Tchadda to have its origin; so that it would seem as if Ptolemy, like Sultan Bello and other modern Africans, had considered the Tchadda as a continuation of the main river, though he knew the Egyptian Nile too well to fall into the modern error of supposing the Niger to be a branch of the Nile. The mountains of Kong, and the passage of the river through them at right angles to their direction, formed a natural termination to the extent of the geographer's knowledge."

Great light will be thrown on the geography of Central Africa by the publication of the explorations made since 1850 by Dr. Overweg, Barth, and Vogel. The determination by the latter of the elevation of Lake Tchad above the level of the sea—namely, 850 feet—puts an end to the theory that this lake was connected with either the Nile or the Quorra. In the account published by Mr. Petermann of the discoveries of Dr. Barth, the country to the south-east of Lake Tchad, comprising the basin of the Shary and others of its feeders for some 200 or 300 miles, presents a level plain almost imperceptibly inclined towards the lake; and the country west from the Shary to the Benueh, or Upper Tchadda, has in all probability a similar character of flatness. Dr. Barth, who in 1851 surveyed Lake Tchad and examined the countries forming its basin, mentions the Serbenel, a feeder of the Shary in the Mandara country south of Bornou, as a very considerable river. The Serbenel, which is called Loggene lower down, joins the Shary at a village named Sheggua, below Kusseru or Kusery. At Masafia, the capital of Baghirimi, the Shary, or Asu, runs due north 8 miles an hour, with a width of 600 yards; it subsequently falls into Lake Tchad. Dr. Barth calls it a magnificent river, and says that it extends to the basin of the Nile. The Serbenel and the Shary run nearly parallel above their junction, and are probably branches of the same river.

The Tchadda in its upper course is called the *Benueh*, and rivals if it does not surpass the Quorra in magnificence; and from the level nature of the country it is presumed that it presents no such obstacles to navigation as rapids or falls. The Benueh was crossed by Dr. Barth in his journey to Adamaoua, a very beautiful pastoral and agricultural country on the Upper Tchadda, at a part where it was half a mile wide and ten feet deep. Yola, the capital of Adamaoua, is placed by Dr. Barth in 8° 2' N. lat., 13° 5' E. long. A notion has lately gained ground that the Tchadda presents the most important and the readiest opening for the extension of European influence and civilisation into the interior of Africa. A flat-bottomed steamer, fitted up at the expense of Mr. McGregor Laird for the exploration of the river, left Birkenhead in 1854 so as to reach the mouth of the Niger by the 1st of July, from which time it was calculated that seventy-five days (during which its waters rise) would be sufficient to reach the head of the navigation of the Tchadda. This expedition returned to Fernando Po on Nov. 7, having spent 118 days on the Niger and the Tchadda without losing a single life. The Tchadda was ascended 350 miles, or 250 miles above Dagbeh, which had been reached in the expedition of 1852.

The *Quorra* rises in Mount Loma, a part of the Kong Mountains, which extend eastward from the coast of Sierra Leone, near 9° 25' N. lat., 9° 45' W. long. The French traveller Mollin says that the Quorra rises in 8° 20' N. lat., 9° 10' W. long. This difference may easily be accounted for by observing that many streams rise in a mountainous country which unite to form a great river, and that each of them may be considered as the source of such a river. The most western of these tributaries, that of which Major Laing got information as rising in Mount Loma, is properly considered the principal river. It runs near its source due north for about 70 miles, and is there called Timbia. It then turns to the north-east, and exchanges its name for that of *Baba*, and *Joli-Ba* (that is, large river), under which name its course as far as Timbuktoo is known, the name of Quorra being only applied to the lower portion of its course. Caillié crossed the Joliba at Curuassa, about 100 miles from its source, and found that it was navigated by large canoes. It flowed in a wide valley from south-south-west to north-north-east, which was surrounded by hills from 150 to 200 feet high. The soil of the valley was fertilised by the inundations of the river. The mountains in the neighbourhood are rich in iron-ore, and contain gold.

From Curuassa to Bammakoo, a distance exceeding 200 miles, the course of the river is unknown; but that portion of it which lies between Bammakoo (13° N. lat., 5° 20' W. long.) and Timbuktoo (18° N. lat., 3° 40' W. long.) has been laid down by Mungo Park and Caillié. Mungo Park, who was the first European traveller who reached the banks of that river, in his first journey travelled along the banks of the river from Bammakoo to Silla, a distance of about 160 miles. Between Bammakoo and Tabbec the river runs in a north-east direction, in a wide valley which produces good crops of rice, maize, and

vegetables, and has good pastures; it is pretty well inhabited, and there are several towns on the banks of the river. At Tabbec the Quorra enters the plain of Sídán, and it runs to the east as far as the town of Jennee. From Tabbec to Silla, the end of his travels, Mungo Park found the country on both sides of the river extremely fertile, well cultivated, and studded with towns of considerable size and many villages. In the rainy season the country to a considerable distance from the river is inundated. The current of the river is moderate, and offers no impediments to navigation; large river-boats are frequently seen both ascending and descending. In his second journey Mungo Park embarked at Segou, and descended the river more than 1000 miles to the town of Boussa (10° N. lat., 4° 40' E. long.), where his boat was wrecked and he was killed. Thus the information which he had obtained respecting this part of the course of the river and the countries adjacent to it was lost to the world. But Caillié has partly supplied the loss. He descended the river from Jennee to Timbuktoo, and found the banks in some places well cultivated and rather populous. The general course of the river was north as far as the Lake of Debo, and even to some distance farther; but afterwards it turned to the north-north-east, and continued so to the town of Timbuktoo, or rather to its port, Cabra. The river-barges which navigate this part of the river are from 60 to 80 tons burden, and take the produce of the country—rice, millet, corn, honey, butter of the shea-tree, &c.—to Timbuktoo and other large places. The crews consist of about 20 men: the boats use no sails. The Lake of Debo, through which the Quorra flows, south of 16° N. lat., is of considerable extent; it is perhaps 10 miles from south to north, but it occupies a much greater space from east to west. North of the lake, where the river flows to the north-east, cultivation is more general, and the number of villages is greater. Some of them carry on a considerable traffic with Timbuktoo. The winter at Timbuktoo, according to Dr. Barth, who visited it in 1853, is severely felt, coughs and colds being very prevalent, and the air relaxing, owing to the inundations of the river. In approaching Timbuktoo the Quorra separates into two branches, which appear to unite at no great distance farther down. On the smaller and more northern of these branches is Cabra, the port of Timbuktoo. From Timbuktoo the river seems to run in a general south-east direction to Yauri. It seems that the Quorra leaves the great plain of Sídán before it reaches the neighbourhood of Yauri. Above Yauri it flows through the interesting country of Dindina, a long narrow strip of land on both banks inhabited by a tribe of Tuaricks, who are distinguished for their industry and civilisation above the neighbouring tribes. The Rima or Sakatu River, also called Zirmi, joins the Quorra from the east to the south of the Dindina country; it flows past *Sakatu*, the best provided market and largest town in the Fellata country. This town is built in the form of a square; has 8 gates, according to Dr. Barth, and about 23,000 inhabitants. Sakatu is no longer the Fellata capital; *Wurao*, a town of 13,000 inhabitants, founded in 1831, and situated also on the Rima, 17 miles N.E. from Sakatu, now enjoying that distinction. Dr. Barth, the illustrious explorer of Central Africa, died at Menade on his return from Timbuktoo to Kuka, July 18th, 1854. Kashna, or Katsena, and Kano, are two very important places in the interior, between the Quorra and Lake Tchad. At Kano considerable quantities of British and American manufactures are sold: the former are sent across the desert from Tripoli and the Mediterranean coast; the latter, according to Dr. Barth, are sent up the Quorra in steamers by the Americans, who are extending their influence widely in these regions. A Fellata province near the Quorra called Kebbu (capital, Gando) is described by Dr. Barth as a most fertile, well-watered, and populous region, with "innumerable" large towns and villages.

From Yauri to its mouth, the river Niger has been navigated by the Landers. Between Yauri and Rabba (9° N. lat.) the river runs nearly south, and then it makes a great bend to the east; but before it arrives at 8° 24' lat., near which it is joined on the left bank by the Tchadda, it again runs south. That portion of its course which lies between Yauri and 7° N. lat. is only navigable during and after the rainy season; at the end of the dry season the bed of the river is full of rocks, sandbanks, and shoals. In these parts the river runs through a mountainous country, but the valley is low, and annually inundated; it is however very fertile, and villages and cultivation are common. The mountains by which this valley is inclosed rise to a considerable elevation, and with a gentle declivity. Between 8° and 7° N. lat. the lower offsets of the mountains on both banks of the river come close up to the water, and where they recede from it the interval is not very wide. The declivities of the mountains are covered with woods. This narrow valley does not contain so large a population as the wider one farther north. Near Abbasacca (about 6° N. lat.) the river leaves the mountain region, and enters a low alluvial plain, or delta, in which it divides into a great number of branches. The delta is mostly covered with swamps or jungle. Some parts of it are covered with high forests. The more elevated tracts of the delta are cultivated, and villages occur at distances of two or three miles, but most of them are surrounded by jungle, and not viable from the river. The river is frequently more than two miles wide, but in several places it contracts to a mile and even less, especially towards its mouth. The tide is perceptible to about 100 miles from its mouth. The principal arm or mouth of the river is that called the Nun.

The whole course of the Quorra probably exceeds 2500 miles. The Tchadda, which joins it near 8° N. lat., is not inferior in size to the Quorra; indeed some think the Tchadda to be the principal river. The volume of water brought down by the Tchadda evidently shows that it must have a long course; and this, with some other facts, induced Captain Allen to suppose that the Tchadda is the channel by which the Lake Tchad discharges its waters into the Quorra—a supposition which has hitherto received no confirmation. From the facts stated in a preceding part of this article it might be questioned whether Lake Tchad has any outlet at all.

Several expeditions have been undertaken to explore the Quorra, but generally speaking, they have failed to make us much better acquainted with the river. In the year 1832, Mr. McGregor Laird, and some other gentlemen of Liverpool, formed an association for the purpose of opening a direct communication with the interior of Africa by ascending the Quorra. Two steam-boats were fitted out for the expedition, and a sailing vessel was also equipped to carry out the goods with which it was proposed to trade with the natives. Richard Lander, already known by his African journeys, was engaged to take the direction of the expedition, which was also joined by Lieutenant Allen, for whom the Admiralty had requested a passage for the purpose of making a survey of the river. The expedition reached the mouth of the Quorra in safety, and the river was ascended to Rabba in 9° N. lat.; the Tchadda was also ascended to Dagbeh, in 8° N. lat., a distance of above 100 miles from its confluence with the Quorra. The results of the expedition were most disastrous. It was indeed shown that the Quorra is navigable in moderate-sized vessels from the sea to Bousa; but as a commercial speculation the expedition entirely failed, and it was attended with a melancholy loss of life caused by the climate. Only nine persons of those aboard the steamers survived; among these were Mr. McGregor Laird and Lieutenant Allen. Expeditions sent out by government in 1841 under Captain Allen, and others fitted out since, ended with similar results, the insalubrity of the climate being the main obstacle to the success of the different enterprises.

(Park; Mollie; Laing; Caillié; Clapperton; Lander, *Journal*, *London Geographical Journal*, vol. viii.; Laird and Oldfield, *Narrative of an Expedition into the Interior of Africa*; Petermann, *Account of the Progress of the Expedition to Central Africa in 1850-53*; *Athenæum* for 1852-54.)

NIGRITIA is a term, formerly applied by geographers to that part of Africa at present known by the name of Soudán. [SOUDÁN.]

NIKOLAJEFF. [CHERSON.]

NILE (*Nilus*, in Latin), the name of the great river of Eastern Africa, the various branches of which have their rise in the high lands north of the equator, and, flowing through Abyssinia and other regions to the westward of it, meet in the country of Sennar. The united stream flows northward through Nubia and Egypt, and after a course of more than two thousand miles from the farthest explored point of its principal branch, enters the Mediterranean by several mouths, which form the delta of Egypt. The word Nil seems to be an old indigenous appellation, meaning river, like that of Gir in Soudán and other countries south of the Atlas. The modern Egyptians call the river Bahr-Nil, or simply Bahr; in Nubia it is called by various names; in Sennar the central branch, or Blue River, is called Adit; and in Abyssinia, Abawi. The three principal branches of the Nile are:—1, the Bahr-el-Abiad, or White River, to the west, which is now ascertained to be the largest and longest; 2, the Bahr-el-Azrek, or Blue River, in the centre; 3, the Tacazze, or Atbara, which is the eastern branch. These three branches were known to Ptolemaeus, who seems to have considered the western as the true Nile, and to have called the others respectively Astapus and Astaboras, but his knowledge of them was very limited. The Bahr-el-Abiad was traced upwards by Linant in 1827 as far as Aleis, a direct distance of 132 geographical miles south of Khartum, which is in 15° 34' N. lat. and about 32° 30' E. long., and at the confluence of the Blue and White Rivers. In 1840, 1841, and 1842, expeditions were sent by the Pasha of Egypt to explore the course of the river to its sources, accompanied by some Europeans of scientific acquirements, among them Dr. Werne, a Prussian surgeon, who published an account of the second expedition. In the first the party marched upwards from Khartum for 35 days along the banks of the river, when they began to retrace their steps. At this point the river was shallow, full of islands, and six hours in breadth; and there were no mountains in sight. The latter part of the march appears to have been in a direction nearly west, and as the first island of the Shilluks, which they reached on the twelfth day, is not far from Aleis, according to Linant's statement, the extreme point attained was probably about 10° N. lat. and 29° E. long. By these expeditions it has been ascertained, that as far south as Aleis the Bahr-el-Abiad is in general from one to two miles wide, and runs in a bottom, which is generally four miles wide, but sometimes even six miles. Farther south the river is three miles wide, and contains a great number of low islands. Near 9° 11' N. lat. the Bahr-el-Abiad is joined from the east by a large tributary, the Sobat, which is supposed to rise in the mountains of Abyssinia, and brings down a volume of water nearly equal to that of the principal river. Above this point the Bahr-el-Abiad flows from west to east for about a hundred miles, and appears to traverse an

immense swamp interspersed with many smaller and larger lakes, one of which is stated to cover an area of 420 square miles. The river is completely navigable, without cataracts and even without rapids. At length the expeditions arrived in the country of a black nation called the Barrys, where their progress was stopped by a ledge of gneiss, which traversed the river in all its width. Here the current was estimated at six miles an hour, and mountains became visible, extending from east to west. This point, the farthest advance of Dr. Werne, was in 4° 42' N. lat., 30° 58' E. long. The natives stated to Dr. Werne that the sources of the river were much farther south.

About the end of 1845 M. Anthony d'Abbadie claims to have found the source of the White Nile in a stream called the Gibe, the source of which, in the mountains of Marya, he reckons to be in 7° 49' 45' N. lat., and in 36° 2' 39" E. long., thus making the river bend round to the north and east. But Dr. Beke and others still contend, founding their belief on information obtained from natives, from the mass of water brought down, and other reasons, that the Gibe of M. d'Abbadie is at most only an affluent, and that the true source is not yet discovered, though it probably lies in a range of mountains in about 2° S. lat. This theory he considers to be confirmed by the intelligence obtained by Dr. Krapf (one of the explorers of Africa from the eastern coast) in 1851, who heard of a river issuing from a large lake at the foot of the mountains of Kenia, flowing northward through another lake, and having an immense body of water.

Since Dr. Werne's visit the Pope's Vicar-General in Africa, Dr. Knoblecher, who has a missionary establishment at Khartum, has ascended the White Nile somewhat farther. He reached 4° 9' N. lat. in the country of the Barry negroes in 1850, twice ascended a mountain called Lognek, and saw the river trending away in a south-westerly direction, until it was lost between two mountains. He was also informed by the natives that beyond these mountains the river came straight from the south. The river was about 625 feet wide, and from 10 to 15 feet deep.

The Bahr-el-Azrek, or Blue River, which was long supposed to be the main branch of the Nile, has three sources in the high land of Gojam, near the village of Geesh, south-west of Lake Dembea, in 10° 59' 25" N. lat., 36° 55' 30" E. long., according to Bruce's observations. The Agows, who inhabit that district, worship the river. [ABYSSINIA.] The sources of the Azrek appear to have been visited by Father Pass, and perhaps by other missionaries, long before Bruce. After a north and north-west course of about 70 miles, the Azrek, or Abawi, as the Abyssinians call it, enters the Lake Dembea or Tsana on its south-western side. This fine lake is 65 miles in length from south-east to north-west, according to Bruce's map, and above 30 miles in its greatest breadth; its surface is more than twice that of the Lake of Geneva. It occupies the centre of an elevated table-land, surrounded by hills and mountain ranges, from which numerous streams fall into the lake. The Blue River, issuing from the lake at its south-east extremity, runs first to the south-east, forming a large cascade at Alata; after which it flows nearly due south, and then turns to the south-west, encompassing the provinces of Gojam and Damot, and leaving Amhara proper on its right or eastern bank. After receiving several affluents from the high lands of Shoa and Efa, it turns to the north-west, forming a curve which twice intersects the tenth degree of north latitude. The vast tract between this branch and that of the White Nile is yet unexplored; it is nominally dependant on Sennar, and is inhabited by the Denka, the Shilluks, the Bokki, and other negro tribes, who are pagans. Continuing its course in a north-north-west direction, towards the low country of Sennar, the Azrek, or Adit, as it is here called, passes by the town of Sennar, which is on its left bank, in about 13° 30' N. lat., 33° 45' E. long. Continuing to flow nearly in the same direction, it receives on its right bank the Dandar, Rahat, and other streams which flow from the outer or western side of the highlands which inclose the basin of Lake Dembea. At Khartum the White and Blue Rivers unite, the former being the wider. After passing Halfay the united stream of the Nile bends towards the north-east, passes by Shendy and the ruins of Meroe, and on entering the country of Berber it receives on its eastern bank the Tacazze or Atbara, the third great confluent of the Nile.

The Tacazze, perhaps the Astaboras of the ancients, rises in the high mountains of Lasta, in about 11° 40' N. lat., 39° 40' E. long. Its sources were known to the Jesuit missionaries in Abyssinia, and have been visited of late years by Pearce. It flows for a considerable distance in a northern direction between the range of the Samen Mountains on the west, and those of Lasta, Salowa, and Bora on the east. It receives on its right bank the Arequa from Antalo. On arriving at 18° 15' N. lat. the Tacazze turns to the north-west, forming the boundary between the kingdom of Amhara, on its left, and Tigre on its right bank. The river has numerous rapids, which render it fordable at most seasons of the year. Salt saw in it enormous crocodiles of a greenish colour and large hippopotami. Proceeding north-west through the lowlands of Waldhuba and Walkayt, about 14° 50' N. lat., 36° 40' E. long., it receives on its left bank the Angrab, which rises on the north slope of the highland of Dembea. It afterwards receives several other streams which come from the same direction and pass through the country of Ras-el-Feel. It then inclines more to the north; and between the parallels of 16° and 17° N. lat.

in the country of the Taka, it receives on its eastern bank the Mareb, a considerable stream which comes from Tigre. The Tacazze then passes Gous Radjib, and inclines again to the north-west, forming the boundary of the so-called island of Meroe and the Berber country; and after receiving the Mogren on its right bank, at last enters the Nile at 17° 45' N. lat., and about 34° 5' E. long.

The Nile, from the confluence of the Tacazze down to its entrance into the Mediterranean, a distance of 1200 geographical miles measured along the course of the river, receives no permanent streams; but in the season of rains it receives wadys, or torrents, from the mountains which lie between it and the Red Sea. After flowing through Berber in a north-north-western direction, a populous and fertile district, and full of villages, the Nile enters a barren and dreary country, where the desert sands come close to the river's edge. The rocks and stones of the desert are generally of black granite. No verdure is to be seen, except on the margin of the river. On arriving at about 19° N. lat. the Nile turns nearly direct west, and forms the large island of Mograt. The Nile below Mograt turns abruptly to the south-west. This is known as the great bend of the Nile. Arriving at the village of Korti, 18° N. lat., 31° 50' E. long., the river turns to the west; and after a course of about 30 miles in that direction, it resumes a northern course, flowing through the province of Dongola. The breadth of the cultivable land on each bank through the Dongola country, which is above 100 miles in length, varies from one to three miles, beyond which is the desert. The left or western bank is the more fertile, the eastern bank being in many places sandy and barren. North of Argo, in 19° 40' N. lat., the Nile enters the province of Dar Mahass, in Lower Nubia, where it forms a cataract, or rapid, commonly called the third cataract by those who ascend the river. After several windings the river inclines to the north-east; and near 22° N. lat. forms the second cataract, called Wady Halfa, after which it passes the splendid temple of Abusamboul, or Ipsamboul. Continuing its north-east course, the Nile passes by Derr, Dndour, and Kalabsheh; and at about 24° N. lat. forms the last cataract between granite rocks which cross the river near Essouan, or Assouan. Along this tract of Lower Nubia the valley of the Nile is very narrow; about Kalabsheh it rises between 30 and 40 feet perpendicularly during the inundation; and after it has subsided, in February, according to Sir J. G. Wilkinson, the stream runs at a rate of two or three nautical miles an hour.

After entering the boundaries of Egypt the Nile flows through the whole length of that country, which it waters and fertilises. Egypt owes to the Nile its very existence as a productive and habitable region, and accordingly, in olden times, the people worshipped the beneficent river as their tutelary god. [See SUPPLEMENT.]

NILGHERY MOUNTAINS, [HINDUSTAN.]

NIMEGUEN, [GUELDBRAND.]

NÎMES, or NISMES, capital of the French department of Gard, stands at a short distance from the right bank of the Gard, in 43° 50' 36" N. lat., 4° 21' 8" E. long., 30 miles by railway N.E. from Montpellier, and had 49,480 inhabitants in the commune in 1851. Nîmes, the ancient *Nemausus*, is a town of great antiquity. Strabo (p. 186, Casaub.) notices it as the capital of the Volcæ Ariscomisci. It submitted to Rome, B.C. 119, but retained its own laws and enjoyed the 'Jus Latii,' by virtue of which those elected to the ædileship or quæstorship in Nemausus acquired the rights of Roman citizens. It was fortified with walls and gates by the emperor Augustus, about 14 years before the Christian era. On the downfall of the Roman empire Nîmes fell into the hands of the Visigoths; it was taken in the beginning of the 8th century by the Moors, from whom it was wrested by Charles Martel, at whose hands the town suffered much. In the religious wars of the 16th century it was one of the strongholds of the Calvinists: it submitted to Louis XIII., who dismantled the fortifications. In the earlier periods of the French revolution (1791) and on the second restoration of the Bourbons (1815) it was the scene of serious intestine troubles, political and religious.

Of all the towns in France, Nîmes preserves the most striking memorials of its ancient grandeur. The ancient temple, now called Maison Carrée, which is considered to be a master-piece of architecture, is the best preserved Roman monument in the city. Its ground plan is a rectangle 84 feet long by 44 feet wide; the interior length is 52½ feet; the breadth and height are 39½ feet each. It is surrounded by 30 fluted Corinthian columns, so arranged as to present 11 on each side, 6 in the front, and as many at the back. The cornice and frieze which run all round the building, and the capitals of the columns, are regarded as models of architectural beauty. The only entrance to the building is by a door in the front under the portico, the ascent to which is by 15 stone steps. As there were originally no windows, it is conjectured that light was obtained by openings in the roof. There is reason to believe that this structure was only the sanctuary of a vast temple, the walls of which have been lately traced. The age of its erection is unknown, but from some traces of an inscription it is supposed to have been dedicated to Marcus Aurelius and Lucius Verus. In the middle ages it served as a town-hall: in the time of Louis XIV. the canons of St. Austin fitted it up as a church: it is now completely restored, and used as a museum of antiquities and a painting gallery.

The amphitheatre, which is near the Maison Carrée, is in form an ellipse, the major axis of which, extending from east to west, is

431½ feet in length and the minor axis 337½ feet, including the thickness of the walls. The inclosing structure consists of a lower and an upper story, each pierced by 60 arcades; the whole is surmounted by an attic, the summit of which is 70½ feet high. The lower or ground story is adorned with pilasters, and the upper with Tuscan columns. The attic shows the holes destined to receive the posts on which was stretched the awning that covered the amphitheatre. The rows of seats were 24 in number. There were four principal entrances, one facing each cardinal point. The amphitheatre was capable of holding 24,000 spectators. It was built with great solidity without cement. The stones were quarried in the neighbourhood, and some of them are of immense size. The building stands isolated in the midst of a wide open space, and with the exception of the seats may be said to be in almost a perfect state. The arena is now used for bull-coursing and for wrestling matches.

The edifice called Temple de Diane, but which was in reality a hydraulic edifice connected with the adjacent baths, is a mere ruin. The interior still exhibits some remains of a fine vaulted roof and of the niches and columns which once adorned it. The baths and the fountain which supplied them have disappeared, but their plan has been traced; a fountain erected under Louis XIV. disfigures the site. The waters of this fountain are conveyed by a canal round one of the public gardens of the town, and the place of the baths is occupied by statues and groups in marble, of modern date and inferior execution. A beautiful fountain was erected in June, 1851. In the centre of an octagonal basin on an 8-sided pedestal stands the personification of the city crowned with a temple, which seems to be a model of the Maison Carrée; on the four contreforts of the pedestal are four figures of river-gods. The sculptures are of Carrara marble; the basins and body of the fountain of stone. The basins are 8 feet high, and the diameter of the basin in which the whole stands is 38 feet.

The Tour-magne, supposed to be a Græco-Celtic mausoleum and the oldest monument of antiquity in Nîmes, is a tower which originally consisted of several stories diminishing in circumference and differing in form as they rose from the lowest. The ruin now presents a lower story of heptagonal form, 321 feet in circumference, and an upper story, which is octagonal. The original height of the structure was 124 feet, but what now remains of it is only 78½ feet high. It stands on an elevation, and is joined to the ancient walls of the town.

There are two Roman gates. One of them, called Porte d'Auguste, was discovered in 1791, on pulling down some ramparts erected in the 12th century. This gate is built of large blocks of freestone, and has two large arches in the middle, and two smaller arches, one on each side. It bears an inscription, showing that the gates and walls were the gift of Augustus Cæsar to the colony of Nemausus.

Besides these remains Nîmes has a vast number of inscriptions, monumental and other, and one or two fine mosaic pavements. In the neighbourhood there is a Roman bridge.

Nîmes is situated in a delightful plain at the foot of hills covered with vineyards and olive-gardens. The city, properly so called, has narrow, crooked, and ill-built streets; it is surrounded by boulevards, which occupy the site of the ancient ramparts, and separate it from its suburbs, which at least equal it in extent, and have straight, wide streets, but the houses are ill built. Of the public edifices the most remarkable are the court-house, the former citadel which is now used as a central prison, the hospital, the theatre, the cathedral, and the college church. The cathedral contains some interesting monuments, among others the tomb of Fléchier; its pavement is 159 feet above the level of the sea.



Bronze Coin of Nîmes, from the Museum of Avignon.

This coin is the celebrated 'Pied de Biche,' which is very rare. There is a similar coin which is so common that it is often found current with the copper money of France. The two heads are said to be those of Agrippa and the emperor Augustus; that on the right hand is Augustus, and that on the left is Agrippa. The inscription is read, "Imperator Divi Pilius Pater Patriæ." The crocodile chained to a palm-tree, surmounted by a streamer, is said to commemorate the victory of Actium and the subsequent reduction of Egypt, of which the crocodile is the symbol. The words 'Col. Nem.' (Colonia Nemausus) refer to the founding of the colony by Augustus. (Rasche, 'Lexicon Rei Numaricæ'.)

Nîmes has long been an important manufacturing town. Its importance has been lately on the increase in consequence of its being the centre from which the railways diverge that connect the town with Alais, Montpellier, Cette, Arles, Avignon, and Marseille. The principal manufactures are fancy silk goods, silk stockings and caps, hosiery of all kinds, velvet, small wares, printed cottons, shawls, handkerchiefs, chintzes, &c. There are several dye-houses, potteries, brandy-distilleries, vinegar-works, and tan-yards; and the town is the great mart for the raw silks of the surrounding district. Nîmes carries on considerable trade in these productions; and in wine, spices, drugs, oleaginous seeds, medicinal plants, and dye-stuffs.

Nîmes gives title to a bishop, whose see is the department of Gard. It has a High Court, which has jurisdiction over the departments of Ardèche, Gard, Lozère, and Vaucluse; there are also tribunals of first instance and of commerce, a chamber of commerce, and an exchange, a council of prud'hommes, a theological college, an endowed college, a school of design, a botanical garden, several cabinets of antiquities, and a public library of 30,000 volumes. By recent legislation of the French empire the University-Academy of Nîmes has with some others been suppressed, and the department of Gard is now placed within the limits of the University-Academy of Montpellier.

NINEVEH, called by the Greeks and Romans Ninus, the capital of the Assyrian empire, was situated in the plain of Aturia, on the left bank of the Tigris, opposite to the modern town of Mosul. The Hebrew and Greek writers concur in describing Nineveh as a very large and populous city. Jonah speaks of it as "an exceeding great city of three days' journey" (Jon., iii. 3), and states that there were more than 120,000 persons in it that knew not their right hand from their left (iv. 11). Rosenmüller and other commentators suppose this to be a proverbial expression to denote children under the age of three or five years, and accordingly estimate the entire population at two millions. Strabo says that it was larger than Babylon (xvi. 737); but if any dependence is to be placed on the account of Diodorus (ii. 3), who states that it was 480 stadia in circumference, it must have been about the same size as Babylon. (Herod., i. 178.) The walls of Nineveh are described by Diodorus as 100 feet high, and so broad that three chariots might be driven on them abreast. Upon the wall stood 1500 towers, each 200 feet in height, and the whole was so strong as to be deemed impregnable. (Diod., ii. 3; Nahum, chap. ii.)

According to the Greek writers, Ninus was founded by a king of the same name; but in the book of Genesis it is only stated to have been built by the Assyrians, which appears to be the meaning of the passage in Gen., x. 11. It was the residence of the Assyrian kings (2 Kings, xix. 36; Isaiah, xxxvii. 37; Strabo, ii., p. 84; xvi., p. 737), and is mentioned as a place of great commercial importance; whence Nahum speaks of its merchants as more than the stars of heaven (iii. 16). But as in the case of most large and wealthy cities, the greatest corruption and licentiousness prevailed, on account of which Nahum and Zephaniah (ii. 13) foretold its destruction.

On the dissolution of the great Assyrian monarchy, in the 8th century B.C., Nineveh was taken by the Medes under Arbaces, in consequence of the river demolishing part of the wall; when it is said to have been destroyed. (Diod., ii. 26-28.) But it appears to have still existed as the capital of an Assyrian kingdom till B.C. 625, when it was taken by the Medes under Cyaxares. (Herod., i. 106.) Strabo says that it fell into decay immediately after the dissolution of the Assyrian monarchy by the Medes (xvi., p. 737); and this account is confirmed by the fact that in the history of Alexander the Great the town is not mentioned, although in his march along the banks of the Tigris, previous to the battle of Gaugamela, he must have been very near the spot where it is supposed to have stood.

Until the recent discoveries of M. Botta and Dr. Layard the site of Nineveh was a matter of conjecture. According to Abulfaraj and the general testimony of Oriental tradition, most modern writers supposed it to have been situated on the left or east bank of the Tigris, opposite Mosul, and partly on the site of the modern village of Nunia, or Nebbi Yunus. At first sight the ruins of Nineveh present the appearance of a range of hills; but from all these hills large stones, frequently with bitumen adhering to them, are constantly dug out in great numbers. The bridge over the Tigris is said by Rich to have been entirely built of stones dug out of the ruins of Nineveh, which, he adds, is an inexhaustible resource. On the largest of these hills or mounds there is a mosque, which is supposed to cover the tomb of Jonah. The walls and ditches which surrounded part of the city may still be traced very clearly in many parts. It was also Rich's opinion that the part inclosed by these walls (four miles long by two miles broad) formed only "a part of a great city, probably either the citadel or royal precincts, or perhaps both, as the practice of fortifying the residence of the sovereign is of very ancient origin. There are very few traces of ruins outside these walls; but they may probably exist to a greater extent than has yet been supposed, since Rich relates that people digging for stones in a place outside the inclosure, found huge stones laid in layers of bitumen and lime mortar.

M. Botta, consul of France at Mosul, led the way to settling the question about the site of Nineveh by making excavations in 1843. He began with some operations in the inclosure on the river, just alluded to. He found only some bricks and fragments of no value. Meantime the inhabitants of the environs, seeing the consul engaged

in these researches, brought him bricks with inscriptions, and other remains of antiquities, which induced him to send his workmen to the village of Khorsabad, distant about five hours N.E. from Mosul, on the left bank of the Khauser. M. Botta's researches in this place proved more successful. Commencing his excavations in a small mound, his workmen soon came upon a building remarkable for the number and style of the sculptures with which it is adorned, and which appears to have been a royal palace. "The figures," says M. Botta, "though rather stiff, are well designed, the attitudes admirable, the muscles strongly marked, and the hands, feet, and ornaments very carefully executed. I have no doubt that the building has been destroyed by fire [the slabs had the appearance of gypsum, or alabaster]; on the ground were found a quantity of charcoal and some remains of burnt beams." Some of the slabs had on the back also cuneiform inscriptions.

Among the most interesting of M. Botta's discoveries were two colossal statues of bulls, 15 feet high, with human heads, and between them a passage 7½ feet wide, forming a portal of a striking character and of great magnificence. These bulls were winged; they are not properly statues, but in high relief. They have five legs, so contrived that from whatever side you look at them, one leg being hid by another, four legs are always to be seen. On each of the walls of the passage to which this is the entrance there is a figure with the head of a bird of prey; the hair is regularly braided; on the head is a sort of cup which comes down to the shoulder. The figure has a necklace, armlets, and bracelets, and wears a short tunic with a fringe girdle. On the opposite side of the chamber M. Botta afterwards found a similar portal. M. Botta resolved to send two of these bulls to Paris; but unfortunately the excavations made by the workmen deprived the calcined limestone of its only support, and very soon after their discovery these long buried architectural ornaments and historical records fell in pieces. Many sculptures however, and inscriptions, were sent to France, where they form an Assyrian museum. Drawings were made of most of the sculptures by M. Flandin, a French artist sent out for the purpose. In these drawings the manners and customs, the religion, the art of war, the costumes, and the instruments of the people who built the palace, are delineated in faithful copies of the bas-reliefs. The principal figure in most of them is a sovereign, king, or hero; on his head he wears the tiara, his forehead is low and prominent, his eyebrows thick; his hair and beard fall straight on the shoulders and breast, terminating in large ringlets. The dress, which appears to have been extremely magnificent, consists of a richly-embroidered tunic, and an upper garment resembling the surplice of a Roman Catholic priest. This figure appears, sometimes engaged in combat, driving his enemies before him; sometimes seated at an entertainment; and sometimes in a solemn procession, guiding a chariot with four horses abreast. Among the many figures of combatants there is frequently a shield-bearer, under whose protection another warrior draws his bow or poises his lance. M. Victor Place has continued the French researches on the site of Nineveh, and several antiquities, including the monumental gates of the city, four gigantic bulls, several bas-reliefs, many utensils of earthenware, copper, and iron, and a number of very ancient statues, are now (Feb. 1855) on their way to France.

Since M. Botta's first discoveries were made known to Europe still greater additions to our knowledge of Nineveh have been made by Dr. Layard, who spent much time in making excavations in the great inclosure near the Tigris, before mentioned. Here, in the Mound of Nimroud, he discovered the ancient palace of the great Assyrian monarchs; brought to light those colossal human-headed bulls, the kings, warriors, priests, and winged messengers, which form subjects of astonishment to visitors of the British Museum; and gave to learned eyes to read from long cuneiform inscriptions the pompous but interesting catalogue of Assyrian triumphs in war or in architecture. In a word, the discoveries of Dr. Layard, which form the interesting subject of the volumes quoted at the end of this article, have shed light upon one of the darkest periods of history, and laid bare before us the life, arts, and manners of a people of whom previously little more was known than the name. Colonel Rawlinson, Dr. Edward Hincks, and other distinguished British and continental scholars, have made great progress in interpreting the cuneiform inscriptions. An account of what they have done is given in the 'Journal of the Asiatic Society,' vols. xii., xiv., &c. Of the sculptures now in the British Museum a more particular account will be given in the ARTS AND SCIENCES DIVISION.

(*Lettres de M. Botta, sur les Découvertes à Khorsabad, Paris, 1845; Niebuhr, Travels; Rich, Narrative of a Residence in Koordistan; Layard, Discoveries in Nineveh and Babylon.*)

NINIAN, ST. [STRLINGSHER.]

NIO, IOS, one of the Cyclades, situated 5 miles S. by W. from Naxos, and 10 miles N. by W. from Thera or Santorini. It is about 9 miles in length, and 5 miles in its greatest breadth, which is towards the middle of the island. The surface is hilly, but not so rocky or barren as most of the smaller Cyclades. The island produces some corn (but not enough for the consumption), which is of good quality, cotton, oil, honey, and wine; but it is deficient in fruit and other trees. The population is about 3700. The town, called also Nio, is built on a hill on the western coast, above a bay in which there is

good anchorage and a fine spring of water issuing out close to the shore. On the eastern coast is another good harbour, called Manganuri.

Nio was called Ios by the ancient Greeks, in consequence, it is said, of having been colonised by the Ionians, before which, according to Pliny (iv. 12) and Stephanus of Byzantium, it was called Phœnicia, from the palm-trees which grew on the island, but which have long since disappeared, in the same manner as at Delos and other places, where the palm-tree was also found in ancient times. (Spon; Tavernier.)

Strabo, Pliny, and Pausanias speak of the tomb of Homer being at Ios, which was said to be the birthplace of his mother; and the author of the 'Life of Homer' (attributed to Herodotus) reports the epitaph of the poet. Ios now belongs to the kingdom of Greece, and is included in the nome of the Cyclades.

NION, or NYON. [VAUD, CANTON.]

NIONS, or NYONS. [DRÔME.]

NIORT, the capital of the French department of Deux-Sèvres, is situated on the Sèvre-Niortaise, in 46° 19' 23" N. lat., 0° 27' 49" W. long., at a distance of 225 miles S.W. from Paris, 96 feet above the level of the sea, and had 17,562 inhabitants in the commune in 1851. The town is situated in a delightful and well cultivated district, and is built on the slopes of two hills and on both sides of the river. It was formerly one of the most wretched-looking towns of the department, but it has been considerably improved of late years. The town-hall is a very ancient building, once the palace of Eleanor of Guienne, wife of Henry II. of England. There are two churches—one of them, called Notre-Dame, is an ancient gothic building, with a fine spire raised by the English, and 246 feet high; cavalry barracks; and an ancient castle, which is now used as a prison. The town has two good squares, and there is a pleasant promenade near the barracks. The chief manufactures are chamois and other leather, gloves, shoes, woollen- and cotton-yarn, druggets and other woollens, saddles, braces, horn combs, paper, saltpetre, and confection of angelica. Considerable trade is carried on in wine, staves, timber, corn, flour, wool, and hair. The navigation of the river Sèvre commences at Niort. There are in the town tribunals of first instance and of commerce, a council of prud'hommes, a college, two hospitals, a theatre, a public library of 20,000 volumes, and a botanic garden.

NIPON. [JAPAN.]

NISCHNEI- or NIJNI-NOVGOROD, or NISCHEGOROD (Lower Novgorod), a government of great Russia, is situated between 54° and 57° N. lat., 41° 45' and 46° 15' E. long. It is bounded N. by Kostroma, N.E. by Wiatka, E. by Casan, S.E. by Simbirsk, S. by Perm, S.W. by Tambov, and W. by Wladimir. The area is 18,557 square miles, and the population in 1846 amounted to 1,178,200.

The country is an undulating plain, diversified only by the high lands along the banks of the rivers and by small elevations. There is a considerable extent of forest, but only few swamps. The soil consists in a great measure of sand, with a mixture of good earth, and in many places it is covered with a thick layer of black mould; here and there clay is found, with portions of iron or ochre. The hills, none of which is more than from 400 to 500 feet above the level of the sea, generally consist of clay, gypsum, and limestone, and occasionally of sandstone: they are all covered with forests. The principal river is the Volga, which enters the government from Kostroma, and flows thence to Casan in a semicircular bend. This great river, in its course through the government, receives the following rivers:—The Oka, which, rising in Orel, flows through that government, and those of Tula, Kaluga, Riäsan, Moskwa, and Wladimir, and, after a course of 340 miles through the most fertile parts of Russia, falls into the Volga near the city of Nischnei-Novgorod; and then the Kulma, the Kirsenez, the Sura (a rapid river navigable only in the spring), the Werluga, and the Alatyr. There are few lakes, and none of them are large. The climate is milder than in Wladimir; there is not so much moisture, and spring and autumn are not so variable. The inhabitants are very long lived, and the number of births is often nearly double that of deaths.

Nischnei-Novgorod is one of the most fertile and best cultivated provinces of the empire. The inhabitants grow rye, buck-wheat, millet, peas and beans, large quantities of flax, hemp, and hops; and abundance of common vegetables and fruits. The forests are very productive; the banks of the streams and rivers are clothed with the finest timber, especially oak- and lime-trees. The pine, the fir, the beech, and the alder are found in all the forests. The oaks however have been very much thinned; and the great extent of the forests has led to the most extravagant waste. The undefined privileges of the distilleries, the potash manufactures, and the glass- and iron-works, are an obstacle to anything like system in the management of the forests. The breeding of cattle, though subservient to agriculture, is very carefully attended to. The best horses of the Russian breed are found in this province, where the government and many private persons have studs. The horned cattle are handsome and of a large size. Sheep and hogs are of the common breed. Some poultry, especially geese, abound; bees also are common. The principal fish in the rivers are the bleak, the isinglass-fish, and the caviare-sturgeon, of which there is a sufficient supply for home consumption.

Of all the governments of Russia, Moscow and Wladimir not excepted, Nischnei-Novgorod is that in which the inhabitants are the

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most generally engaged in manufactures of various kinds, though the province has comparatively few manufactories on an extensive scale. But most of the villages are full of artisans and little manufacturers of all descriptions, who, without belonging to a manufactory, yet make a great abundance and variety of articles. There are also in the country many who carry on some business on a large scale, though it is considered as only a secondary employment; so that weaving mats, making potashes, spinning yarn, weaving linen, and making earthenware, are common all over the country. The few large establishments manufacture woollen-cloth, leather of various kinds, linen, Russia-duck, cordage, soap, candles, iron, steel, and glass wares.

The exports of the province consist of corn, flour, hemp, flax, yarn, coarse linen, cordage, base-mats, leather, carved and turned wooden wares, oak-timber, potashes, cooper's work, iron-wire, hardware, glass, cloth, horses, and some other trifling articles, which amply suffice to counterbalance the imports, which are chiefly bar-iron, salt, brandy, wine, colonial produce, and manufactures.

The population consists of Russians, the most numerous race; Tschuvasches, Mordwins, Tschheremesses, and some Tartars. The Tschuvasches, Mordwins, and Tschheremesses are of Finnish origin. The Greek Church predominates, and is under the bishop of Nischnei-Novgorod. The Mordwins and Tschheremesses are most of them baptised, as well as many of the Tschuvasches, but a great portion of the latter are still heathens. They do not worship their gods in temples, but in consecrated places in the open air, which they call Keremet, or Irsan, and which are chiefly in groves and forests. They have a supreme god, whom they call Thor, and whom, as well as the inferior gods, they worship as an invisible being; they offer sacrifices to him, believe in a state of future rewards and punishments, and have priests and conjurers, whom they call Juma and Jömmé.

The capital of the government is also called *Nischnei-Novgorod*, which forms the subject of the next article. Among the other towns in this government are—*Arasmas*, 8500 inhabitants, with manufactures of silk, leather, silver, iron, and soap, and considerable trade in linen, sail-cloth, and shoes; *Podschinaki*, 5500 inhabitants, with an imperial stud; *Pawleno-Selo*, on the Oka, 6600 inhabitants; *Balachna*, 4500 inhabitants; *Muraschkina*, 7000 inhabitants; and several other thriving towns.

NISCHNEI-NOVGOROD, the capital of the government of Nischnei-Novgorod, is situated in 56° 19' 43" N. lat., 44° 0' 58" E. long., at the confluence of the Oka and the Volga, and has ordinarily only about 20,000 inhabitants, but at the time of its great fair this number is swelled to nearly 300,000. The city is built in the fork between the right banks of the Oka and the Volga, and consists of three parts:—1. The fortified part of the city is built on a hill, better than a mile in circumference, and surrounded with a wall which has five square and two round towers and two gates. It is chiefly composed of three handsome streets, which converge upon an open space in front of the Kremlin, or fortress, that crowns the hill and overhangs the Volga. In this fortress are the two cathedrals dedicated to St. Michael and to the Transfiguration, the palaces of the governors, and some other public buildings, and an obelisk of granite 46 feet high, in honour of Minin and Pojarsky. A beautiful terrace on the side towards the Volga affords a most extensive view of the noble rivers pursuing their course through a vast plain of corn and forest lands. 2. The city itself is situated on the declivity of the hill above the Volga, which is pretty well built in the Russian fashion: the streets indeed are narrow, but there is a large open market-place and a fine quay. 3. A large suburb is built along the face and at the foot of the high ground on the right bank of the Oka.

This city is the residence of the military governors of Perm and Nischnei-Novgorod, of the civil governor of the latter, the see of a bishop, and the seat of various public offices. The public buildings and institutions are:—42 churches, of which 30 are of stone, 3 convents, a seminary for schoolmasters, a gymnasium, several schools, and a very fine stone bazaar. Some of the churches are of great size and beauty. The domes and steeples of the numerous churches give it the appearance of a much more considerable town. The inhabitants carry on various manufactures of cordage, leather, coarse lace, cloth, copper and iron articles, soap, and candles, and there are many malt-kilns, breweries, and tanneries.

The great annual fair of this part of Russia was originally held in Kazan, the Tartar capital; it was transferred in 1648 to Makarieff, about 50 miles below Nijni, and its duration limited to five days. New regulations were promulgated in 1679, 1680, 1681, and 1691, by the last of which every facility was granted to foreigners. In 1750 the fair had become so considerable, that the government built a vast bazaar of wood, containing 800 shops; but the quantity of goods brought from Europe and Asia increased every year in such a degree, that the old bazaar could not contain half of them, and in 1809 the emperor Alexander ordered a new building to be erected, which contained 1400 shops. But even this bazaar was soon insufficient, and a great portion of the goods were placed under sheds, the number of which it was necessary to increase every year, till they at length amounted to 1800, the rent of which and that of the shops in the bazaar produced annually 120,000 rubles.

The government had devoted a sum of 600,000 rubles to the erection of this building, which was scarcely completed when it was totally

destroyed by a dreadful fire on the 18th of August 1816. The emperor Alexander transferred the fair in the following year to Nischnei-Novgorod, which is in the centre of that immense system of inland navigation which covers Russia as if with a net, and affords a communication from this point with the two capitals, with the White Sea, the Gulf of Finland, and the Caspian. A low flat peninsula, formed by the left banks of the Oka and the Volga, and Lake Mestcharskoe, which has a communication with the Volga a little farther to the north, was chosen for the site of the new bazaar. It was necessary first of all to raise the ground, which was inundated every spring by the Volga: to procure earth for this purpose, and likewise to facilitate the movement of the boats, a broad canal, in the form of a horse-shoe, was dug, the two extremities of which join the Oka, while on the other side it communicates by means of Lake Mestcharskoe with the Volga.

On the plateau inclosed by this canal there is now a whole town of stone magazines, built in the form of a large oblong parallelogram, surrounded with shops, before an edifice adorned with three rows of columns, which is the hotel of the governor, in which the local authorities reside during the fair: a long wide bridge of boats across the Oka joins the busy place to the city. Forty-eight blocks of buildings, separated by streets which intersect each other at right angles, extend behind this parallelogram. The number of the shops is about 2524, and over each there is a small apartment, in which the merchant may reside. All these buildings are roofed with iron, and the coverings of the open galleries which run along all the façades are likewise of iron, and supported by 8000 elegant cast-iron pillars. A very broad street, passing through the centre of this commercial town, terminates in a church built in a rich and noble style. A little before the church, in two transverse ranges on the right and left, are the Chinese shops, the fantastic architecture of which, their turned-up roofs, surmounted with flags and long streamers which are moved by every breath of air, give a variety to the appearance of these immense edifices. On the same line, beyond the canal, there is on the west an Armenian church, and on the east a mosque. The remainder of the peninsula beyond the canal round the above-mentioned mosque is occupied by a great number of wooden booths, in which are deposited goods less liable to spoil, such as iron, leather, cordage, &c. There too are the theatre and the numerous tents of the Tartar restaurateurs. An island in the Oka, between the town and the fair, is covered with similar booths. On each side of the bridge of boats across the Oka, which is as wide as the Thames at London, and along the Volga, at the mouth of the former river, the waters are covered for above a mile with boats and barges of all shapes and sizes used in conveying goods to the shops on the banks of the rivers and canals. Above 40,000 persons of various races and languages from the confines of Europe and Asia navigate these vessels, and altogether above 250,000 persons, mostly of the male sex, are here congregated for business.

All this vast, regular, and handsome town of warehouses, the erection of which cost 11,000,000 rubles, presents for ten months in the year the silence of a desert; but scarcely is the flag announcing the commencement of the fair hoisted on the 29th of June, when all the streets and warehouses are filled with a countless multitude who have flocked hither from the two Russian capitals, from the shores of the Baltic and the Caspian, from Bokhara, Khiva, Kokand and Tashkend, from Asia Minor, from the mountains of Turkistan and the frontiers of China, from western Europe, and even from America and Australia. All these magazines and booths are filled with the produce of the most diverse countries, and thousands of boats are employed in landing the goods, or in taking them on board to convey them to the seas which wash the northern and southern shores of the empire. Other goods, such as wooden wares, are piled up even in the open country, and farther on are long lines of carts with their horses, which serve both as magazines, and lodgings for the country-people.

The total values of the merchandises exposed for sale at this fair in 1837 amounted to 6,512,808*l.* sterling; in 1840 to 7,483,619*l.*; and in 1842 to 7,458,421*l.* The total value of the goods sold in 1840 was 6,794,897*l.*, including 4,248,945*l.* worth of Russian merchandise. In 1842 goods were sold for 6,087,379*l.*, of which 4,460,871*l.* worth was Russian manufacture and produce. The number of shops and magazines let in 1842 exceeded 4800.

The various products exposed for sale at the fair of Nischnei comprise cotton manufactures, woollen cloths; hempen and flaxen textures; silks; furs; leather and worked skins; washed rags; produce of the mines and foundries, iron, copper, and metal goods; porcelain, earthenware, mirrors, and glass; dried fish, caviare, train oil, and isinglass; corn and flour; Russian wines, brandy, mead, &c.; refined sugars from St. Petersburg and Archangel. Miscellaneous goods—such as potashes, soap, tobacco, paper, feathers, hogs' bristles, horses' tails, hides, skins, timber, Russian and Tartar horses, &c.; coffee, indigo, cochineal, other drugs and foreign wines. Of Asiatic produce the most important article is tea, imported from China by way of Kiachta, of which 46,000 chests were imported in 1842; 6000 boxes of tea pressed in cakes; Chinese silks, cottons, colours, playthings; Bokhara cotton, raw, spun, and woven; shawl-pieces, turquoises, furs, &c.; Cashmere wool, Persian carpets, raw silks, &c. Steamers ply on the Volga up to Tver and down to the Caspian Sea, and also up the Kama to the government of Perm, so that great facilities exist for

conveyance of goods to Nischnei over and above the common river and canal traffic in which it participates. Except during the times of the fair Nischnei is a dull uninteresting place.

NISHAPOOR. [PERSIA.]

NISIBIN, or NISIBIS. [MESOPOTAMIA.]

NISSA, or NISCH, a town in European Turkey, the residence of a pasha, is situated in a fine open plain on the Nissava, a feeder of the Morava, near the frontier of Servia, 60 miles S.S.W. from Widden, and contains about 10,000 inhabitants (4000 Mohammedans and 6000 Christians). Nissa occupies the site of Naissos, the birthplace of Constantine the Great; but nothing remains of its ancient glory. The town is modern, and by no means remarkable for its beauty; the principal building is the Konak, or palace of the pasha. The defensive works round the Turkish quarter on the right bank of the river consist of well-built ramparts of great extent, with wattled parapets and a dry ditch. The bazaar on the left bank of the Nissava is surrounded by a trench and palisades. The Christian quarter, which is the largest part of the town, lies beyond the bazaar, and is open to the plain. Nissa is now the chief town of the pashalic of Sophia; it is called Nisch by the Turks. It is the residence of a Greek bishop, and has famous thermal springs. As it is the key to military communications between Thrace, Bulgaria, and Servia, the fortifications of the town are mounted with a considerable number of guns of large calibre, and in good order. The plain of Nissa lying between wooded slopes of the Tesovitch and the little Balkan, two ramifications of the Hæmus, is one of the most beautiful, fertile, and well-tilled districts in Bulgaria. The town was taken by the Turks under the Sultan Amurath I. in 1389 on the march to the battle of Kosova. A couple of miles above Nissa on the road to Sophia, the site of an action between the Turks and Serbs in the same year is marked by a tower of skulls, which is more terrible in name than in reality. It was constructed of stone and lime, but externally heads were imbedded in the mortar. Very few skulls now remain, the Christians having in the course of time removed almost all of them for the purpose of interment, but their places are marked by rows of round holes. The tower is 10 feet square, 15 feet high, covered with a red-tiled roof, and has neither door nor window in it. The interior is said to be a favourite retreat of snakes and lizards. The Austrians took Nissa in 1737.

NITH, NITHSDALE. [DUMFRIESSHIRE.]

NIVELLE. [BRABANT, SOUTH.]

NIVERNAIS, one of the provinces into which France was divided before the first revolution. It was bounded N. by Orléanois and the district of Auxerrois in Bourgogne; E. by Bourgogne; S. by Bourbonnois; and W. by Berri.

It is almost entirely comprehended in the modern department of NIEVRE. In feudal times it constituted the county of Nevers.

NIZZA. [ACQUI, NICE.]

NOACOTE. [NEPAUL.]

NOBBER. [MEATH.]

NOCERA DEI PAGANI, a town on the south-eastern border of Campania, in the kingdom of the Two Sicilies, now belonging to the province of Principato Citra, is situated in a valley near the Sarno, at the foot of the Monte San Angelo ridge, which traverses the peninsula of Sorrento, and on the high road from Naples to Salerno. It is an open straggling town, with about 5000 inhabitants. It is a bishop's see, has several churches and convents, a clerical seminary, and fine barracks for cavalry. The walls and castle of the old town, which was deserted on account of the earthquakes, are on the hill above. About a mile from Nocera, on the road to La Cava, is a circular church, which has been mistaken by some for an ancient temple, but it evidently dates from the earlier ages of Christianity. A double row of marble columns, disposed in a circular range, support the roof upon arches. Nocera is joined to Naples by railway.

Nocera was destroyed by Hannibal (Livy, xxiii. 15), after whose departure for Lucania the dispersed inhabitants were settled by the Romans in Atella, the inhabitants of the latter town having been transferred to Calatia (xxviii. 3). The town of Nocera was however rebuilt and became a Roman colony. After several vicissitudes it was partly destroyed by earthquakes in the time of the early Norman kings, in the 11th century, when the inhabitants resorted to the present site. The adjunct 'Dei Pagani' which it bears has been variously accounted for: some derive it from the Saracens, called Pagani in the middle ages, who occupied the town for a considerable time in the 10th century; others from a powerful baronial family, Pagani by name, one of whom, Hugh de Payen, was Grand Master of the Templars in the time of the emperor Frederick I. (Lunadoro, 'Lettera intorno all' Origine di Nocera.')

NOCERA, NUCCERIA, a town of ancient Umbria, now belonging to that province of the Papal States called 'Delegazione di Perugia.' It is built on a steep hill on the western side of the central ridge of the Apennines, near the source of the river Topino, which is an affluent of the Tiber. Nocera lies on the high road from Rome to Pesaro and Rimini. Nuoceria was a city of the Umbri, and is mentioned by Livy (ix. 38) as having surrendered to the Romans, with other towns of Umbria, in 307 B.C. In the fall of the Western Empire, Nuoceria was repeatedly devastated by the Visigoths and other northern tribes. Under the Longobards it formed part of the duchy of Spoleto. In the year 1198 Innocent III. annexed it to the Papal territories. It

has given title to a bishop since A.D. 402; but the see has been united to Sassoferrato since A.D. 1027. The population is now only about 1200. The surrounding territory, which is hilly, produces wine, oil, and plenty of fruit.

NOCTON. [LINCOLNSHIRE.]

NOGARO. [GERS.]

NOGENT. [AUBE; EURE-ET-LOIR; MARNE, HAUTE.]

NOIRMOUTIER. [VENDEE.]

NOLA. [LAVORO, TERRA DI.]

NOMBRE DE DIOS. [MEXICO.]

NONANCOURT. [EURE.]

NONTRON. [DORDOGNE.]

NOOKHA. [GEORGIA, ASIATIC.]

NOOTKA SOUND. [VANCOUVER ISLAND.]

NORD, a department in France, thus named from its being the most northern portion of that country, lies between 49° 58' and 51° 5' N. lat., 2° 7' and 4° 28' E. long., and is bounded E. by Belgium, S. by the department of Aisne, W. by those of Somme and Pas-de-Calais, and N. by the North Sea. Its length from Dunkerque to the south of Trélon, is about 124 miles; its breadth is very variable, being 39 miles at the widest part, but not quite 2½ miles near Armentières, where it is crossed by the Lys. The area is 2193.5 square miles; the population in 1841 was 1,085,298; in 1851 it amounted to 1,158,286, being 528.05 to the square mile, or 853.47 above the average per square mile for all France. With the exception of the metropolitan department of Seine, Nord is the most populous department in France.

The department is formed out of the old province of French Flanders, of nearly the whole of Hainaut-Français and Cambresis, and of small portions of Artois and Vermandois. It belongs almost entirely to the basin of the Escaut, and has a general inclination towards the north-east. The surface, except in the south of the department, is level. Some isolated hills spring up here and there, which seem to be higher than they really are in consequence of the general flatness of the country. Mont-Cassel, in the arrondissement of Hazebrouck, famous for the extensive view from its summit, is only 361 feet above the sea-level. The arrondissement of Avesnes, in the south of the department, is a hilly country; it is covered by the northern slopes of the Ardenne, many of which are covered with forests, while the narrow vales are furrowed by the Helpe-Majeure, the Helpe-Mineure, and a great number of smaller streams that flow into the Sambre, a feeder of the Meuse. The Ardenne Hills extend also into the arrondissement of Cambrai, and form the watershed between the Sambre and the Escaut. The hills of this arrondissement are all of gentle slope, and generally cultivated to their summits; the loftiest of them, Bonavis, the summit of which is the highest point in the department, is only 394 feet above the sea. In the arrondissement of Dunkerque, which extends about 25 miles along the sea-coast, a considerable portion of the surface is very little, if anything above the sea, and marshy, but maintained in a state fit for cultivation by a system of drainage called *Watteringues*. The *Watteringues* district, which contains an area of 95,927 acres, is divided into four sections, each under the care of commissioners appointed for the purpose of seeing the drainage works kept in repair. Between these lands and the sea extends a melancholy fringe of sand, bordered near the sea by sand-hills called 'dunes,' or downs. The canal from Bergues to Furnes, which forms one of the outlets for the waters raised from the *Watteringues* country, separates this from the district of the *Moères*, consisting of the basins of two lakes drained in a similar way by canals, windmills, and dykes; the *Moères* district is under a separate administration. The marsh-lands in the valleys of the Scarpe, the Escaut, the Sambre, and in various other districts, are each subjected to a system of drainage regulated by commissioners, who are appointed under the authority of the prefect of the department, by the proprietors interested in the reclamation of the lands.

The soil is in general good; but in such an extent of surface the variety of course is great, from the deep rich clay and marly soil of the arrondissement of Lille, to the barren sand-hills on the coast, and to the light gravelly soil of the southern districts. But everywhere the system of agriculture is good, and fine crops of great variety are gathered. Of the whole surface, which measures 1,403,824 acres, 1,175,224 acres are under cultivation, namely, 888,549 acres under plough-culture, 236,817 acres of meadow and grass-land, 40,372 acres of gardens, orchards, and nurseries, and 9486 acres under various culture. Of the remaining surface, 88,532 acres consist of forest land, a large portion of which lies in the arrondissement of Avesnes; 17,501 acres are barren bog and heath; 50,618 acres are covered with roads, streets, and buildings; and 57,470 acres of forest domain are the property of the state.

The crops grown for the sustenance of man and the domestic animals are—wheat, mixed grain, spelt and buckwheat, rye, barley, oats, peas, beans, and other leguminous seeds. The produce of these crops, taking one year with another, is now sufficient for the consumption; formerly this was not the case, though the population was then smaller. Of potatoes, the produce is not nearly equal to the consumption. Authority was given to plant 2498 acres with tobacco in 1849, calculated to furnish 63,070 cwt. of leaf. The other objects of the farmer's care are clover, lucern, oleaginous seeds, beet-root, turnips, colza, flax,

and hemp. The number of wind-, water-, and steam-mills for the manufacture of oil and flour, in 1848, was 1367. A good deal of the barley grown in the department is used for malting, beer being a common beverage; other grain and potatoes are used in the gin and other spirit distilleries. Apples, pears, nuts, and other common fruits are cultivated; flowers too are objects of especial attention; hops are grown.

The horses of the department are large, strong, and of good breed. A great number of horned-cattle are fed on the natural pastures and on the abundant green crops that are raised. The number of sheep reared to supply the markets with mutton and for the growth of wool is very considerable. Good butter and passable cheese are made. Pigs, poultry, and fish are abundant. Bees are kept chiefly in the south of the department. Coal is the common fuel, wood being scarce. Timber-trees are grown along the roads and in the hedgerows.

The principal rivers of the department are—the *Aa*, which runs along the western boundary, and enters the North Sea at Gravelines, where it forms a small harbour: the *Yser*, which receives the *Peene* below Wormhout, and runs north-east into Belgium: the *Lys*, a feeder of the Escaut, which is itself fed by the *Lave* and the *Deule*: the *Scarpe*, which, rising in Pas-de-Calais, runs east past Douai, and joins the Escaut at Mortagne, on the Belgian frontier: the *Escaut*, which, rising in the north of the department of Aisne, flows north to Cambrai, whence it runs north-east past Valenciennes and Condé, 7 miles north of which it enters Belgium, having received the *Seneffe* at Bouchain, the *Selles* and the *Escaillon* between Bouchain and Valenciennes, and the *Haine* at Condé: and the *Sambre*, which crosses the south of the department, passing Landrecies and Maubeuge, below which it enters Belgium on its way to join the Meuse. Most of these streams, and many smaller ones, have been rendered navigable; they, with the 25 canals that traverse the department in all directions, afford an internal navigation of 308 miles. Of these canals, particular mention must be made of the St.-Quentin Canal, which, running from Cambrai to St.-Quentin, unites the Escaut to the Somme, and completes the internal navigation of France between the North Sea, the Atlantic, and the Mediterranean.

Roadway accommodation is afforded by 15 state, 17 departmental, and 50 parish roads, to the extent of 1029 miles in length. Railroads traverse the department in several directions, uniting Valenciennes, Douai, Lille, Dunkerque, and the intermediate towns with Paris, Calais, Courtrai, Bruges, Mons, Antwerp, and Brussels. All these lines are connected with Paris by electro-telegraphic wires.

The mineral wealth of the department consists chiefly of its coal- and iron-mines; of the former, 19, all situated in the valley of the Escaut, were worked in 1848, and of the latter, three were worked in the arrondissement of Avesnes. A valuable coal-field was discovered near Douai in June 1858. Steam-engines are used for draining the mines. Marble, paving-stones, brick-earth, potters'-clay, peat, and fossil-ashes, which are used as manure, are found. There are mineral waters and baths at St.-Amand.

The industrial products of the department are of the most varied description, including all kinds of woollen, cotton, and linen manufactures, ticking, duck, velveteen, printed cottons, and handkerchiefs; woollen, flaxen, cotton, and hempen yarn; lace, tulle, cambrie, and lawn; soap, refined sugar, and salt; beer, oil, nails, glass, paper, tiles, bricks, earthenware, ropes, leather, toys, small wares, cannon, small arms, saltpetre, &c. These numerous products form the items of a large home and foreign commerce. The imports are chiefly raw cotton, wool, flax, colonial produce, wine, brandy, and timber. At the principal points on the Belgian frontier custom-house officers are stationed, who are under the direction of the custom-houses of Dunkerque and Valenciennes.

Among the principal educational, benevolent, and administrative institutions of the department are—at Douai a University-Academy, (which comprises within its limits the departments of Aisne, Ardennes, Nord, Pas-de-Calais, and Somme), and a Normal school; lycées at Douai and Lille, in which science and languages are taught; 15 communal colleges for pensioners, foundationers, and day students; societies of medicine and botanical gardens at Douai and Lille; public and lending libraries, and museums in all the principal towns; 47 hospitals, 5 of which are general, 7 for the sick, and the rest for special inmates; 2 institutions for deaf-mutes, one at Lille for girls, and one at Fives for boys; 3 lunatic asylums; 6 lying-in societies for the poor under the direction of ladies; a central prison at Loos, where the silent system is enforced, except among the junior convicts; and 8 common prisons. There is a branch of the Bank of France in Lille; 5 *monts-de-piété*, and 9 savings-banks in the large towns. In almost every commune there is a 'bureau de bienfaisance,' supported by charitable bequests, for the distribution of relief in food, clothes, child-bed linen, or money to poor householders. There are Protestant oratories at Lille, Quiévy, Walincourt, Inchy, and St.-Amand. The Jews have a synagogue at Lille. Besides these, there are numerous scientific and agricultural societies; special academies, in which painting, music, applied mathematics, hydrography, zoology, clinical medicine, chemistry, architecture, drawing, modelling, &c., are taught. The number of journals and periodicals published in the department is 32. In 140 communes there are societies of nuns and religious women, who attend the sick in the hospitals and at their

homes, and devote themselves to the consolation of the old and the education of the young.

The department is divided into seven arrondissements, which, with their subdivisions and population in 1851, are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Lille	16	132	371,156
2. Douai	6	66	101,109
3. Dunkerque	7	59	105,441
4. Hazebrouck	7	53	104,515
5. Avesnes	10	153	145,040
6. Valenciennes	7	81	156,779
7. Cambrai	7	113	174,245
Total	60	662	1,158,285

1. Of the first arrondissement, and of the whole department, the capital is LILLE. *Armentières*, a clean well-built town on the *Lys*, 9 miles by railway N.W. from Lille, has a college and 7959 inhabitants. It is a busy manufacturing place; the chief products are beet-root sugar, table linen, ticking, hosiery, lace, printed calicoes, flaxen- and cotton-yarn, tulle, soap, grain spirits, bricks, &c.; there are also several bleach-works, dye-houses, and salt-refineries. The town has an active commerce in its industrial products, and in corn, wine, brandy, tobacco, iron, nails, sausages, &c. *Comines*, a pretty little town of 5225 inhabitants, situated on the frontier, 10 miles N. by E. from Lille, stands on the *Lys*, which divides it into two parts. The part on the right bank has belonged to France since the treaty of Utrecht in 1713; the part on the left bank is in the Belgian province of West Flanders. Tape, cotton stuffs, linen thread, beer, spirits, oil, flour, and leather are the chief industrial products. *Halluin*, 10 miles N.N.E. from Lille, on the right bank of the *Lys*, has a population of 4264, who manufacture calico, table linen, ticking, cotton-yarn, bricks, and oil. Near *Hautbourdin*, a small manufacturing town S.W. of Lille, is the village of *Loos*, on the Upper Deule, with a population of 3404. The buildings of the former abbey of Loos are converted into a central prison. *Le-Queunoy*, on the Lower Deule, a few miles N. from Lille, has 3551 inhabitants, who manufacture nails, anvils, chains, crucibles, iron, beer, coarse linen, &c. *Roubaix*, 6 miles by railway N.E. from Lille, one of the principal centres of the woollen trade in the north of France, is a well-built town, with a council of prud'-hommes, a commercial court, and 31,039 inhabitants. At the beginning of the present century the population was only 8000; in 1830 it was 13,132. Besides its elegant tissues of wool, the articles manufactured are table linen, furniture, cotton, nankeens, waistcoat pieces, woollen- and cotton-yarn, leather, gin, &c. These products, together with corn, wine, and colonial produce, form the items of a considerable commerce. *Sectin*, S. of Lille, a station on the Lille-Douai railroad, has a manufacturing population of 3240. *Tourcoing*, about 2 miles N. by railway from Roubaix, is an important manufacturing town, and has a college, a council of prud'-hommes, and 26,834 inhabitants. The town is well built, with wide straight streets and several good public buildings, the most remarkable of which are the town-hall and the churches of St-Christophe and St-Jacques. *Tourcoing* is a great mart for the sale of wool, which, after being washed and combed, is despatched to the manufacturers of Roubaix, Amiens, and St-Quentin. The principal manufactures are table linen, duck for trousers, swanakin, camlet, velveteens, cotton- and woollen-yarn, refined sugar, soap, grain, spirits, &c.

2. In the second arrondissement the chief town is DOUAI. Among the other towns are *Marchiennes*, an ill-built town on the Scarpe, E. of Douai, population 2965; and *Orchies*, N.E. of Douai, which is girt with a wall and fosse, and has 3568 inhabitants, who manufacture oil, soap, pottery, beer, gin, leather, and flaxen yarn.

3. In the third arrondissement the chief town is DUNKERQUE. *Bergues-St-Winoc*, 5 miles S. from Dunkerque, on the railway that joins the Lille-Calais line at Hazebrouck, stands at the junction of several canals, by one of which, communicating with the sea, vessels of 300 tons can reach the town. It is well built, with good brick houses, and has 6045 inhabitants. The town-house, the beffroi or clock-tower, and the two towers of the old abbey of St-Winoc, which serve as landmarks to sailors entering the harbour of Dunkerque, are the most noteworthy objects in the town. The manufactures consist of soap, hosiery, cotton-yarn, sugar, salt, distilled spirits, leather, &c.; boats are built; and there is a considerable trade in corn, cheese, butter, wine, and cattle. This town was strongly fortified by Vauban, and is considered a fortress of the first class. *Bourbourg*, in an unhealthy marshy situation near the right bank of the *Aa*, has oil-mills, breweries, salt-works, and 2603 inhabitants. *Gravelines*, a fortified sea-port town, 12 miles W. from Dunkerque, built in a marshy spot at the mouth of the *Aa*, has a lighthouse and 5582 inhabitants. The town is pretty well built; the arsenal is the most remarkable object. The fortifications constructed by Vauban render the town impregnable towards the sea; on the land side it may be surrounded with water at pleasure. The principal articles of trade are wine, brandy, gin, salt, timber, salt-fish, refined sugar, beer, &c. Vessels are fitted out for the herring, cod, and mackerel fisheries. *Hondschoote*, a few miles E. from Bergues, on the Bass-Colme Canal, has tan-yards, breweries, oil-mills, bleach-

works, and 3971 inhabitants. *Wormhoudt*, 11 miles S. from Dunkerque, situated on the *Yser*, is one of the cleanest and prettiest towns in French Flanders. It has 3828 inhabitants, several bleach-mills, breweries, brick-works, oil-mills, and tan-yards.

4. In the fourth arrondissement the chief town, *Hazebrouck*, is situated on the *Bourre*, a small feeder of the *Lys*, at the point where the railway from Lille diverges to Calais and Dunkerque, and has a tribunal of first instance, a college, and a population of 7589. The town, which is 25 miles distant from Lille and Dunkerque, is well built, and possesses several handsome public buildings, among which are the parish church, the town-house, the sub-prefect's residence, and the old Augustinian convent, the several parts of which are now used as college lecture-rooms, tobacco warehouse, hospital, corn-market, and a normal school. Among the industrial products of Hazebrouck are linen-cloth and twist, soap, leather, refined salt, beer, oil, and lime. A great linen-market is held every Saturday. *Bailleul*, 9 miles from Hazebrouck, on the railway to Lille, stands on high ground, and is in general a well-built town, with regular streets and tastefully-constructed houses. The sculptured decorations over the doors of the best mansions represent subjects taken from the Scriptures, and give an idea of the taste and of the religious feeling of the French Flemings. The most remarkable public structures are the church of St-Vaast and that which belonged to the former Jesuit college. The industrial products are linen of all kinds, tape, beet-root sugar, pottery, soap, refined salt, beer, oil, bricks, leather, and flour. There is considerable trade also in corn, beans, cheese, poultry, and cattle, of which great numbers are fed on the fine pastures round the town. *Bailleul* has 10,141 inhabitants. *Cassel*, said to be the *Castellum Menapiorum*, is built on an isolated conical hill, in the midst of a fertile and extensive plain, 6 miles by railway N. from Hazebrouck, and has a college and 4410 inhabitants. The town is neat, clean, and supplied with water from an abundant fountain. The summit of the hill on which the town is built is the highest point in French Flanders, and presents one of the finest views of the kind in Europe, comprehending the harbours of Dunkerque, Gravelines, and Calais, 32 towns, and above 100 church and clock towers, marking so many towns, villages, and hamlets, scattered over a varied and fertile plain. Lace, linen, hats, stockings, soap, coarse pottery, leather, and oil are the chief industrial products; there is also some trade in corn, butter, beans, poultry, and cattle. *Estaires*, 11 miles S.E. from Hazebrouck, formerly a fortified but now an open town, stands on the *Lys*, and has a college and 6390 inhabitants. The manufacture and bleaching of linen, the preparation and spinning of flax, nail-making, and boat-building are the leading occupations of its population. *Merville*, at the junction of the *Bourre* Canal, with the *Lys*, 8 miles S. from Hazebrouck, is a well-built town, with a population of 6079. It has important manufactures of damask and linen-cloth; and also salt-refineries, breweries, and brick-works. *Stenevoorde*, N. by E. of Hazebrouck, near the Belgian frontier, has a custom-house and 3363 inhabitants, who manufacture woollen stuffs, linen, pottery, beer, leather, and tiles. A great deal of hops are grown near this town.

5. The fifth arrondissement takes its name from *Avesnes*, a small well-built fortified town, situated on the *Helpe*, a feeder of the *Sambre*, in the former territory of Hainaut, 54 miles S.E. from Lille. It has a tribunal of first instance, a college, and 2946 inhabitants, who manufacture hosiery, gin, soap, leather, and bricks; there are also salt-refineries, marble-works, and, in the neighbourhood, iron-mines, iron-forges and smelting-furnaces, naileries, and glass-works. *Baray*, 15 miles N. from Avesnes, a small place of only 1700 inhabitants, marks the site of the Roman *Bajacum*. It contains several traces of its founders—among others, the ruins of a circus and an aqueduct. In the middle of the town a heptagonal column marks the point where seven Roman roads, called *Chaussées Brunehaut*, met. *Laudrecies*, a fortified town on the *Sambre*, 12 miles W. from Avesnes, has a handsome church, large barracks, and 3991 inhabitants. The *Sambre* is navigable at this place; and there is a good trade in corn, hops, flax, cheese, wood, charcoal, slates, cattle, and glass bottles. *Mauberge*, a well-built fortified town on the *Sambre*, by which it exports the coal, marble, and slates found in the neighbourhood, has 7328 inhabitants. The manufactures consist of ironmongery, tin-ware, nails, soap, and beet-root sugar; there are also marble-works, tan-yards, a salt-refinery, and a government manufactory of fire-arms. *Le-Queunoy*, another fortified town, 17 miles N.W. from Avesnes, is prettily situated on a hill above a fertile and extensive plain, fringed by the forest of Mormal, and has 3922 inhabitants, some cotton-spinning factories, tan-yards, and breweries. It is a pretty brick-built town, with a handsome town-house, an arsenal, and a remarkable church, founded in the 11th century. *Solre-le-Château*, situated on the *Solre*, 7 miles N.E. from Avesnes, has fulling-mills, marble-works, tan-yards, naileries, glass-works, and manufactures of lace, serge, blankets, and woollen-yarn; population, 2645. *Tyvelon*, 8 miles S.E. from Avesnes, has 2000 inhabitants, who manufacture hosiery, chemical products, iron, and lime.

6. Of the sixth arrondissement the chief town, *Valenciennes*, which is situated on the railway from Paris to Brussels, 22 miles S.E. from Douai, at the junction of the *Rhonelle* with the *Escout*, in 50° 21' 29" N. lat., 3° 31' 34" E. long., is 84 feet above the level of the sea, and has 22,625 inhabitants. The town, which is surrounded by fortifications and defended by a citadel constructed by Vauban, is

pretty well built, but the streets are narrow, crooked, and irregular. The town-hall, the theatre, the hospital, the church of St. Géry; the public library, which contains 18,000 volumes; and the academy of painting, sculpture, and architecture, are among the most remarkable buildings and establishments in the town. The beffroi, or clock-tower, which was erected in 1237, fell down April 7th 1843. Valenciennes has tribunals of first instance and of commerce, a college, a custom-house, an arsenal, large provision stores, and barracks. The principal manufactures are lawn, lace, hosiery, toys, nails, oil, soap, colours, pottery, &c.; there are also cotton-printing factories, oil-mills, beet-root sugar factories, dye-houses, bleach-works, tan-yards, and grain-distilleries. *St-AMAND-LES-EAUX*. *Ansis*, a village of about 5000 inhabitants, situated a mile N.W. from Valenciennes, of which it might be called a suburb, is the centre of one of the best coal-fields in France. Besides the works in the mines, there are at the surface several large establishments, such as foundries, saw-mills, rope-walks, forges, timber-yards, &c., for the construction of all the steam and other machinery required in the mines. There are also naileries, chicory-mills, cast-iron foundries, glass-works, salt-refineries, breweries, distilleries, and brick-works. *Bouchain* stands in a strong position on the Escaut, 11 miles S.W. from Valenciennes; it is fortified, and has 1400 inhabitants. *Condé-sur-l'Escaut*, 8 miles N.E. from Valenciennes, is situated on the Escaut, close upon the Belgian frontier, and has a population of 5103. It is a well-built fortified town, and possesses a handsome town-house and an arsenal. The defences were constructed by Vauban: by means of a sluice the town may be surrounded with water. Oil, salt, nails, ropes, and leather are the chief industrial products; boats are built; there are also chicory-mills, dye-houses, and bleach-works. *Denain*, situated 5 miles by railway W. from Valenciennes, in the centre of a rich coal-field, on the left bank of the Escaut, has a population of 5144. This town has sprung up almost entirely since 1826, when the population was only 900. The streets are straight and regular; here and there are iron-forges and smelting-furnaces, and shafts leading to the mines with short railroads, by which the coals are conveyed to the docks on the river bank. There is a good market in the town. Beet-root sugar is manufactured. Denain is celebrated for the defeat of the allies, under Lord Albemarle, by the French, under Marshal de Villars, July 23, 1712. A short way south of Condé is *Fresnes*, or *Fresnes-sur-l'Escaut*, which has glass-works, distilleries, breweries, steam flour-mills, and 4109 inhabitants, many of whom are employed in the several coal-mines of the neighbourhood.

7. The seventh arrondissement is named from its chief town, CAMBRAI. *Cateau-Cambresis*, 15 miles S.E. from Cambrai, on the right bank of the Selle, is a well-built town, with a college and 7686 inhabitants. The town, which is famous for the treaty signed in it between Philip II. of Spain and Henri II. of France in 1559, takes its name from the château (corruptly pronounced cateau) built for its protection, and from its position in the Cambresis or territory of Cambrai. The former archbishop's palace (now converted into a cotton factory), is the most imposing structure in the town. The manufactures are shawls, merinos, lawn, calico, soap, woollen- and cotton-yarn, beer, gin, leather, and salt. *Soldmes*, famous for its Benedictine abbey, still subsisting, stands 12 miles E. from Cambrai, and has 5295 inhabitants, who manufacture lawn, gauze, merino, cotton-stuffs, beer, leather, soap, &c. The parish church is a large handsome structure, surmounted by a spire above 200 feet high. *Crèvecoeur*, situated near the right bank of the Escaut, and famous for the defeat of Chilperic II. by Charles Martel, March 21, 717; and *Clary*, S. by E. of Cambrai, are small places of a little over 2000 inhabitants each.

The department forms the see of the Archbishop of Cambrai. It is included in the jurisdiction of the High Court and within the limits of the University-Academy of Douai; and belongs to the 8th Military Division, of which Lille is head-quarters. The department of Nord returns 8 members to the Legislative Body of the French empire.

(*Dictionnaire de la France; Annuaire du Département du Nord; Annuaire pour l'An 1853; Official Papers.*)

NORDBERG. [ALBEN.]

NORDEN. [AURICH.]

NORDHAUSEN. [ERFURT.]

NORDHEIM. [HILDESDAMM.]

NORDLAND. [TRONDHEIM.]

NORDSTRAND. [SCHLESWIG.]

NORE. [THAMES.]

NORFOLK, a maritime county of England, on the eastern coast, is bounded S. by Suffolk, from which it is separated by the Waveney and the Little Ouse; W. by Cambridgeshire; N.W. by Lincolnshire and the Wash; and on all other sides by the North Sea. Its greatest length from Yarmouth to the neighbourhood of Wisbeach is 67 miles, and its greatest breadth near 1° E. long. is 42 miles. The area is 2116 square miles, or 1,354,301 statute acres. The population in 1841 was 412,664; in 1851 it was 442,714. In area it is the fourth of English counties, being exceeded only by Yorkshire, Lincolnshire, and Devonshire.

Coast-line, &c.—The Norfolk coast, extending from the estuary of the Yare to that of the Nen in Cross-Keys Wash, is above 90 miles in length, and for the most part low, and liable to continual encroachments from the sea. Between Happisburgh and Weybourne, a dis-

tance of about 20 miles, are low cliffs called the Mud Cliffs, formed chiefly of clay and masses of imbedded chalk. From the mouth of the Yare to the commencement of the cliffs there is a low sandy coast skirted by sand-banks. The channel between these banks and the shore is known as Yarmouth Roads, and constitutes a safe anchorage, in 10 to 13 fathoms water. In time of war this roadstead has been the usual rendezvous of the North Sea fleet; and at all times it is frequented by the colliers in their way southward. West of the cliffs a low sandy or shingly coast succeeds, extending to St. Edmund's Point, at the entrance of the Wash. Along this coast is a line of sand-hills. The sands, by which Brancaster Bay in this part of the coast is defended to seaward, render it tolerably safe anchorage, with a depth in some parts of 16 or 18 fathoms. At Hunstanton, near St. Edmund's Point, are cliffs nearly 80 feet high. The Wash is an estuary, having extensive sand- and mud-banks dry at low water, with channels of deeper water between them. The Ouse and the Nen both flow into it. The deeper water off the Norfolk coast is known as Lynn Deep. A considerable breadth of very fertile land has been reclaimed from the sea by successive embankments in that part of Norfolk which lies west of Lynn. One of the embankments, which is most inland and no doubt very ancient, is called the Roman Bank; it is many miles in length, and extends a long way into the adjacent part of Lincolnshire. The works of the Norfolk Estuary Improvement Company, noticed under LYNN, add a considerable breadth of land to this district. The creeks and harbours on the Norfolk coast are—Yarmouth, Cley and Blakeney, Wells, Burnham, Brancaster, Thornham, Heacham, Snettisham, and Lynn. There are lighthouses at Winterton, 8 miles N. from Yarmouth; at Happisburgh, at Cromer, and at Hunstanton.

Surface and Geological Character.—Norfolk contains no hills. The rivers flow through valleys of varying breadth, skirted by low rising grounds. The highest ground in the county is probably on the north-west side, where the chalk downs appear, extending north and south from near St. Edmund's Point to Castle Acre, between Lynn and Swaffham, where they sink beneath the marshy valley of the Nar, whence they again emerge and extend to Downham. This high ground subsides gradually towards the east, where the chalk sinks under the beds of diluvium (or alluvium, for our authorities are not agreed) which overspread a large portion of this county and the adjacent county of Suffolk; but on the west, towards the shore of the Wash, the chalk has a steeper escarpment. On this side the chalk-marl and greensand crop out from beneath it; and beds of similar character to those of the Weald in the south-east part of England crop out from beneath these formations. The western part of the county is included in the great Fen district. The chalk has been found in many places, in the eastern part of the county, beneath the diluvial beds. Near Cromer large portions of it have been washed away by the sea, and the point of Foulness near that town has evidently been the site of a farther extension of the chalk towards the north-east; and some of the shoals which render the navigation of this coast so dangerous are formed of aggregated masses of ponderous chalk-flints. The diluvial beds vary in character. In the eastern part they are of gravel, sand, and clay, embodying in many places fragments of chalk, and containing a substratum of fossil shells, several feet in thickness, called 'crag-pit shells.' Beds of gravel are found on the sides of the valleys which intersect this district. At Norwich, and to the north and west of the city, thick beds of sand and gravel are found resting on the chalk, with patches of alluvial clay and brick-earth interspersed. In the western parts of the diluvial districts large blocks or boulders of gray or greenish sandstone, distinguished by its peculiar fossils, are found in pits of the clay or marl which rests upon the chalk. This side of the county is however chiefly distinguished by sandy beds.

Chalk is dug for lime in many places; excellent sand for glass-making is procured between Snettisham and Castle Rising; potters'-earth and good brick-earth are found; marl is dug in the valley of the Bure; and the Fen districts of the west furnish peat for fuel and manure.

Hydrography; Changes of the Coast.—The principal streams flow from the north-west part of the county. The Wensum rises at Wick-end, 7 miles W. from Fakenham, and, after making a circuit past that town, flows south-east in a winding channel 45 miles to Norwich, 2 miles below which it joins the Yare. The Yare rises at Shipdham, between Watton and East Dereham, and flows east to join the Wensum after a course of 25 miles. The stream formed by their united waters by some called Wensum, by others Yare, flows first south-east and then north-east through Reedham Marsh, till it expands into a large sheet of water called Breydon Water, 4 miles long and in some parts 1 mile broad, at the south-western extremity of which it receives the Waveney, and at the north-eastern the Bure; after receiving these it flows 3 miles southward into the German Ocean. From the source of the Wensum, the real head, to the outfall of the river, is 74 miles.

The Waveney rises at Lopham, between Thetford and Diss, and flows first east and then north-east past Dies, Bungay, and Beccles, to its junction with the Yare, nearly 60 miles. The Bure rises in the northern part of the county, at Melton Constable, between Foulsham and Holt, and flows south-east past Aylsham 50 miles to its junction with the Yare. These rivers receive several small tributary streams. In the lower part of their course the Yare, Waveney, and Bure flow

through flat marshy valleys in which are considerable pools of water, locally designated 'broads' and 'meers.'

The streams of the western side of the county belong chiefly to the system of the Ouse, which touches the border of the county a few miles below Ely, and flows northward 22 miles into the Wash below Lynn. The tide flows up to Denver near Downham, where it is arrested by sluices: it formerly flowed up much higher. This river receives the Little Ouse, the Wissey, and the Nar. The Little Ouse rises at Lopham, in the same tract of swampy ground as the Waveney. It joins the Greater Ouse in the marshes near the border of the county. The Wissey, or Stoke, is formed by the junction of two streams which unite at Buckenham Tofts, north by west of Thetford, and flow into the Ouse near Denver Sluice. The Nar, or Setch, rises at Litcham, in the neighbourhood of East Dereham, and flows into the Ouse above Lynn. One of the arms of the Nen forms for several miles the boundary of the county; and the Welney, a stream communicating between the Ouse and the Nen, skirts the border just above its junction with the Nen.

Few parts of England exhibit marks of more remarkable changes than this county. The valleys of the Waveney, Yare, and Bure were originally longitudinal basins of chalk; and it seems probable, from geological considerations, that the valley of the Bure as far as Burgh by Brampton, that of the Yare to above Norwich, and that of the Waveney to Bungay, were arms of the sea. The low flats north of Yarmouth, in which are so many 'broads,' were also parts of an estuary, which probably remained till the time of Alfred, but has since been left dry. There are local traditions of the sea having once reached Norwich on the Wensum, and Bungay Castle on the Waveney. The spot on which Yarmouth stands was not dry land till the 11th century.

Navigation and other Communications.—The Wensum and Yare are navigable to Norwich for sea-borne vessels. The southern entrance of the Yare, through Lake Lothing, was formerly much used by shipping; but a bar of shingle and sand accumulated at the mouth of it, and this was crowned in 1712 with an artificial bank to prevent the inundation of the marshes at high tides. The only navigable entrance to the Yare for centuries after the accumulation of the bar at Lake Lothing was by Yarmouth, where sea-borne vessels discharged their cargoes; and the communication with Norwich was carried on by river-craft. In 1827 an Act was obtained for making the Yare and Wensum navigable for vessels drawing 10 feet water, and for making a cut from the Yare to the Waveney, and from the Waveney, at Lowestoft, through Lake Lothing to the sea, thus restoring the ancient entrance, and making Norwich once more a port. The tide- or sea-lock of this navigation admits vessels 84 feet long and of 21 feet in the beam. The Waveney is now navigable to Beccles for small sea-borne vessels, and to Bungay, a few miles higher up, for river-craft. The Bure is navigable up to Aylsham, 40 miles from the sea at Yarmouth. The Greater Ouse and the Nen are navigable throughout that part of their course which is within this county. Some of the smaller rivers are likewise navigable for short distances from their respective outfalls.

The Norwich coach-road through Ipswich enters the county at Scole on the Waveney, and runs by Long Stratton to Norwich; that through Newmarket enters the county at Thetford, and runs by Attleburgh. The road to Lynn and Wells enters the county about 9 miles beyond Ely, and runs by Downham, Lynn, Snettisham, and Brandon. Another road to Wells enters the county just beyond Brandon in Suffolk, and runs by Swaffham, Fakenham, and Great Walsingham. The road to Cromer branches off from this beyond Brandon, and runs by Watton, East Dereham, and Reepham. One road to Yarmouth branches off from the Norwich and Ipswich road at Scole, and follows the valley of the Waveney; but the main road does not enter the county until it reaches Yarmouth.

The county is reached from London by the Eastern Counties railway through Colchester and Ipswich, and by the other great line belonging to the same company through Cambridge and Ely. From the Haughley station, midway between Ipswich and Bury St. Edmunds, a line runs northward into the county at Diss, and passes through Burston to Norwich. From Ely the Norfolk railway runs north-east, and entering this county at Brandon, passes Thetford and Wymondham to Norwich, and is continued eastward to Reedham, with branches thence to Yarmouth and Lowestoft. Another line, the East Anglian, runs from Ely northward down the valley of the Ouse through Downham Market to King's Lynn, where it turns eastward, and, passing Swaffham and East Dereham, joins the Norfolk railway at the Wyndham station. A branch from the East Anglian line running northward from East Dereham to Wells is completed as far as Fakenham. The extreme west of the county is crossed by a short line from the Watlington station on the East Anglian railway to Wisbeach, whence other cross lines run to Peterborough, connecting the railroads of this county with the Great Northern and other lines.

Climate, Soil, and Agriculture.—The climate is somewhat colder than that of the southern and western counties of England. The coast is exposed to the north-east winds. Except in a small portion of the county on its western boundary, and a strip along the southern part, which are marshy, the air is dry and healthy. The soil may be divided into three classes: light sands of various qualities, chiefly in

the north-west of the county; low alluvial clays and loams, on the borders of Lincolnshire and Cambridgeshire; and loams of various qualities, chiefly light, incumbent on a marly clay, in the centre and eastern part. There is a strip of peat and marsh along the courses of the Ouse and the Waveney on the southern boundary.

Much unproductive land in this county has been brought into cultivation and made equally productive with those which are naturally fertile. This has been effected chiefly by laying considerable portions of the marly clay, found a little below the surface, on the poorer soil which was at the surface, and by an excellent system of tile-draining where the subsoil is impervious to water. The crop which is raised in the greatest perfection in Norfolk is barley; but all the usual grains, with turnips, mangel-wurzel, potatoes, and the ordinary roots, are extensively cultivated. The principles of Norfolk agriculture generally are those of a judicious rotation of crops, known as the Norfolk system; the production, by rich manure, of a few inches of thoroughly good earth; a careful garden cultivation; and, to provide sufficient manure for the corn-crops, half the land is devoted to raise food for cattle.

On the light lands large flocks of sheep are kept. The old horned and black-legged breed, long peculiar to the county, are now in a great measure superseded by the Leicester and South Devon breeds. The Norfolk sheep are good, and their flesh superior to most other mutton, at a proper age, but they are great wanderers. The favourite oxen of the Norfolk farmer are the small Scotch breeds. Few large dairies are now found in the county. The cows kept for private use are mostly of the polled Suffolk breed. Many farmers in Norfolk breed horses from their working mares; and excellent hunters and coach-horses are sometimes produced by a cross with a good bony blood horse. Pigs are bred in great numbers. Great numbers of turkeys and geese are reared for the supply of the London market. Game is abundant, but less so than formerly.

Divisions, Towns, &c.—The county is divided into East Norfolk and West Norfolk, and into 33 hundreds, 13 of which are in the eastern division, and 15 in the western. The hundreds in the eastern division of the county are—Blofield, central; Clavering, south-east; Depwade, central; Diss, south; Earsham, south; North Erpingham, north-east; South Erpingham, central; Eynsford, central; East Flegg, east; West Flegg, east; Forehoe, central; Happing, east; Henstead, central; Humbleyard, central; Loddon, south-east; Taverham, central; Tunstead, north-east; and Walsham, east. In the western division are the hundreds—Brothercross, north; Clackclose, west; Freebridge Lynn, west; Freebridge Marshland, west; Gallow, central; North Greenhoe, north; South Greenhoe, central; Grimshoe, south-west; Guiltcross, south; Holt, north; Launditch, central; Mitford, central; Shropham, south; Smithdon, north-west; and Wayland, central. Besides these hundreds are the city and liberties of Norwich, constituting a county of a city, the boroughs of King's Lynn and Thetford, and part of the borough of Great Yarmouth. The county returns 12 members to the House of Commons, 2 for each division of the county, 2 for the city of Norwich, and 2 each for the parliamentary boroughs of Lynn, Thetford, and Yarmouth. Norfolk is in the diocese of Norwich, of which it forms the archdeaconries of Norwich and Norfolk. It is included in the Norfolk circuit. Assizes and quarter sessions are held in Norwich; county courts in Attleburgh, Aylsham, Downham Market, East Dereham, Holt, King's Lynn, Norwich, Swaffham, Thetford, North Walsham, Little Walsingham, Wymondham, and Great Yarmouth. The county jail and lunatic asylum are in Norwich; there are houses of correction at Swaffham, Little Walsingham, and Wymondham, and borough jails at Norwich, Yarmouth, King's Lynn, and Thetford. The maritime jurisdiction of the county is under the direction of the vice-admiral of Norfolk (generally the lord-lieutenant of the county), who is appointed under a commission from the lords of the admiralty, and is invested with power to hold a court of admiralty for the county, with judges, marshals, and other officers.

NORWICH, the capital of the county, is described in a separate article. Notices of ATTLEBURGH, AYLISHAM, BLOFIELD, EAST DEREHAM, DISS, DOWNHAM, LODDON, LYNN, SWAFFHAM, THETFORD, WALSHINGHAM, and YARMOUTH, will be found under their respective heads. Of the other towns the more important are given here; the population is that of 1851.

New Buckenham, population of the parish 766, is situated 15 miles S.W. from Norwich, near the source of the Tae. Old Buckenham had a castle at the time of the Conquest; but this castle was pulled down and an Augustinian priory built from its ruins, in the time of Stephen or Henry II. by William de Albini, who erected a new castle, round which grew up the town of New Buckenham. There are a National school and an almshouse for four persons. The church, dedicated to St. Martin, was partly rebuilt near the close of the 16th century. It has a richly-carved screen and some interesting monuments. Wesleyan and Primitive Methodists have chapels in the town. Fairs are held on the last Saturday in May and November 22nd.

Burnham, 32 miles N.W. from Norwich, is distinguished as Burnham Westgate from several neighbouring parishes with a similar designation. The population of the parish was 1241 in 1851. Burnham Ulph and Sutton and Burnham Norton are so close to Burnham Westgate as to form with it one town. The town is situated on the left

bank of a small stream, the Burn, at the mouth of which is a small tidal harbour, called Overy Staith. The church is a neat little building of stone and flint, with an embattled tower. There are chapels for Wesleyan and Primitive Methodists, and Independents. A considerable trade in corn, coal, and agricultural manures is carried on at the Staith, and two iron-foundries are in operation at Westgate. There are two yearly fairs. There are National, British, and Infant schools.

Cley, or Cley-next-the-Sea, population 995 in 1851, is 25 miles N. by W. from Norwich, on the right bank of a small river, the Glarm, and Blakeney on the left bank; the mouth of the river forms a harbour, called Cley and Blakeney Harbour. The river is navigable to Cley for vessels of 50 tons burden. There is a considerable importation of corn, coal, timber and deals, hemp, iron, tan, tallow, oil-cake, &c. The church is a large and beautiful edifice of early English architecture. The battlements, parapets, and tracery of the windows are remarkably rich and fine. An annual fair for horses is held in July. The Wesleyan Methodists have a chapel. Large quantities of the finest fruits and vegetables are raised by the inhabitants, and disposed of chiefly at Cromer. The population of *Blakeney* was 1108 in 1851. Blakeney church is a large old building of stone and flint, with a square embattled tower. Wesleyan and Primitive Methodists have chapels, and there are National and Infant schools. There are some remains of an ancient Carmelite monastery. About 50 vessels, mostly small, belong to Blakeney, some of which are employed in the oyster fishery.

Cromer is on the coast, 21 miles N. from Norwich: population of the parish 1366. There was anciently a town or village on this part of the coast called Shipden, which was destroyed by the sea about the commencement of the 15th century. The sea continues to gain on the land, and several houses in Cromer have been destroyed within the memory of those now living. The town is situated at the top of the cliffs. Many good houses have been built of late years, and the town has generally been much improved. It is frequented in summer as a watering-place. The Bay of Cromer is very dangerous. There is some trade in coals, timber, tiles, and oil-cake. The crab and lobster fishery is actively carried on. There is a yearly fair. The church is a building of great beauty, in the perpendicular style; the tower is nearly 160 feet high, and is remarkably fine. The Wesleyan Methodists have a chapel. The Free school, founded in 1505, had 80 scholars in 1850. There are a girls school and an Infant school.

Fakenham, 29 miles by railway, 25 miles by road N.W. from Norwich; population of the parish 2240, is situated on a pleasant declivity near the left bank of the Wensum. It is lighted with gas. The church, which dates from 1497, is handsome and commodious, with a lofty western tower. The Independents, Wesleyan and Primitive Methodists, and Baptists have chapels. There are National, British, and Infant schools; and a savings bank. There is an ancient market-cross. A large corn-market is held here on Thursday; fairs are held on Whit-Tuesday and November 22nd, and a hiring session for servants in October.

Foulsham is 16 miles N.W. from Norwich: population of the parish 1077. The town was burnt in 1770, and has been since rebuilt on a regular plan and in a respectable style. The church is a handsome building of flint and stone. There is a yearly fair. The Baptists have a chapel, and there is a National school.

Harleston, 16 miles S. from Norwich, population of the chapelry 1309, consists of a main street along the Yarmouth road, and has a convenient market-place on the south side. It is lighted with gas. The Independents, Wesleyan Methodists, and Baptists have places of worship. A small British school, two National schools, and a savings bank, are in the town. A neat corn-hall has been recently erected. There is a well-attended corn-market on Wednesday, and four fairs are held in the year.

East Harling is 20 miles S.W. from Norwich, on the Norfolk railway: population, 1198. An iron-foundry, a large flour-mill, lime-burning works, and a manufactory of agricultural implements, afford some employment. There is a weekly market on Tuesday for corn. Besides the church there are places of worship for Wesleyan and Primitive Methodists and Quakers; also National schools.

Hingham is 4 miles W. by N. from Wymondham: population, 1698. The town contains some good houses. The market-place is very neat. The church, which dates from the time of Edward III., is large and handsome, partly in the decorated, partly in the perpendicular style. The Independents and Mormons have chapels. The market is held on Tuesday, and there are three yearly fairs. There are an Endowed Grammar school for boys of the town, which had 36 scholars in 1852, and a National school.

Holt, 21 miles N. by W. from Norwich, population of the parish 1726, is irregularly laid out, but the houses are neatly built, and the streets are paved and lighted with gas. The town was nearly destroyed by a great fire in 1708, but it was much improved on being rebuilt. There are a neat sessions-house and a church, chapels for Wesleyan Methodists, Baptists, and Quakers, and an Endowed school for 50 boys, founded by Sir Thomas Gresham, and placed under the government of the Fishmongers' Company, London: it had 55 scholars in 1850. There are also National, British, and Infant schools. A market is held on Saturday. A county court is held. Brewing, brick-making, and rope- and twine-making are carried on.

Reepham is 12 miles N.N.W. from Norwich: population of the parish 409. The town was formerly remarkable for having three churches, those of Reepham, Hackford, and Whitwell, in one churchyard. Hackford church was burned in the reign of Henry VIII.; the two others, Reepham and Whitwell, yet remain. The market is on Wednesday for corn; and there is a yearly fair. Brewing, malting, and tanning are carried on.

Stoke Ferry is on the road from Thetford to Lynn, 33 miles W. by S. from Norwich: population of the parish 820. The church was restored and a new chancel built in 1848. The Wesleyan and Primitive Methodists have places of worship. There are a National school and an endowed Free school. The market is held on Friday, chiefly for corn, and a large cattle-fair on December 6th. There are extensive malting establishments, lime-burning works, and a steam flour-mill.

Swaffham is 34 miles by railway and 27 miles by road W. from Norwich; population of the town 3858. It is situated on an eminence, and contains numerous well-built houses, a neat theatre, an assize room, a house of correction, and a jail. The church, a large cruciform edifice, consists of a nave with two aisles, a chancel, and two transept-chapels. At the west end is an embattled tower with pinnacles. There are meeting-houses for Wesleyan and Primitive Methodists and Baptists, a Free school, National, British, and Infant schools, and a school of design. The market is held on Saturday, and there are three fairs in the year. Large quantities of butter are sold. The Mid-summer quarter-sessions for the county are held here. Races and coursing meetings are held on a heath near the town.

North Walsham, 14 miles N.N.E. from Norwich, population of the parish 2911, stands on a gentle eminence above the river Ant, a feeder of the Bure, and contains many good modern houses. The town was almost entirely burnt in the year 1600. A market-cross, erected in the time of Edward III., was repaired after the fire. The church is a fine specimen of the perpendicular style. Parts of the tower fell down in 1724 and in 1835. There are several chapels for Dissenters, schools, a literary and scientific institution, a savings bank, and a neat theatre. The silk manufacture is carried on. The market is held on Thursday; there are a cattle fair and two statute fairs in the year. A navigable canal opens a water communication between this town and Yarmouth.

Watton is a small town 20 miles W. by S. from Norwich, situated in the midst of a dairy country, from which butter is sent to London. Population of the parish 1353. The church, which is at some distance from the town, has a round tower with an octangular top; it was built in the reign of Henry II. There are chapels for Independents, and Wesleyan and Primitive Methodists, National and Infant schools, and a savings bank. Wednesday is the market-day; fairs are held in July, September, October, and November. Petty sessions are held monthly.

Wells, 29 miles N.N.W. from Norwich, population of the town 3633, stands on a slight elevation, above the marshy-flat which here lines the coast, and about half a mile from the sea, on a creek, the mouth of which forms the harbour. The shifting sands render this harbour difficult of access, but considerable improvements have been made; a new quay has been built, to which vessels of 200 tons can ascend. The town is partly lighted with gas, and possesses a custom-house and a theatre. Besides the parish church there are chapels for Wesleyan and Primitive Methodists, Independents, and Quakers, the Earl of Leicester's school for boys, girls, and infants, and two Free schools. Ship-building and rope-making are carried on. Corn and malt are shipped; and coals, timber, deals, bark, oil-cake, tar, and wine are imported. There is a yearly fair. Petty sessions are held every fortnight.

Wymondham, population of the town 2970, stands at the junction of the East Anglian and the Norfolk railways, 11 miles W.S.W. from Norwich. A Benedictine priory was established here before 1107, by William de Albini, chief butler to Henry I. Part of the conventual church is now used as the parish church. It is a spacious and remarkably fine edifice, having strong claims upon the attention of the antiquary. Wymondham has been much improved of late years; it is lighted with gas and paved. The Independents, Baptists, and Plymouth Brethren have each a place of worship; the Methodists have two chapels. The Free Grammar school, founded in the reign of Edward VI., had 25 scholars in 1853. There are also a Parochial and a British school. A market is held on Friday, and there are fairs on February 14th and May 17th, for horses and cattle, and a general fair on September 29th.

Of the places formerly of note, but now decayed, the following may be mentioned.—*North Elmham*, population 1211, situated 5 miles N. from East Dereham, was for four centuries (673-1075) the seat of a bishopric, formed originally by dismemberment from the still more ancient see of Dunwich, to which however it was reunited about 870. Some of the bishops had a castle here. The intrenchment which surrounded the castle still remains, and incloses about 5 acres of land. There are a few vestiges of the castle and some traces of the cathedral. The parish church is a handsome edifice, with a square tower. There are a chapel for Independents and a National school.

Castle Acre is 4 miles N. from Swaffham, on the right bank of the Nar, or Setch River, which joins the Ouse above King's Lynn: population 1567. Several coins and a tessellated pavement have been dug

up here. Of the castle erected by William, earl of Warren and Surrey, the earthworks remain, as well as fragments of the building. The principal street of the village passes through one of the main entrances of the castle; this entrance consists of an outer and inner gate, with a portcullis between them, and two circular bastions to defend the approach. Earl Warren founded here a priory of Cluniac monks, which existed till the dissolution. Of the priory buildings the remains are fine specimens of Norman architecture. The parish church is a handsome and commodious structure, with a lofty square tower. Wesleyan Methodists and Baptists have places of worship; there is a National school. Tanning and fellmongery are carried on, and there are flour-mills. Two yearly fairs are held.

Castle Rising is 5 miles N.W. of Lynn, on the left bank of the Rising, or Habingly River: population 392. William de Albi built a castle here before 1176. The trade of the place was considerable, and the town was incorporated; but the harbour becoming choked up, the place fell into decay. Of the castle the keep is standing. The general style of the building is Norman. Isabella of France, queen of Edward II., was kept in confinement in this castle by her son Edward III. from 1330 till her death in 1358. The church, which was built in the 11th century, was restored in 1844. Trinity hospital provides accommodation for twelve poor women and a governess.

Kenninghall, population 1048, about 3 miles E. from East Harling, on the Ikeneld-street, was once a residence of the princes of East Anglia. The site of the palace consists of an area of 4 acres, surrounded by a ditch, and having an artificial mound at each corner. The church has a south door of very singular Norman composition. There are chapels for Wesleyan Methodists and Baptists, and a Free school. Fairs are held on July 18th and September 30th.

Litcham is 7 miles N.W. from East Dereham: population 855. Although the market has been discontinued, the place continues to be the mart of the surrounding villages. Besides the parish church there are chapels for Wesleyan and Primitive Methodists. Pleasure fairs are held in May and November: races are held in July.

Methwold, between Brandon and Stoke Ferry, was formerly a market-town: population 1669. It has a handsome church with an embattled tower, surmounted with an octagonal spire. The Wesleyan Methodists have a chapel. A cattle fair is held on April 23rd.

Snettisham, 11 miles N. by E. from Lynn: population 1172. It has a church, Wesleyan and Primitive Methodist chapels, and a National school. Several brass 'celts' have been dug up in this neighbourhood. There are quarries of carstone and some chalk-pits.

Worstead is 12 miles N.N.E. from Norwich and 3 miles from North Walsham: population 827. It was formerly the seat of a considerable manufacture, introduced by the Flemings, of woollen twists and stuffs, called from it 'worsted goods;' but this manufacture was, in the reigns of Richard II. and Henry IV., removed to Norwich. The church is a fine building, chiefly of perpendicular character; the tower is of decorated character, and is of admirable arrangement and composition. There are a chapel for Baptists, National and British schools, and almshouses for six poor persons.

The following are among the more important villages: the populations are those of the parishes in 1851:—

Banham, population 1195, is 7 miles S. by E. from Attleburgh. The parish church is a handsome gothic structure: the altar-piece was brought here from Bristol cathedral in 1845. The Wesleyan and Primitive Methodists have chapels, and there is a Free school. In the neighbourhood are barracks. *Binham*, or *Binham Abbey*, 3 miles N.E. from New Walsingham, population 511, is a large village, which had a market and fair granted by Henry I. The fair only is now held. There are extensive ruins of a Benedictine priory. The nave of the priory chapel was converted into the parish church. There are a National and a Free school. *Blickling*, population 852, about a mile N. from Aylsham. The manor belonged to the father of Anne Boleyn; it was afterwards purchased by Lord Chief Justice Hobart, whose son built, in 1620, the mansion, Blickling Hall. The hall contains an extensive and valuable library, with numerous portraits and other paintings. A school for poor children is supported by Lady Suffield. *Briston*, population 996, about 5 miles S. by W. from Holt, near one of the heads of the river Bure, has a parish church, partly of decorated, and partly of later English character; chapels for Wesleyan and Primitive Methodists and Independents; and a National school. A stock market is held weekly on Tuesday, and a cattle fair on May 26th. *Caistor-next-Yarmouth*, population 1043, about 2½ miles N. from Great Yarmouth, formed at one time two parishes, but of one of the churches only a part of the tower remains. There are chapels for Wesleyan and Primitive Methodists, and National and Infant schools. Several persons are engaged in fishing. The coast-guard has a station here. West from the village are some remains of a round tower and of the walls of Caistor Castle. *Catton*, population 618, about 2 miles N. from Norwich, a neat village, containing many good houses and villas, chiefly the residences of Norwich merchants. The parish church is a neat building, with an octagonal tower; in the interior are some interesting monuments. There is here an Industrial school for girls. *Coltishall*, population 907, on the river Bure, 7 miles N. by E. from Norwich, occupies a pleasant situation, and has a considerable trade in corn, malt, coals, &c. The church has an embattled tower. The Wesleyan Methodists have a chapel,

and there is a National school. A fair is held on Whit-Monday. *Costessey*, or *Cossey*, population 1025, on the river Wensum, 4 miles N.E. from Norwich, consists chiefly of one long street. The church, a commodious structure, has a square tower, surmounted with a lofty wooden spire; the south porch is Norman. The Baptists have a place of worship. There are National, Roman Catholic, and Baptist schools. Near the village is the fine mansion and park of Costessey, the seat of Lord Stafford. Contiguous to the hall is a handsome Roman Catholic chapel. *Ditchingham*, population 1130, about 13 miles S.E. from Norwich, forms a suburb of Bungay, in Suffolk, from which it is separated by the river Waveney. The church, a handsome edifice, which contains some good specimens of stained glass, occupies an elevated site. There are National and Infant schools. A large silk manufactory here belongs to a Norwich firm. *Feltwell*, population 1675, about 7 miles S. by E. from Stoke Ferry, consists of several streets. St. Mary's Church is a handsome edifice, with a richly ornamented tower. St. Nicholas, a small plain building, has been in part rebuilt within the last few years. There are chapels for Wesleyan and Primitive Methodists, and a Free school. *Happisburgh*, or *Hasbro'*, population 621, on the coast, about 6 miles E. by N. from North Walsham. The parish church, a handsome building, with a lofty embattled tower, stands on an elevated site, and is a conspicuous land-mark. There is a National school. Some of the inhabitants are engaged in fishing. There is here a station of the coast-guard. The encroachments of the sea at this part have been considerable. Two lighthouses, respectively 80 feet and 100 feet high, stand a short distance south-east from the village. *Hickling*, population 812, about 15 miles N.E. from Norwich; the houses, being scattered, cover a considerable space. The ground in the neighbourhood is marshy. Hickling Broad, an extensive lake, communicates by the North River with the Bure, and small vessels are thus enabled to keep up commercial intercourse in the district. The church is an ancient edifice, with a tower. The Wesleyan and Primitive Methodists have chapels, and there is a National school. There are some remains of an Augustinian priory. *Hilgay*, 4 miles S. by E. from Downham, population 1710, has a large and handsome church; a fine avenue of trees forms an approach to the church. There are chapels for Wesleyan and Primitive Methodists, and a National school. The Wissey, or Stoke River, which is here crossed by an iron bridge, runs into the Ouse at Hilgay Creek, about two miles from the village. From Lynn, coal and other cargoes are brought by lighters to the quay at Hilgay, and corn and other products of the locality are taken back. *Holkham*, population 683, about 2 miles W. from Wells, and a mile from the coast, has a handsome church seated on elevated ground, with a lofty embattled tower, which forms a good land-mark: in the interior are some ancient monuments. There are a Free and an Infant school. *Holkham Hall*, the splendid seat of the Earl of Leicester, is situated in an extensive and well-wooded park. In the mansion are galleries of paintings and sculpture, and a noble library. Almshouses were erected in 1755, by the Countess Dowager of Leicester. In the 14th century the port of *Holkham* was of some importance. Much land has been reclaimed from the sea at this part of the coast by the efforts of the successive Earls of Leicester, particularly of the late earl (better known as Mr. Coke, the Norfolk agriculturist), who was created Earl of Leicester, of *Holkham*, in 1837, but who had succeeded to the estates sixty years before. In the course of the sixty-six years during which he held the estates of *Holkham* its rental was increased, chiefly owing to his princely improvements, from little more than 2000*l.* to above 20,000*l.* It was stated in the earl's will that he had "lately expended the sum of 500,000*l.* in the improvement of his estate." A column has been erected to his memory by subscription in the neighbourhood. It is 140 feet high, and in the Corinthian style. *Langley*, population 312, is about 10 miles S.E. from Norwich, near the right bank of the Yare. The church is a neat building, with a square tower. There is a National school. *Langley Hall*, a spacious mansion, stands in an extensive park on the west of the village. It contains numerous paintings and sculptures. About a mile north-east from the village are some remains of *Langley Abbey*, founded in 1198. *Marham*, population 1125, about 17 miles E.N.E. from Norwich, near the right bank of the river North, has a handsome gothic church, chapels for Wesleyan and Primitive Methodists and Baptists, and Free schools for boys and girls. A fair is held in July. *Mundsey*, population 451, about 20 miles N. by E. from Norwich, is a pleasant village on the coast, frequented in summer for bathing. In the absence of any harbour or pier, small vessels receive and discharge their cargoes on the beach. There is a coast-guard station at *Mundsey*. The church, which occupies an elevated site on the cliff, is partly dilapidated; service is performed in a portion of the nave. There are a chapel for Dissenters, and National, British, and Infant schools. *Northwold*, population 1397, about 4 miles E.S.E. from Stoke Ferry, is pleasantly situated on the left bank of the Wissey or Stoke River. The church is a handsome and commodious structure, with a tower of the 14th century, built chiefly of flint, and surmounted with 10 crocketed pinnacles. The Wesleyan Methodists have a chapel, and there is a Free school. *Great Ormsby*, or *Ormsby St. Margaret's*, population 707, about 5 miles N. by W. from Yarmouth, and a mile from the coast, has a parish church of ancient date, with a tower

surmounted by figures of four monks instead of pinnacles. The Wesleyan Methodists and Baptists have places of worship, and there is a National school. Near the village is Ormsby Hall, a handsome gothic mansion. *Oxborough*, or *Ozburgh*, population 293, about 7 miles S.S.E. from Swaffham, has a commodious gothic church, built of flint and stone, with a square tower and a spire of considerable height. The interior is neat; the roof is of carved oak: in the east window is some richly-stained glass. The Roman Catholics have a chapel. A fair for horses, cattle, toys, &c., is held on Easter Tuesday. *Oxborough Hall*, a castellated mansion of the 15th century, the seat of Sir H. R. P. Bedingfield, Bart., is in the neighbourhood. At Warren Hill are some ancient earth-works. *Pulham*, population 1414, pleasantly situated on an eminence 15 miles N. by W. from Norwich, has a handsome church, with a lofty embattled tower, and a porch of Norman character on the south-west side. The Baptists have a chapel, and there is a school with a small endowment. *Lower Sherringham*, population 1374, about 7 miles E.N.E. from Holt, is a fishing village of some importance; the fishery, chiefly of cod, lobsters, crabs, whittings, and skate, employing about 30 boats. There is here a station of the coast-guard. *Upper Sherringham*, about 1 mile S.W. from Lower Sherringham, has a handsome church of early English character, with some portions of later date; the church has a lofty embattled tower. *Shipdham*, 5 miles S. by W. from East Dereham, population 1769, has a handsome church, which was enlarged in 1845, and an Endowed school. The Wesleyan and Primitive Methodists and Independents have places of worship. A fair is held on the last two days of June. *Spronston*, population 1308, about 2 miles N.E. from Norwich, consists chiefly of one street about a mile long, containing many good dwelling-houses. The church is ancient, but it has been greatly altered by repairs. Brick-making and lime-burning are carried on. There are several corn-mills and saw-mills in the vicinity. *Stalham*, population 698, about 12 miles N.E. by N. from Norwich, has an ancient church, of which the tower was shattered by lightning some years since. The chancel was built in 1827. The Wesleyan Methodists have a chapel, and there is a National school. By Sutton Broad, or Lake, Barton Broad, and the river Bure, there is navigable communication with the sea at Yarmouth. *Terrington St. Clements*, population 2250, about 4 miles W. from Lynn, has a cruciform church, the tower of which stands apart from the body of the building. There are chapels for Wesleyan and Primitive Methodists, and a National school. Petty sessions are held fortnightly. *Lovell's Hall*, in the neighbourhood, is a stone mansion of the 16th century. *Thorpe*, population 3000, pleasantly situated on the left bank of the Yare, about 2 miles E. from Norwich, has a small church, a chapel for Independents, National and Free schools; also extensive iron-works. About a mile east from Thorpe is the County Lunatic Asylum, which in 1851 had 277 inmates. The Norwich Yacht Club has its head-quarters at Thorpe. The village is a favourite place of resort for the inhabitants of Norwich on holiday occasions. *Tullehall*, population 615, about 2 miles N. from Litcham, has a church of ancient date, in which are several interesting monuments, particularly one in black and white marble in memory of Lord Chief Justice Coke, with a full-length effigy. *Upwell*, population of the Norfolk part of the parish 3189, about 7 miles W. from Downham Market, on a branch of the river Nen, which here forms the boundary between the counties of Norfolk and Cambridge. The church is on the Norfolk side of the stream. There are in the village meeting-houses for Methodists and Baptists, and a Charity school. *Walpole St. Peter*, population 1361, about 7 miles W. by S. from Lynn, has a very handsome church in the perpendicular style, with a fine south porch and embattled tower. There is a Free school. The Roman embankment or sea-wall passes the village on the west. *Walsoken*, population 2740, about a mile N.E. from Wisbeach, is a favourite resort for the inhabitants of Wisbeach, there being pleasant walks round the village. *Walsoken*, like the neighbouring villages of Walton and Walpole, derives its name from its situation near the old Roman wall or embankment against the inundations of the sea. *Wilton*, population 1069, near the south border of the county, about 9 miles S. by E. from Stoke Ferry. The land in the neighbourhood is chiefly heath. The parish church is a modern structure of stone and flint, recently repaired. The Wesleyan and Primitive Methodists have chapels. In the centre of the village is an ancient stone cross 15 feet high on a circular brick pedestal 6 feet high. There is a Free school. *Winfarthing*, population 691, pleasantly situated about 18 miles S.S.W. from Norwich, is chiefly the property of the Earl of Albemarle. The church is ancient. The Wesleyan and Primitive Methodists have places of worship. *Winterton*, population 722, about 8 miles N. by W. from Yarmouth, is a fishing village, chiefly belonging to Joseph Hume, Esq., M.P., and the Earl of Winterton, who is lord of the manor. The church has a fine embattled tower 120 feet high. There is a National school. Many of the population are employed in the herring and mackerel fishing. There is a station of the coast-guard. *Winterton Lighthouse*, a hexagonal structure seated on a lofty eminence, is about 70 feet high.

History, Antiquities, &c.—Norfolk formed part of the territory of the Iceni. In the Roman division of Britain it was included in the province of Flavia Caesariensis. There were many British and Roman towns or posts in this county. *Venta Icenorum* was probably at Caistor St. Edmund's, about 3 miles S. from Norwich, and was the

chief town of the Iceni. *Branodunum* and *Gariannonum*, mentioned in the 'Notitia Imperii,' were probably in this county; the former at Brancaster, the latter on the estuary of the Waveney; and *Ad Taum*, mentioned in the Peutinger Table, was probably at Taesburgh, on a branch of the Yare. The mouth of the great estuary, where Yarmouth now stands, is mentioned by Ptolemaeus under the name *Garryenus*.

Of *Venta*, the principal Roman post on the east side of the island, there are some remains on the right bank of the Tase, which joins the Yare. It comprehended about 30 acres. Of a massive tower near the river, designed to guard the gate toward the water, there are considerable remains: it is still 30 feet high, and is composed of alternate layers of Roman bricks and of flint, imbedded in a strong cement. The parish church, which stands within the area, is partly built of Roman bricks.

There are traces in the county of Roman or other ancient roads. A road, nearly coinciding with the Norwich coach road, ran from the neighbourhood of Diss to *Venta Icenorum*. Another from *Ixworth* in Suffolk ran in nearly a direct line by *Castle Acre* to *Holme*, near *St. Edmund's Point*. A third road ran from *Venta*, or *Ad Taum*, across the valley or estuary of the Waveney at *Bungay*. The *Ikeneld-street* crossed the *Little Ouse* above *Thetford*, and ran in the direction of *Venta*. Several other roads traversed the county.

After the conquest of England by the Saxons, Norfolk formed part of the kingdom of East Anglia. In 823, Norfolk, with the rest of East Anglia, quietly submitted to the sovereignty of Egbert, king of Wessex; but continued for some time under the immediate government of the East-Anglian kings, and subsequently of ealdormen. In the Danish descent upon England, in 866, the inhabitants made common cause with the invaders, part of whom settled in the county. In 870 the Danes returned and established themselves at *Thetford*. *Edmund*, the East-Anglian king, in an attempt to expel them, was taken prisoner and beheaded, Nov. 20th, 870, and the dominion of the invaders became permanent. In the peace made between *Alfred* and *Guthrun* or *Godrun* (883), this county was included in the *Danelagh*, and, though subject to the supremacy of the Anglo-Saxon kings, became Danish in character. In 1004 *Sweyn*, king of Denmark, brought his fleet up to Norwich, which he plundered and burnt; but he was forced to retire by *Ulfketil*, or *Ulfkytill*, ealdorman of East Anglia, who was himself of Danish extraction. In the reign of *Edward the Confessor*, the earldom of East Anglia was held by *Harold*, afterwards king.

After the Conquest the earldom of Norfolk and Suffolk was bestowed on *Ralf de Guader*; but he, having rebelled, the earldom of Norfolk was bestowed on *Roger Bigod*, another of the companions of the Conqueror. On the death of *William*, *Roger* supported the claim of his eldest son, *Robert*, to the throne, which led to the devastation of the county. In the rebellion of the children of *Henry II.* against their father (1177) Norfolk was the scene of contest, *Hugh Bigod* being a supporter of the young princes: he died attainted of treason. His son *John* was one of the barons who extorted *Magna Charta* from *John*. In the subsequent war with the barons the king came into this county; and it was in crossing the *Wash* from *Lynn* into *Lincolnshire* that he lost his baggage. The forces of *Louis the Dauphin* and his confederates afterwards overran the county. In the great rebellion of the Commons under *Wat Tyler* (1381), the men of Norfolk took part under the command of *John the Litester* (or *Dyer*); but they were defeated at *North Walsham*, and the leaders were executed. At this time the manufacture of woollen-stuffs was flourishing in the county, and Norwich was a large and populous city. The earldom of Norfolk had before this period passed to the *Mowbrays*. *Thomas de Mowbray* was created Duke of Norfolk by *Richard II.* before 1380. In the time of *Edward IV.*, the direct male line of the *Mowbrays* having become extinct, the title of Duke of Norfolk came to *Edward's* son, after whose murder in the Tower the dukedom was conferred by *Richard III.* on *Sir John Howard*, in whose family it has ever since remained.

In the disturbances which arose out of the Reformation, Norfolk became the scene of tumult. A rising took place at *Attleburgh* in 1548, and it soon became serious. *Ket*, a tanner of *Wymondham*, was chosen leader of the rebels, who encamped on *Mousehold Heath*, near *Norwich*, to the number of 20,000. *Ket*, with two assessors from each hundred in the county, held a court of justice under an oak, since called 'the Oak of Reformation,' and issued edicts levying contributions for the support of his followers. The rebels were at length attacked by the Earl of *Warwick* with an army that had been collected to invade *Scotland*, and were totally defeated in a place called *Duffen Dale*, to which they had retired. *Ket* was hanged on *Norwich Castle*, and his brother on the tower of *Wymondham church*; and the rebellion, which had also broken out in other parts of England, was put down. In the struggle between *Charles I.* and the Parliament, Norfolk zealously supported the cause of the Parliament, and was one of the associated counties under the Earl of *Manchester*.

Of the edifices of the middle ages, monastic, ecclesiastical, or castellated, Norfolk has several remains. The principal castles are those at *Norwich*, *Castle Acre*, and *Castle Rising*, and *Caistor*, described elsewhere.

There are several ancient manor-houses. *Ozburgh Hall*, near *Stoke*

Ferry, on a stream that flows into the Wissey, was erected in 1481 by Sir Edmund Bedingfield. It is wholly constructed of brick, and originally inclosed a quadrangular court, 118 feet by 92 feet. The entrance is over a bridge (formerly a drawbridge) and through a gateway between two fine towers 80 feet high. The whole is surrounded by a moat 52 feet broad and 10 feet deep. Of East Basham House, near Fakenham, built in the reign of Henry VII. or Henry VIII., the walls of the porter's lodge and some of the apartments on the northern side of the court remain, and are appropriated as a farm-house. Winwal House, at Wareham, near Stoke Ferry, is perhaps the most ancient domestic edifice in England. It has Norman buttresses, and some portion of ornament in that style. It consists of two stories, each containing two apartments. The whole building is only 33 feet long by 27 feet deep, and scarcely 16 feet high. Oxmead Hall, and Blickling Hall, near Aylsham, belong to a later period—Oxmead to that of Elizabeth, and Blickling to that of James I. or Charles I.

A notice of the ancient buildings of Lynn, and of the abbey of Thetford, will be found under LYNN and THETFORD. The abbey or priories of Wymondham and Castle Acre have been already mentioned. Walsingham Abbey is noticed in the article WALSHINGHAM, LITTLE. Langley Abbey is on the verge of the marshes of the valley of the Yare, 2 or 3 miles N. from Loddon. It was founded in 1198 by Robert Fitz-Roger Helke, or De Claving, for Premonstratensian Canons. The remains of the Benedictine abbey of St. Bennet of Hulme, founded by Canute before 1020, are in the marshes near the junction of the Bure with the Thurn and the Ant. At West Dereham, between Stoke Ferry and Downham Market, are the remains of a Premonstratensian abbey, founded in 1188. The chapel and hospital (afterwards priory and abbey) of North Creak, 2 miles S. from Burnham Market, were founded by Sir Robert de Nerford in 1206. The priory and abbey belonged to the regular canons of St. Augustine. Of all these institutions there are ruins which contain some beautiful portions, chiefly in the early English style. Near the sea, on the road between Cromer and Cley, are some remains of Beeston Priory, founded for the canons of St. Augustine in the reign of John or of Henry III. There are a few remains of the once extensive priory of Flitcham, founded in the reign of Henry III., about 9 miles N.E. from Lynn: they are used for farm offices. Of Binham Priory, a Benedictine house, 5 miles S.E. from Wells, founded by a nephew of the Conqueror, the ruins are very considerable and interesting. The nave and north aisle, and a portion of the south aisle of the conventual church, with the chief part of the west front, and the ruins of the north transept remain. The west front is early English; the interior of the church is Norman. The nave and north aisle are at present used as the parish church. Of Broomholm Priory, near the sea, between Cromer and Yarmouth, founded in 1113 for Cluniac monks, there are some remains incorporated with a farm-house.

Several of the churches in the county have round towers, of no great dimensions, surmounted by an octagonal upper story; and many of them are partly of Norman architecture. Little Snoring church has a doorway exhibiting a curious mixture of Norman and early English. Northwold church has in the chancel against the north wall a lofty shrine, or Easter sepulchre, the upper part of which is composed of canopies over niches, while the lower part forms an altar tomb, on which are three figures of armed men in a posture of alarm, designed to represent the soldiers at the Resurrection of Our Lord. At Houghton, near Walsingham, is a small chapel, which is a beautiful specimen of decorated architecture.

Statistics; Religious Worship and Education.—According to the Returns of the Census in 1851 there were then in the county 1441 places of worship, of which 719 belonged to the Church of England, 516 to Wesleyan Methodists, 91 to Baptists, 49 to Independents, 15 to Quakers, 13 to Mormons, 7 to Unitarians, 6 to Roman Catholics, and 2 to Jews. The total number of sittings provided was 280,668. The number of day-schools in the county was 1861, of which 497 were public schools, with 34,961 scholars; and 864 were private schools, with 18,745 scholars. Of Sunday schools, there were 782 in the county, with 50,182 scholars, of which 481 schools, with 27,422 scholars, were under the superintendence of the Established Church. The number of evening schools for adults was 58, with 1033 pupils. There were 18 literary and scientific institutions in the county, with 2176 members, and 40,470 volumes in the libraries belonging to them.

Savings Banks.—In 1853 the county possessed 10 savings banks—at Aylsham, Downham Market, Fakenham, Harleston, King's Lynn, Norwich, North Walsham, Swaffham, Walton, and Great Yarmouth. The amount owing to depositors on November 20th 1853 was 595,823*l.* 3*s.* 3*d.*

NORFOLK, U. S. [VIRGINIA.]

NORFOLK ISLAND. The group of islands of which Norfolk Island is the largest, consists of Norfolk Island, Philip Island, Nepean Island, and several islets named the Bird Islands, which are little more than masses of rock scattered about near the shores of Norfolk Island. The sea surrounding the island has a rocky bottom, and there is no good anchorage. Norfolk Island is used by the British government as a penal settlement. It is situated in 29° 2' S. lat., 168° 2' E. long., 900 miles E.N.E. from Sydney, and about 400 miles N.N.W. from New Zealand. It is about 5 miles long, and the average width is about 2½ miles. The area is estimated at 14 square miles.

The substratum of the island is porphyry, but a very large number of boulders of greenstone are distributed over the surface, and appear to have been originally imbedded in the porphyry. The south-eastern part of the island, where the settlement is placed, is comparatively flat, and the beach is almost incessantly beaten by a violent surf. In this part the porphyry is overlaid by sandstone and limestone. The rest of the island rises from the sea with steep cliffs to the height of from 200 to 300 feet. The general elevation of the central part of the island is from 300 to 350 feet, but Mount Pitt rises to the height of 1050 feet. Numerous ravines radiate in all directions from Mount Pitt, most of which terminate in abrupt declivities from 30 to 40 feet above the sea, over which in winter fall several picturesque cascades. A landing-place on the north side of the island is close to one of these ravines, called Great Cascade. Springs of fresh water are abundant. The soil is rich, and the greatest part of the island is covered with timber-trees, among which are pines 200 feet in height and 5 feet in diameter. Maize, wheat, rye, barley, and oats, as well as vegetables and fruits are cultivated; but the difficulty of landing is unfavourable to colonisation. The island was discovered by Captain Cook in 1774. It was first occupied as a dependency of New South Wales, partly by criminals and partly by free settlers; but since 1825 it has been exclusively a penal settlement. The number of prisoners is from 600 to 700. *Philip Island*, about 6 miles S. from Norfolk Island, and unoccupied, is somewhat more than a mile long, and less than a mile wide. It is everywhere precipitous, and is furrowed into deep gullies. *Nepean Island* is smaller, and about 600 yards S. from Norfolk Island.

NORICUM, a province of the Roman empire, was bounded N. by the Danube, W. by Vindelicis and Rhætia, E. by Pannonia, and S. by Illyricum and Gallia Cisalpina. It was separated from Vindelicis by the Cenus (Inn), and from Gallia Cisalpina by the Alpes Carnicæ and Alpes Julis; but it is difficult to determine the boundaries between Noricum and Pannonia, as they differed at various times. Under the later times of the Roman empire, Mount Cæsius and part of the river Murus (Mur) appear to have formed the boundaries. Noricum would thus correspond to the modern Styria, Carinthia, and Salzburg, and to parts of Austria and Bavaria. Noricum is not mentioned by name in the division of the Roman empire, made by Augustus, but it may be included among the Eparchie. (Strabo, p. 840.)

Noricum was divided into two nearly equal parts by a branch of the Alps, which was called the Alpes Noricæ. These mountains appear to have been inhabited from the earliest times by various tribes of Celtic origin, of whom the most celebrated were the Norici (whence the country obtained its name), a remnant of the Taurisci. Noricum was conquered by Augustus, but it is uncertain whether he reduced it into the form of a province. It appears to have been a province in the time of Claudius, who founded the colony Sabaria, which was afterwards included in Pannonia. (Plin., iii. 27.) It was under the government of a procurator. (Tac., 'Hist.', i. 11.) From the 'Notitia Imperii' we learn that Noricum was subsequently divided into two provinces, Noricum Ripense and Noricum Mediterraneum, which were separated from each other by the Alpes Noricæ. In the former of these a strong military force was always stationed, under the command of a dux.

In addition to the Norici, Noricum was inhabited in the west by the Sevaes, Alauni, and Ambisontii, and in the east by the Ambidravi or Ambidrani; but of these tribes we know scarcely anything except the names. Of the towns of Noricum the best known was Noreia, the capital of the Taurisci or Norici, which was besieged in the time of Cæsar by the powerful nation of the Boii. (Cæsar, 'Bell. Gall.', i. 5.) It was subsequently destroyed by the Romans. (Plin., 'Hist. Nat.', iii. 23.) The only other towns worthy of mention were, Juvanum (Salzburg), in the western part of the province, Boiodurum (Innsbrück), at the junction of the Inn and Danube, and Ovilava, or Ovilaba, or Ovilava (Wels), south-east of Boiodurum, a Roman colony founded by Marcus Aurelius.

The iron of Noricum was in much request among the Romans (Pliny, 'Hist. Nat.', xxxiv. 41); and according to Polybius gold was formerly found in this province in great abundance (quoted by Strabo, iv. p. 208).

NORMA. [FROSINONE.]

NORMANDIE, one of the provinces into which France in ante-revolutionary times was divided, stretches along the English Channel from the mouth of the Bresle at Tréport to the mouth of the Couesnon, which river flows past Pontorson and enters the sea to the west of Mont-St.-Michel. It is bounded on the north and west by the sea. The eastern boundary dividing it from Picardie and Ile-de-France, ran along the Bresle and the Epte, to the mouth of the latter in the Seine; it then followed an irregular line to the Eure, which it struck opposite Ivry, whence the Eure completed the boundary to the mouth of the Avre. The provinces of Perche and Maine touched it on the south, the division being formed partly by the Avre, and partly by the crest of the high lands that form the watershed between the Channel and the Bay of Biscay, to about 1° W. long., whence it ran due west to the Couesnon. On the south-west it was bounded by Bretagne, the lower course of the Couesnon forming for a few miles the boundary between the two provinces.

Normandie was divided into Haute, or Upper Normandie, of which

the capital was Rouen; and Basse, or Lower Normandy, the chief town of which was Caen. Upper Normandy was subdivided into the following districts:—Caux, Bray, the Norman Vexin, Roumois, Auge, Ouche, and Lieuvin; Lower Normandy comprised the plains of Alençon, and Caen; together with the districts of Houlme, Bessin, Bocage, Cotentin, and Avranchin. Normandy now forms the departments of SEINE-INFÉRIEURE, EURE, CALVADOS, MANCHE, and of OISE, with the exception of the arrondissement of Mortagne.

Le-Vexin-Normand was so designated to distinguish it from that portion of Le-Vexin, which was in the early ages included in the domains of the crown and entitled Le-Vexin-Français.

The population of the five departments into which Normandy has been divided, with the exception of the arrondissement of Mortagne in the department of Orne (which comprehends a portion of the county of Perche), was, in 1851, 2,587,717. The length of the province, from east to west, is about 160 miles; the breadth varies from about 60 to 110 miles. The area is about 11,300 square miles.

A detailed description of the country is given under the names of the departments into which it is now divided. Normandy contains no great elevations, except in the south, where it is traversed by the eastern prolongation of the Armorican chain of hills, and in the west, where a branch of that chain extends into the Cotentin. It is watered on the east side by the Seine and its tributaries the Eure and the Rille; in the centre by the Orne, Dives, and Touques; and in the west by the Douve, Vire, Sée, and Celune. The climate is moist and temperate, and the soil produces abundantly all sorts of grain; apples and pears are grown in great quantity, from which are made cider and perry, the common drink of the peasantry. The meadow and grass lands are extensive and excellent, and afford pasturage to great numbers of cattle and horses. Normandy contains many important towns. Manufactures of cotton, linen, woollen stuffs, and lace are carried on in Rouen, Evreux, Caen, Lisieux, Bayeux, Vire, and other towns. Along the coast are the ports of Dieppe, Havre, Honfleur, Isigny, Cherbourg, and Granville.

The country was, in Roman times, inhabited by a number of Celtic nations, and was included in the Roman province of Lugdunensis Secunda. This part of Gaul was, on the downfall of the empire, conquered by Clovis (A.D. 497-500), and incorporated by him in the kingdom of the Franks. In the division of the Frankish territory among the sons of Clothaire I., it was included in the kingdom of Neustria. In the attacks of the Northmen on France, Neustria had its share of the general devastation. Among the most formidable of their chieftains was Rollo, who first attacked France in 876: he ravaged alternately the north and the south of France, the Low Countries, and England; and in 911 he led a numerous army from the last-mentioned country to the siege of Paris. He failed in his attempt upon Paris, but received, from the weakness or policy of Charles le Simple, the hand of his daughter Gisele in marriage, with the cession of an extensive province, to be held as a fief, on condition of his ceasing to ravage the rest of the kingdom and making profession of the Christian religion. The ceded province lying between the Seine, the Epte, and the sea, became the duchy of Normandy.

Rollo appears to have possessed qualifications far beyond those of an ordinary sea-king. He introduced the feudal system in its complete and regular form. The first fiefs granted by him were to some of the churches of his duchy, the rest of which he divided into counties and distributed among the chief officers of his army. The Normans applied themselves with energy to the cultivation of the ravaged lands; strangers from all parts were invited to settle within the duchy, and the laws were strictly administered for the protection of property. He rebuilt the ruined churches, and took every precaution for the defence of his territories against the attacks of other pirates, inclosing the towns with walls, securing the mouths of the rivers by barricades, and keeping up the valour and warlike skill of his subjects by hostilities along his frontier, especially against the Bretons, whom he partly reduced to subjection.

The warriors whom Rollo established in his new settlement adopted the language, the social and political institutions, and the religion of the nation which they had conquered; but they imparted to each that vigour which was the characteristic of their own nation. The rude dialect, formed by a corruption of the Latin language, which was then common in France, became a regular and a written language, embodied in their judicial code or in the poetry and romance which constituted their popular literature. The feudal system received from them a stability which rendered it an important instrument in the restoration of social order in Europe. Their attention to the sermons and the catechetical instructions of the clergy was marked by the same assiduity which characterised their other pursuits; although churches and priests had been, during their piratical career, the objects of their bitterest hostility.

Some years after the establishment of the duchy, a new invasion of France by the piratical Northmen took place (923-927), and the invaders, when defeated, found shelter and assistance among the subjects of Rollo, by whose support they were enabled to renew their ravages. The cession of Le-Bessin, or the territory of Bayeux, and of a portion of Maine, bought off the Duke of Normandy, and the pirates, left to their own resources, were almost entirely destroyed in a battle near Limoges. Rollo abdicated his duchy (927) in favour of his son.

Guillaume (William) I., called Longue-Epée (long-sword), was the successor of Rollo. He gained several advantages over the Breton chiefs who opposed him. He received from the King of France, the cession of Le-Cotentin and L'Avranchin, which he added to his dominions. He had a principal share in the restoration of Louis IV. to the throne of France. He afforded an asylum to Harald VII., king of Denmark, whom he restored by an armed force to his throne. Guillaume was assassinated by the attendants of Arnolphe, count of Flanders, at a conference which he held with that noble at Pecquigny on the Somme (942), just as he was on the point of abdicating his duchy to assume the habit and vows of a monk.

Guillaume left no legitimate offspring, but his natural son Richard I., afterwards called Sans-Peur (the Fearless), a boy of 10 years, was recognised as duke by the Normans, and placed by them under the care of three or four guardians, of whom two at least were recent emigrants from Denmark, and had not renounced paganism. Louis IV., king of France, hastened to Rouen (943) and secured the person of the young duke, whom he conveyed to Laon, that he might be there brought up in a manner befitting his rank and prospects. To put an end to the dissensions between Louis and Hugues, duke of France, the partition of Normandy was agreed upon; and these two, uniting their forces, attacked the duchy on one side, while it was assailed on the other by the Bretons, who gladly seized so favourable an opportunity of throwing off the Norman yoke. The address and perseverance of Bernard the Dane, regent of Normandy, triumphed over these difficulties. In this warfare Richard grew up, signalising his courage and obtaining thereby his distinguishing epithet of Sans-Peur. Louis (954) and Hugues (956) died leaving their children minors.

In the reign of Lothaire, son and successor of Louis IV., new attempts were made on the person and dominions of Richard (963), who resorted for assistance to the King of Denmark and obtained the support of an auxiliary force. By the ravages of this barbarous soldiery the king and his chief adviser, Thibaut, count of Chartres, were obliged to sue for peace. On the death of Louis V., successor of Lothaire, Richard was one of the most energetic and influential supporters of Hugues Capet, in his usurpation of the throne of France (987). Richard died at Fécamp (996), after a reign of 53 years.

The early part of the reign of Richard II., surnamed Le Bon, was distinguished by an attempt on the part of the peasantry of Normandy, who had been reduced to an inferior condition by the settlement of the Northmen under Rollo. Secret assemblies were held in each county of the duchy, and two deputies were appointed by each to meet in a general assembly in a central place, to maintain their pretensions to perfect equality with the dominant race. The plan was however discovered. A band of soldiers, despatched by the duke, surprised the general assembly at its sitting, seized the deputies and others of the peasantry, and causing them to be mutilated by cutting off their hands and feet, sent them home to strike general terror. The peasantry after this resigned themselves to a servitude against which they deemed it in vain to struggle (997).

A connection between the affairs of Normandy and England was first established by the marriage of Ethelred II. with Emma, the sister of Duke Richard (1002). In the following year hostilities appear to have broken out between the two powers, and a force, landed from an English fleet, was repulsed in an attempt to ravage the duchy. At a subsequent period Ethelred, when attacked by Sweyn, king of Denmark, and abandoned by his subjects, took refuge in Normandy (1013-14); until recalled by his subjects. On his death, Emma returned with her children to Normandy; but subsequently married Canute the Dane, the usurper of her children's inheritance.

Another remarkable event marked this reign. Rodolph, a Norman chieftain, who had some complaint against Richard, proceeded with many companions to Rome, in the double character of a pilgrim and an appellant to the authority or influence of the Pope (1016). By the advice of the pontiff he engaged in the service of the Lombard princes of Benevento, and attacked the Greeks of Apulia, which country was then subject to the emperors of Constantinople. Many young Normans, encouraged by Duke Richard, engaged in the service of Rodolph; and this expedition, in the course of a century, led to the establishment of a Norman dynasty on the throne of the two Sicilies. [SICILY, KINGDOM OF.]

On the death of Richard II. (1026 or 1027), his eldest son Richard III. succeeded to the throne. Soon after his accession he had a war with his brother Robert, whom he obliged to submit; but, immediately on his return to Rouen, he died under circumstances which led to a strong suspicion of poison; and the vacant duchy was seized by Robert, whose character and exploits obtained for him the twofold epithet of Le Magnifique (the Magnificent) and Le Diable (the Devil). He had to struggle against the rebellion of his vassals, but he triumphed over these opponents, and became the arbiter of the disputes among his neighbours, restoring Baldwin of Flanders to his country (1030), and enabling (1031) Henri I. to mount the throne of France. Henri, in return for his powerful support, ceded to him as a fief the district called Vexin-Français, between the Epte and the Oise. In 1034 Robert equipped a fleet for an expedition to England, in order to restore Alfred and Edward (afterwards the Confessor), the children of Ethelred II. by Emma, to the throne of their ancestors, then usurped and occupied by Canute the Dane. The fleet was however

driven back by a tempest, and Robert, changing the direction of the force he had gathered, sent it into Bretagne, and compelled Alain or Alan, who then held that duchy, to do homage to him. Robert shortly afterwards set out on a pilgrimage to the Holy Land, after having recommended his only son William the Bastard, a boy of eight years, to the fidelity of his nobles; and died at Nicaea, in Bithynia, in 1035.

Guillaume (William) II., surnamed first 'the Bastard,' afterwards 'the Conqueror,' had been, before his father's departure, taken to the court of Henri I. of France. On the death of Robert, Henri took his young ward to Rouen, and established him in possession of his father's dominions, except Le-Vexin-Français.

The tender age of the young duke, and the stain attaching to his birth, led to civil discord and bloody dissensions which caused terrible desolation, not only in Normandie, but in all parts of France. In this state of affairs the clergy attempted the establishment of 'the peace of God,' which would have caused the almost entire cessation of private war; but unable to suppress the evil, they set themselves to limit and regulate it, and under the title of 'the truce of God,' they secured certain periods of time, and portions of territory, and classes of persons, from the violence of warfare. The confusion and troubles of Normandie continued however during the minority of Guillaume, who, at last, by the victory obtained at Val des Dunes, between Caen and Argentan (1047), crushed his most formidable competitor, Guido of Macon, supported by nearly the whole body of Norman nobles. Henri I. of France was present at this battle, with an auxiliary force of 3000 men, on the side of Guillaume. Soon after, during the troubles of Anjou, the succession of which was disputed, and while Bretagne was torn by internal dissensions, Guillaume seized his opportunity, and wrested the suzerainty of Maine from the rival counts of Anjou. He also carried on war with the Bretons, over whom he gained some advantages (1065) a year before his expedition to England. He set sail for the conquest of England from St.-Valery-sur-Somme on Michaelmas-day in 1066. [ENGLAND.]

William, on setting out for the conquest of England, had engaged to Philippe, king of France, in order to obtain his consent to the enterprise, that he would, if successful, resign his continental dominions to his son Robert. ('L'Art de Vérifier les Dates.') After his success he not only refused to deliver up to Robert the government of the duchy, but withheld from him even the county of Maine, which had been granted to him as his wife's dowry. These and other wrongs, real or imagined, drove Robert into exile, and led him to make incursions into Normandie, which were repressed by Guillaume. In 1087 Guillaume demanded of Philippe I. of France the restitution of Le-Vexin-Français, which had been withheld from him by Henri I. Philippe refused; war ensued; and an accident which occurred in the course of it led to the death of Guillaume, after he had governed the duchy of Normandie 52 years.

On the death of Guillaume, Robert became Duke of Normandie; and, returning from exile, took possession of his inheritance. He made a vain attempt by means of his partisans to possess himself of England, which had fallen to his next brother, William the Red (1088). The misconduct of Robert, and the intrigues of his brothers, excited general discontent in Normandie, which continued to be the scene of confusion; until the duke, eager to engage in the first crusade, pledged his dominions to his brother the king of England for a sum of money, and embarked for the Holy Land (1096). Guillaume le Roux, thus possessor of the duchy, renewed the contest with Philippe for the possession of Le-Vexin-Français, and sought to recover Maine, but his projects were cut short by death (1100).

The death of William and the absence of Robert gave opportunity to Henry, the Conqueror's youngest son, to seize the throne of England. Normandie quietly submitted to Robert on his return (1101) from the crusade. Under his weak sway the country was again torn by anarchy and dissension, when in 1106 it was assailed by Henry with an army of Anglo-Normans. The discontent of Robert's subjects favoured his designs: he took Bayeux after a stout resistance and burned it, and Caen surrendered; but Falaise and Tinchebray resisted. The two brothers engaged in conflict under the walls of the last-named town; Robert was defeated and taken, and an English army conquered Normandie. Robert died, after a long captivity, in 1134.

Henry governed the country with vigour. He put a stop to internal warfare, resumed or compelled the restoration of many grants made by his brother, restored to the church the possessions that in a time of discord had been wrested from it, and regained possession of all that had belonged to his father. His attempts to possess himself of the person of Guillaume, son and heir of Robert, who took refuge in France, led to mutual jealousy, distrust, and war between him and Louis VI., Le Gros, king of France. Guillaume, the only legitimate son of Henry, was drowned in his passage from Normandie to England (1120). His daughter and heiress Maude had been married to the emperor of Germany, Henri V. (1114), after whose death (1125) her father married her (1129) to the son of the Count of Anjou, Geoffroy Plantagenet, who succeeded by the abdication of his father to the county of Anjou and its dependencies, in the same year in which the marriage was celebrated.

The death of Guillaume, son of Duke Robert, and claimant of Normandie, in 1128, seemed to secure for Henry's daughter the quiet succession to the kingdom of England and the duchy of Normandie;

but notwithstanding this favourable event his latter days were embittered by quarrels with Geoffroi of Anjou, and on his death (1135) the kingdom of England fell into the hands of his nephew Stephen, count of Boulogne. This usurpation led to civil war, and both England and Normandie suffered from a long series of hostilities, and from consequent social disorganisation. Stephen passed over from England to Normandie (1137), and did homage to Louis VI. for that duchy; but he too displeased his subjects and returned to England, and the duchy remained without a master until 1144, when it was conquered by Geoffroi, who in his turn did homage for it to the king of France, now Louis VII., and Maud exercised a government little more than nominal until 1151, when Geoffroi died, and was succeeded in his Anjevine and Norman states by his son Henri, afterwards Henry II. of England.

Henri had indeed been invested with the rights of his parents over Normandie before Geoffroi's death (1150), and the recognition of his investiture by the king of France had been purchased by the cession of Le-Vexin-Normand. In 1152 he married Eléonore, duchess of Aquitaine, from whom Louis VII. of France had just been divorced. This union, by uniting under one chieftain Normandie, Anjou, and Aquitaine, rendered his power superior to that of the king of France; and in 1164 he succeeded, on the death of Stephen, to the crown of England. His right to Anjou was disputed by his younger brother Geoffroi, on the ground that his father had bequeathed it to him. This was true; but the defrauded prince was obliged to content himself with lands unfortified and a pension from his brother (1156). The talent and ambition of Henry, his extensive plans of aggrandisement, his struggles with Louis VII. of France, the rebellion of his sons, and his memorable contest with the archbishop of Canterbury (Thomas a Becket), belong to the history of England. Henry died in 1189, worn out and broken-hearted by the ingratitude and perpetual rebellions of his children. His eldest and third sons, Henry and Geoffroi, had preceded him to the tomb.

Richard Cœur-de-Lion, or the Lion-hearted, succeeded his father in Normandie as well as in England. He had, before his father's death, and while in rebellion against him, done homage to Philippe Auguste, king of France, for the duchy and all the other fiefs possessed by his father in France. He was crowned as Duke of Normandie after his father's death, and before his own departure on the third crusade. During his captivity in Germany the duchy was attacked by the king of France, who took several towns, but failed in his attempt on Rouen (1193). The treachery of Prince John, Richard's brother, afforded him a fair prospect of wresting the duchy from its rightful owner; but the release of Richard and the double treachery of John frustrated his plans, and a petty yet destructive war followed, which, though interrupted by a short peace between the two kings, and by some subsequent temporary suspensions of arms, continued till the death of Richard (1199), an event which happened in the course of an obscure struggle, but which led to consequences of the most important character, especially to Normandie.

The dominions of Richard passed into the hands of John, his youngest brother; but his claim was disputed by Arthur, duke of Bretagne, son of Geoffroi, the third son of Henry II. Philippe Auguste however embraced the cause of Arthur; but the capture of Arthur (1202), and his subsequent assassination by John at Rouen (1203), put an end to the struggle. The crime however cost John his duchy; general indignation was excited by it: Philippe overran the duchy, and took the strongest fortresses. John fled to England, and his subjects, abandoned by their prince, hastened to submit to the invader. Rouen was the last town to capitulate, and Normandie passed finally into the hands of the French king. Philippe accused John before the peers of France of the murder of Arthur, and procured a sentence of forfeiture against him, by virtue of which the duchy was ever after united to the crown of France, though the legal act re-uniting it in perpetuity to that crown was not executed till the reign of Jean II. of France (1361).

In the wars of the English under Henry V. and VI. Normandie came again into their hands. They no longer however held it as a feudal duchy, but as a part of the kingdom of France to which they laid claim.

(Sismondi, *Histoire des Français*; Thierry, *Conquête d'Angleterre par les Normands*; *L'Art de Vérifier les Dates*, &c.)

NORMANTON, SOUTH. [DERBYSHIRE.]

NORRKÖPING, a sea-port town in Sweden, situated in 58° 36' N. lat., 16° 28' E. long., near the mouth of the Motala, which falls into an inlet of the Baltic called the Brävicken, a short distance below the town. This inlet is about 22 miles long, with a breadth varying between half a mile and two miles, and has depth enough for middle-sized vessels, which may sail up to the town. Norrköping is built on both sides of the river, which is crossed by several bridges. The streets are wide and generally straight, though the town stands on undulating ground; the houses, partly of wood and partly of stone, are only two stories high, but have a neat appearance. The manufactures are numerous, comprising woollen-cloth, brass and hardwares, stuff, paper, linen, cotton, gloves, starch, refined sugar, &c. There are oil-mills and ship-building docks. Iron is an important article of export, as all the iron worked in Eastern Götaland is exported from this town. Most of the grain grown in the plain of Linköping is also

shipped at this harbour. The town has a population of about 12,000. It has a grammar school, free schools for the poor and for orphans. The Jews are permitted to settle in this town, and have a synagogue. Norrköping is situated in the district (län) of Linköping, and is about 90 miles distant from Stockholm. [SWEDEN.]

NORRLAND. [SWEDEN.]

NORRSKA FIELLEN (the Norwegian Range), a mountain mass which occupies with its branches the southern portion of the Scandinavian peninsula. The southern portion of the Norrska Fiellen is sometimes called the Dovre Field, though this name properly belongs to the most northern portion of the mass. The range that lies north of the Norrska Fiellen is called Kiölen. The boundary-line between the Norrska Fiellen and the Kiölen lies between 63° 30' and 64° N. lat., east of the Vårdals Fiord, the eastern portion of the bay of Trondhjem, where the range is less than 12 miles across, and presents one of the most convenient roads for passing it.

The range of the Scandinavian mountains begins on the south with Lindesnaes, the most southern extremity of Norway (south of 58° N. lat.), and extends to Cape Nordkyn (71° N. lat.), and the Varanger Fiord, over a space exceeding 1000 miles in length. The Norrska Fiellen is only about 360 miles in length, but it considerably exceeds the Kiölen range in width and in elevation.

The Norrska Fiellen occupies more than three-fourths of the southern part of Norway. Its elevated, rocky masses approach close to the southern and western shores: on the east its boundary is determined by a line drawn from the shores of the Skagerrack at the Lange-sunda Fiord (9° 40' E. long.), to the town of Trondhjem, though some of its lower offsets advance considerably to the east of that line. In the whole country west of this line there is no low level, except in the narrow valleys; but on the summits of the rocky masses there are extensive plains.

South of 59° N. lat. the mountain masses do not attain a great elevation. They rise from the sea with a steep ascent to the height of 300 or 400 feet; but at the distance of about 20 miles from the coast they hardly exceed 1000 feet in elevation. Farther north they rise still higher in the Heck Field and in the Bygle Field, which attains an elevation of 2000 feet above the sea. In the latter the upper part of the mountains begins to extend into plains. South of it they are broken into narrow ridges running north and south, and separated from one another by deep narrow valleys. These valleys, though they contain only a small portion of low and level land fit for agricultural purposes, are fertile; and being sheltered against the western and northern winds, have a more temperate climate than any other part of the globe under the same parallel. The declivities of the ranges are covered nearly to their summits, except where they are very steep, with forests of pines, birches, and beeches. The coast is much broken, but none of the numerous inlets advance more than five miles within the mountain masses, and most of them not half that distance.

Bygle Field and the mountains south of it are only the southern slope of the whole mass. North of 59° N. lat., it attains, in the Yökle Field, an elevation of about 4500 feet, which may be considered as the general height of the Norrska Fiellen as far as the Dovre Field, whose branches extend to 63° N. lat. The highest part of the rocky masses is towards the western shores. These shores are cut up in a very remarkable manner by numerous inlets, which are generally only a few miles wide, but penetrate to a great distance inland, some of them 70 and 80 miles, between the huge mountain-masses that inclose them. Along the open sea and close to the water's edge the mountains are on an average between 600 and 1000 feet high, and they continue to rise as they proceed eastward; so that at the distance of 10 or 15 miles they attain the general level of about 4500 feet, which they preserve for more than 100 miles. They form indeed an elevated plain of uneven surface, on which are scattered bold peaks, rugged precipices, and extensive lakes. The general elevation of the plain does not rise above the line of perpetual congelation, which in 60° N. lat., in this country, is said to occur at an absolute height of 5600 feet, and in 62° N. lat., at 5100 feet; but it rises considerably above the line of trees, which cease to grow, even in a stunted state, below the height of 4000 feet. The surface of the plain consists either of barren naked rocks, or is covered with extensive morasses. In some places there are tracts on which heath and lichens are thinly scattered. These tracts are inhabited by the rein-deer and lemming. Here and there a few depressions occur in the plain, which in summer are covered with a scanty growth of grass, and are pastured for about two months; but they are from 50 to 60 miles distant from the nearest village. Along the western shores, owing to their steepness and to the western gales, the mountains are quite bare. But along the shores of the inlets there are level tracts of moderate extent, which are partly covered with tall pines, and are partly cultivated. The clear blue water of these inlets, the high mountains rising from their shores with a steep ascent, varied by the forests and cultivated spots, give to the whole a degree of beauty and sublimity which is hardly surpassed in any country on the globe. The scanty and scattered population find their subsistence mainly in the deep sea, which contains fish in abundance. The beauty of these inlets is sometimes much increased by the falls of water from the high rocks which surround them. Some of these falls pour down perpendicularly from a great height, as the Feigum Foss (or Fall), 700 feet, the Sevlø Foss,

1000 feet, and the Keel Foss, 2000 feet. These three cataracts occur on the shores of the Søgne Fiord. On the Hardanger Fiord are the Skyttie Foss and the Böring Foss, each 900 feet high. The eastern declivity of the Norrska Fiellen may be considered to commence about 100 miles from the western coast, near 8° E. long. This slope is much less rapid than the western, occupying about 50 miles in width, and descending in this space about 4500 feet. Its surface is exceedingly broken, consisting of precipitous ridges, which have flat and sometimes extensive plains at their tops, and of deep narrow valleys. Though a few of the ridges, as the Halling Skarven (5436 feet), the Gousta Field (5522 feet), rise above the line of trees, the valleys and a large portion of the declivities of the lower mountains are covered with extensive woods, and the largest and best portion of the timber exported from Norway comes from this region. But the valleys are generally too high for cultivation, though they supply good pasturage. Many of the valleys are occupied by deep and extensive lakes, especially near the beginning of the descent. Several of these lakes are from 1200 to 2000 feet above the sea-level.

The highest part of the Norrska Fiellen is situated at the innermost recess of the Søgne Fiord, and is known by the name of Hurungerne. Its surface is covered with snow nearly all the year round. The Skagstøls Tind is 8000 feet above the sea; farther east is the Ymes Fjeld (8400 feet), the highest summit in Norway. Contiguous to the Hurungerne, on the north-west, is the Søgne Field, which is somewhat lower; but west of the Søgne Field lie the Justadals, or Sneer Bräen, an immense sheet of perpetual snow and ice, covering a surface of more than 600 square miles. This is by far the largest mass of ice in Europe; the large snow-fields which surround the Finster Aarhorn and the Jungfrau do not occupy more than 200 square miles. The elevation of the Sneer Bräen is not known, but it is estimated that the more elevated portions are 7000 feet above the sea. From the sides of this mass descend glaciers, which terminate in several lakes at their base. The Folge Fonden is another remarkable and elevated mountain-mass; it is situated on the southern shores of the Hardanger Fiord, and partly occupies the peninsula formed by this long frith and one of its branches, the Sör Fiord. The masses of ice covering its summit extend 25 miles from north to south, and about 10 miles in average width. Its elevation is stated at 5380 feet; glaciers descend from the sides to a height of only 2000 feet above the sea-level; the summit rises above the snow-line, which here occurs at 4120 feet. (Forbes, 'Norway and its Glaciers'.)

The most northern portion of the Norrska Fiellen is the Dovre Field, in the southern and highest part of which is the Sneer-hätten, which rises to 7487 feet above the sea, and nearly 3000 feet above the mountain plain on which it stands. The northern and lower parts of the Dovre Field approach the entrance of the Trondhjem Fiord, or Bay of Trondhjem.

The mountain plains of the Norrska Fiellen terminate with the Dovre Field. East of 10° E. long., the rocky masses do not extend in plains, nor do they constitute a continuous range; still the country between 61° 30' and 63° N. lat., 10° and 11° 30' E. long., is a mountain region, its surface being in general more than 2000 feet above the sea-level, and there being only a few valleys which sink below that elevation. Its surface is exceedingly broken, and presents a continuous succession of ascents and descents. Neither the mountains nor the intervening valleys occupy a large space; mountains generally extend from north to south, in the direction of the whole system, but they rarely continue for a few miles without being broken by deep depressions. Still more rarely do their summits present a level surface. Many of the valleys are only ravines, which however widen towards the border of the mountain region so as to become narrow valleys, and to admit cultivation, which even extends on the declivities of the mountains to some elevation. The whole region is wooded, though the timber-trees are not so large as on the eastern declivity of the mountain plains. Several of the mountains rise above the line of trees, but only a few attain the snow-line. The Tron Fiellet (near 62° N. lat.) is 5593 feet, and the Sylfiellen (near 63° N. lat.) is 5747 feet high.

Only two roads fit for carriages traverse the Norrska Fiellen; one of these connects Christiania and Bergen. It runs from Christiania northward, skirting the eastern shores of the Rands Fiord Lake, at the northern extremity of which it turns west, and begins to ascend the eastern declivity of the mountain mass. It passes over the table-land in a depression lying near 61° N. lat., between the Hurungerne on the north and Mount Sule Tind on the south. The highest point of the road does not much exceed 3000 feet above the sea, from which elevation it descends in a narrow valley between high mountains to the Søgne Fiord, and then traverses a hilly and broken tract till it reaches the Södra Oester Fiord and Bergen. The second road leads from Christiania to Trondhjem. It runs from Christiania to the Lake of Miösen; along the eastern shore of that lake and up the valley of the Lougen, nearly to its northern extremity, and ascends the Dovre Field, passing near the base of the Sneer-hätten, where it attains an elevation of more than 4500 feet. As snow-storms are very frequent even in summer in this elevated region, and as travellers are exposed to great danger during these storms in an uninhabited region, four 'field-stuer,' or houses of refuge, have been erected ever since the 13th century; they occur in a space of about ten miles. The road

then descends in a northern direction to the valley of the Driv Elf, passes through a depression in the mountains into the valley of the Orkel Elf, and through another depression into that of the Guul Elf, which it follows to the vicinity of Trondhjem. A carriage-road leads from Trondhjem to Røraas, by which the produce of the copper-mines of the last-mentioned place is brought to the port to be shipped. This road follows the road to Christiania as far as it lies in the valley of the Guul Elf, and then runs along this river to its source, where it crosses a mountain-side, probably more than 3000 feet above the sea, west of the Lake of Oresund, whence it descends to Røraas, which is somewhat more than 2500 feet above the sea.

The most frequented road is that which lies in the deep depression of the mountains between 63° 45' and 64° N. lat., which divides the Norrska Fiellen from the Kiölen Mountains, and by which the western districts of Swedish Norrland bring their produce to the harbour of Trondhjem, in preference to taking it to the harbours on the Gulf of Bothnia. It runs from the town of Oresund in Oresunds Län, on the northern side of the Lake of Störsejon, and after passing along the southern base of Mount Areskutan, which is 4775 feet above the sea-level, it traverses the boundary-line between Sweden and Norway, and its highest level occurs west of Stalstugan, where it is little more than 2000 feet high. Hence it descends in the valley of the Suul Elf to the eastern extremity of the Trondhjem Fiord, along the shores of which it continues to the town of that name.

North of the depression in which this road lies begin the *Kiölen Mountains*, or the northern part of the Scandinavian range: they present the character of a nearly continuous ridge, which in general occupies a space of 25 miles in width. Between 64° and 68° N. lat. the range extends in a north-north-east direction, but farther north it runs north-east, and towards its northern extremity, north of 69° 30' N. lat., east-north-east. Between 64° and 65° N. lat. nearly the whole width of the mountain mass lies within the territories of Norway; but farther north, up to 69° N. lat., it is nearly equally divided between Norway and Sweden, the watershed constituting the boundary-line between these countries. Farther north the Kiölen Mountains belong to Norway, except a small tract along the upper course of the Muonio River, which is under the dominion of Russia.

South of 66° N. lat. the highest part of the range is in the middle. It does not generally rise to a great elevation, though always above the line of trees; a few isolated summits are always or nearly always covered with snow. The declivity towards the east is not very steep, descending, in a distance of about ten or twelve miles, about 2000 feet to the base of the mountains, which is about 2000 feet above the sea-level. The lower offsets of the range extend however farther eastward to a distance of about twenty miles; they are commonly below the line of trees, and the valleys embosomed by them are often from six to eight miles wide, and generally covered with woods. The western declivity is exceedingly steep and broken. It descends, in a space of ten or twelve miles, from an elevation of about 4000 feet to the level of the sea. Rugged and precipitous masses of rock inclose long and wide valleys; the rocks are usually bare, or covered with heath and lichens, and sometimes with brushwood, but the valleys contain forests of fine timber-trees, especially that of the Namsen Elf. The elevated rocky masses extend to the very shores of the sea, which consist of a succession of deep inlets and projecting headlands. The Földen Fiord penetrates seventy miles into the rocky masses.

North of 66° N. lat. the high mountain masses rise to a greater elevation, and occupy a much larger space. Numerous summits lie along the watershed, which are always covered with snow. The largest snow-field in this part of Norway is the Fondalen, which extends through 50' of latitude, between 66° and 67° N., with a breadth of 14 to 28 miles, and sends glaciers into the sea at Holands Fiord. The highest of the snow-capped summits is the Sulitelma, near 69° N. lat., which is 6200 feet above the sea. Here also the eastern declivity is not steep, but exactly resembles the descent farther south; towards the west however the high mountain masses preserve a great elevation to the very shores of the sea. Cape Kunnen, near 67° N. lat., consists of rocks which rise in perpendicular precipices to the height of 1000 feet, and at a distance of about four miles inland they attain an elevation of 4000 feet. The whole rock is covered with perpetual snow, the glaciers extending on the south side to the very edge of the sea. This shows that the snow-mass by which this glacier is fed must be very extensive. Other parts of the coast are less elevated, but in several places the mountains near the coast rise to 3000 feet.

The islands, which are numerous along the coast, must be considered as portions of the range, and the mountains of which they consist rise to a great elevation. The island of *Aloten*, which is of moderate extent, rises almost perpendicularly out of the sea, and the seven-pointed peaks with which it terminates ascend far beyond the region of snow, rising to more than 4500 feet, whilst the snow-line hardly exceeds 4000 feet. The mountains on the island of *Dunnö* are above 3000 feet high. The valleys, which are inclosed between the high masses of the continent, are deep and rather narrow; though in general well wooded, they do not contain timber-trees, and the soil is not adapted to agriculture, except in a few places.

The Sulitelma is the highest mountain in Europe north of the Polar circle. It has been examined by Wahlenberg, a Swede, who found that the snow-line on the Lapland, or eastern side occurs at

about 3520 feet, on the western declivity at 3410 feet. The vegetation on the two sides therefore differs considerably. In Sweden the fir-trees ascend the declivity of the Sulitelma to about 1200 feet, the pines to 1400 feet, and the birch to 2100 feet. A mountain on which the birch does not grow is called 'fiell.' Above 2100 feet only bushes are found, especially birches, and two kinds of willow (*glauca* and *hastata*), but they disappear at about 2800 feet. The mosses on which the rein-deer feed extend to 800 feet below the snow-line, and to this height the Laplanders advance with their herds in summer. *Ranunculus nivalis* and similar plants are found in the crevices of the bare rock, projecting out of the snow-masses 500 feet above the snow-line, and *Lichenes umbilicati* even 1500 feet higher in similar situations. Higher up all vegetation disappears, and no animal or bird is met with, except the *Emberiza nivalis*.

North of 68° N. lat. the mountains along the watershed of the rivers (which flow respectively into the Gulf of Bothnia and into the Atlantic), sink to a much lower level, none of their summits attain; the snow-line. The highest portion of the range lies along the West Fiorden, or the long strait which divides the Lofoden Islands from the continent, and on these islands themselves. In these parts numerous mountain masses rise above the snow-line. The Faxfield, an isolated mass (near 69° N. lat.), rises to 4260 feet; the mountains along the eastern shores of Lyngen Fiord rise almost perpendicularly above the region of snow to upwards of 4000 feet, and the glaciers descend to about one-fourth of this height. At 70° N. lat. is the Yökle Field, between Quinanger Fiord and Alten Fiord, which rises to 3500 feet, and is covered with extensive snow masses. It is the most northern snow-mountain of the Kiölen on the continent. In these parts all the mountain masses are isolated, being separated from one another by deep valleys with steep sides, exactly resembling the deep sounds between the islands lying along the shores. The mountains on the Lofoden Islands are hardly inferior in height. Snow-capped summits occur in East and West Vaage, and they rise in Hindoe and some smaller islands to 3200 feet above the sea. Farther north they are less elevated, but the last snow-mountains occur on the island of Seiland, where they may be considered as a continuation of the Yökle Field, which stands opposite the island, on the continent. The islands farther north up to Mageröe, which contains North Cape, are far less elevated. This is the most dreary part of the Kiölen range. The rocks are naked and the valleys narrow. They contain little wood, and that of a small size. In a few places at the innermost recesses of the firths some few spots occur where potatoes are cultivated. The sea supplies the scanty population with subsistence.

The Yökle or Jökuls Field may, in some measure, be considered as the termination of the high range. Rocky masses of considerable elevation separate indeed the great bays called Alten Fiord, Porsanger Fiord, Laxe Fiord, Tana Fiord, and Waranger Fiord, but they decrease in elevation as they proceed farther east. The highest portion of these rocky masses occurs at the extremity of the headlands, on the shores of the Icy Sea, but as they advance south they gradually decrease in height, until at the southern extremity of the fiords they unite in a table-land with an undulating surface, intersected by low long-backed hills of gentle ascent. This table-land descends gradually and continually towards the northern extremity of the Gulf of Bothnia; and it contains the last elevated summits of the Kiölen Mountains. The Vorio Duder, south of the innermost recess of the Porsanger Fiord, probably attains nearly 3620 feet; and Mount Rastekaise, south of the Laxe Fiord, 3200 feet. Between the Tana Elf and the Lake of Enars is Mount Peldoive, an isolated height, rising to 2130 feet, but not above the region of the birch. Farther east every trace of mountains disappears. This region is somewhat more favoured by nature than that south of Yökle Field. It is true that the Porsanger Fiord, and the bays east of it, being open to the northern and eastern gales, do not admit any kind of cultivation; but on the Alten Fiord, which is sheltered against these winds by the elevated islands lying before its entrance, barley and potatoes are successfully cultivated, and the birch-tree attains a considerable size, though this place is in 71° N. lat. It is the most northern place on the globe in which grain is grown.

The Scandinavian range consists mostly of primitive and transition rocks; secondary rocks occur very rarely. Gneiss constitutes by far the most prevalent component of this range. Granite is not frequent; it appears, like the other primitive rocks, in some degree subordinate to gneiss. The transition formation is mostly composed of grauwacke, alum-slate, clay-slate, and limestone; but it also contains sandstone and other rocks. The rocky sides of the mountains and fiords are almost everywhere scored by glacial action. The cliffs that screen the Sogne Fiord (which is 110 miles in its whole length) are remarkable for the grooves, flutings, and polished channels in the coarse conglomerates of which they are composed. Glacier markings indeed are observable throughout the whole range; and the glaciers themselves present the wrinkles, dirtbands, and moraines observable in the Alpine ice-fields.

The Scandinavian mountains are rich in metals. Iron occurs in immense layers on the eastern declivity near its extremities, in Norway, in the province of Christiansand, on the south; and, in Sweden, in Lulea Lappmark, on the north; in the latter, near the church of Gellivara, there are mountains many hundred feet high consisting entirely of iron-ore. But the rich iron-mines of Sweden are not

within the range; they are situated in the lower country which extends south-east of it. Silver occurs at Kongsberg and Iarsberg in Norway, and at the Nasafell in Pitea Lappmark; but it is worked only in the first-mentioned place. Copper is found in the Dovre Field, at Røraas, Medal, and Selby; the mines of Røraas are productive. Lead is also found in the southern district of Norway, and at the Nasafell. Cobalt occurs in several places on the eastern declivity of the Norraka Fiellen; zinc, marble, and slate also abound in several places.

(Von Buch, *Travels*; Everest, *Journey through Norway*; Wahlenberg, *Reise auf den Sulitelma*; Schubert; Professor J. D. Forbes, *Norway and its Glaciers*.)

NORTE. [LOIRE-INFÉRIEURE.]

NORTE, RIO DEL. [MEXICO.]

NORTH AUSTRALIA is at present the designation applied to all that part of Australia, comprising considerably more than one-half of the island, which lies north of the parallel of 26° S. lat. This parallel forms the northern boundary-line of the colonies of New South Wales and South Australia, that of Western Australia remaining unsettled. Coburg Peninsula projects west-north-west from the mainland, between Mount Norris Bay on the north-east and Van Diemen's Gulf on the south, and extends in that direction nearly 60 miles. The greatest breadth of the peninsula is 15 miles, and its narrowest part, where it is joined to the mainland by a neck of land of 5 miles in length, is 2½ miles. On the north side of Coburg Peninsula is the deep inlet named Port Essington, which lies between 11° 6' and 11° 25' S. lat., 132° 5' and 132° 18' E. long. The inlet, at its entrance, between Point Smith on the east and Vashon Head on the west, is 7 miles wide, and extends south by east about 18 miles; its average breadth is 5 miles. The depth of water varies between 5 and 12 fathoms, and at the southern end it forms three spacious harbours, each of which extends inward 3 miles, with a width of about 2 miles; the depth of water is 5 fathoms, with a bottom of stiff mud and sand. These harbours are sheltered from every wind, and afford excellent and secure anchorage. The port forms one of the finest natural harbours in the world; it may be entered with safety both by night and day. Being within the range of the regular monsoon it is accessible to the Malay and Bugia trading proas, and to the junks from China.

The soil of the peninsula is in general indifferent, but in many places it is good, principally on the low flats and hollows, and near tracts which are swampy in wet weather. The vegetation is luxuriant, but suffers much during the dry season. The north-west monsoon, which brings the rainy season, begins about November. The rain during this monsoon falls in torrents, but seldom continues above two or three hours at a time. The general range of the thermometer at this season is from 80° to 95° Fahr. in the shade. The termination of the monsoon is indicated by squalls, and usually a tempest in the early part of April. In May the thermometer ranges between 75° and 95°, the mid-day heat being 89°. The average heat of the whole year is 83°, or about that of the equator.

With the expectation that, if there were an establishment on the north coast of Australia, it would be resorted to by the traders of the eastern portion of the Indian Archipelago for the sale of their produce and the purchase of European and Indian commodities, a settlement was made in 1824 in Apsley Strait, and called Fort Dundas, and another in 1827 on the Coburg Peninsula, and named Fort Wellington, but both settlements were abandoned in 1828. In 1838 another attempt was made, and the town of Victoria was founded on the western shores of Port Essington. In 1846 the population was stated to be about 60. The Malays did settle there, as was expected: the climate is unsuitable to Europeans, and the settlement has been abandoned.

The coasts, inlets, and islands of North Australia have been surveyed and named, but of the interior hardly anything is yet known. Melville Island, on the northern coast, between 11° and 12° S. lat., 130° 20' and 131° 34' E. long., is one of the largest of the islands. The area is about 1800 square miles. It is separated from Bathurst Island, which lies west of it, by Apsley Strait, which is from 2 to 4 miles wide and 46 miles long. From Coburg Peninsula it is separated by Dundas Strait, which is 15 miles wide. The natives lead a wandering life, living in the dry season on kangaroos and other marsupial animals, and during the wet season on fish, turtles, crabs, and other shell-fish. Their vegetables are the cabbage-palm and the sago-palm.

NORTH AYLESFORD, Kent, a Poor-Law Union in the northern part of the lathe of Aylesford, of which the area is nearly continuous with the area of the hundreds of Shamwell and Toltingtrough. North Aylesford Poor-Law Union contains 15 parishes, with an area of 41,732 acres, and a population in 1851 of 16,569.

NORTH CAPE. [TRONDHEJEM.]

NORTH POLAR COUNTRIES. [NORTH-WEST PASSAGE.]

NORTH SEA, sometimes called the German Ocean, is separated from the Atlantic by the British Islands, which form its western limits, and on the opposite side by Norway and Denmark from the Baltic. To the southward it is bounded by the coasts of France, Belgium, the Netherlands, and Germany; and to the northward an open space between the Shetland Isles and the Norwegian province of Bergen unites it to the Polar Sea. With the Atlantic it is connected through the Strait of Dover by the English Channel; and with the Baltic by the Skagerrack, the Kattegat, the Sound, the Great Belt,

and the Little Belt. It extends across 10 degrees of latitude and 11 degrees of longitude; its greatest length is about 700 miles, its extreme breadth 400 miles, and its superficies about 140,000 square miles.

On its north-eastern side the bold rocky face of Norway, intersected by deep fiords, rises precipitously from its bosom; but the sea here receives few tributary streams from the interior mountains, and it preserves a depth of many hundred feet along the base of the cliffs. Its south-eastern and southern coasts are low; the Elbe, the Weser, the Rhine, and the Schelde pour out through those alluvial shores enormous quantities of sand, which have more or less filled up the southern portion of the basin. The east coast of England partakes of the same character, and is exposed to the same effects; the Thames, the Ouse, the Humber, the Tyne, the Forth, and the Tay, contributing their unceasing though comparatively trifling efforts to front the shore with similar shoals. All these shoals and banks obstruct the free navigation of the sea, and, combined with the stormy and foggy character of the climate, have led to the destruction of an immense number of vessels. There are other banks, which do not seem to be attached to the shores or to assume the same ridge-like form, but which have been equally the result of the same causes. Such are the long North Bank, the Dogger Bank, the Well Bank, the Broad Fourteens, and others which need not be enumerated. The deep holes which are found in this sea form another of its singular features. There are several of these holes, but it will be enough for our purpose to particularise the 'Little Silver Pit' off the coast of Holderness in Yorkshire. The northern end of this singular hole is in 53° 45' N. lat., 0° 47' E. long., whence it runs in rather an irregular form and nearly on the true meridian to 53° 20' N. lat., 0° 43' E. long., a length of 25 miles. Its breadth at the northern end is little more than half a mile, but towards the middle it is two miles, whence it narrows to one mile and a quarter, and again increases to two miles in breadth towards the southern end. The Little Silver Pit, so called in contradistinction to the Great Silver Pit (which is an extensive space of comparatively deep rocks between the Dogger and Well banks) is situated seven leagues eastward of the entrance of the river Humber. The depth of the water on its edges varies from 50 to 80 feet, and yet in this singular submarine ravine there is a depth of 330 feet, in 53° 31½' N. lat., 0° 41½' E. long. But the most surprising feature of the Little Silver Pit consists in the great steepness of its sides; and it would appear somewhat extraordinary, taking into consideration the sandy, gravelly, and loose nature of the surrounding ground, together with the action of the tides, which run at the springs with a velocity of more than three miles an hour in a diagonal direction across it, that the hole is not in course of gradual filling up. The Little Silver Pit is marked in charts of very ancient date. It is the resort of fish of various kinds peculiar to the North Sea, as ground-fish and soles of unusually large dimensions have been taken from it. The North-North-East Hole, so called from its position with respect to Cromer, is another of these remarkable places, and characterised nearly as the other is: it is situated 8 leagues to the eastward of the Little Silver Pit; its greatest depth yet discovered does not however exceed 265 feet.

One island only interrupts the uniformity of this sea, Helgoland Rock, which lies off the mouth of the Elbe, unless the Bell Rock and the May Rock, situated in the opening of the Frith of Forth, may be so called: on each of these three insulated spots lighthouses have been erected. Lighthouses have likewise been established on all the salient points of the coast, as well as at the entrance of all the principal ports; and floating-light vessels and buoys have also been moored on several of the detached banks. The North Sea carries the great staple commodities of the northern regions of Europe—their coals, the timber of their inexhaustible forests, their hemp, and their hides and tallow; and bears back in return the manufactures, the necessaries, and the luxuries of more favoured climates. It is the marine highway to the capitals of eight different states, and it may be asserted that no sea in the world of equal dimensions can boast of half such a commercial intercourse, either in the number of vessels which it employs or in the general value of their cargoes.

The profusion of fish in the German Ocean has in all ages been celebrated. The principal of these are—cod, hake, and ling, with turbot, soles, and other flat fish, lobsters, and vast swarms of mackerel and herrings which give active employment to thousands of men, women, and children.

To trace the course of the tides in the German Ocean would require a long article, so various are the phenomena, and so incongruous do they at first sight appear; the flood running to the northward along one part of our coast and to the southward in another; rising upwards of 20 feet in some of its estuaries, and elsewhere being scarcely perceptible; and though everywhere regulated by the phases of the moon, yet showing high-water at one place at the same moment that it is low-water in another. The great tidal wave which rolls up from the Atlantic Ocean splits at the south-western angle of Ireland into two streams, one of which pursues its straight course up the English Channel, though somewhat retarded in its progress by the converging shores; while the other passes to the northward, and bending round the north of Ireland and Scotland, pours through the Pentland Frith with a velocity of seven or eight miles per hour, or, sweeping round the Orkneys and Shetlands, turns to the southward along the coast of Great Britain, but spreading as it goes across the whole expanse of

the German Ocean. This circuitous course requires more time for the transmission of the northern wave than that which arrives through the Strait of Dover, and therefore when the two flood-tides meet, which takes place off the coast of Essex, the northern is half a day later than the other branch from which it was originally separated. On the coast of Holland this meeting occurs not far from the Texel. Besides the action of the lunar tides, the effects of distant currents are sometimes manifest in the northern part of this sea, produced by the melting of the polar ice, and, in an opposite direction, by the continuous movement of an offset from the Gulf Stream.

The icebergs which quit the arctic seas and melt in the vicinity of the German Ocean, the overflowing of the Baltic Sea, and the volume of fresh water constantly pouring into its confined space from the surrounding rivers, sufficiently prove, whatever may have been asserted to the contrary, that its water must contain considerably less salt than that of the Atlantic.

NORTH-WEST PASSAGE. The countries which are situated between 49° and 70° N. lat., 55° and 141° W. long., are described in the article HUDSON'S BAY TERRITORIES. Those regions which lie north of 70° N. lat., and within the above-mentioned degrees of west longitude, are noticed in the course of the present article, which is a brief narrative of the successive expeditions for the discovery of a passage by sea from the shores of Europe across the Atlantic Ocean into the Pacific Ocean, and also of the several voyages and overland journeys in search of the expedition under Sir John Franklin. The other countries which surround the north pole are described under their respective names. [GREENLAND, ICELAND, LAPLAND, NOVA ZEMBLA, SIBERIA, KAMTCHATKA, &c.]

A few years after the discovery of America, Vasco de Gama succeeded in reaching the shores of Malabar in Hindustan. He returned to Europe in 1499. On comparing the geographical position of the countries discovered by Columbus and Vasco de Gama, it was evident that an immense space lay between them. This space comprised the great kingdom of Cathay (China), which on the globes and maps made by the German geographers of that time, on the authority of Marco Polo, extends more than 20 degrees east of its true position. It was therefore concluded in Portugal, that Vasco de Gama had only sailed half-way to Cathay, and that the countries discovered by Columbus were much nearer to Cathay than the coast of Malabar was. It was supposed that if a vessel were to sail past the countries discovered by Columbus, either to the north or the south, it would reach Cathay. This consideration gave rise to the first attempt to make a North-West Passage. In 1500 Gaspar de Cortereal, a Portuguese nobleman, was sent out to make the North-West Passage. He discovered a large part of the north-eastern coast of Labrador. The following year he returned to the place to which his discoveries had extended, and came to a strait, which was called the Strait of Anian. It can hardly be doubted that this is the strait which is now called Hudson's Strait. Being entangled in the floating ice which encumbers that strait all the year round, his vessels were separated. The vessel of Gaspar de Cortereal was never heard of, but the two others returned to Lisbon. A brother of Cortereal sailed in 1502 in search of him, but he also never returned. After this the Portuguese abandoned the attempt.

John Cabot had previously (1497) discovered the island of Newfoundland, but evidently without any design of discovering a North-West Passage. His son, Sebastian Cabot, who had accompanied him on his voyages, sought for the passage in 1517, when he accompanied Sir Thomas Pert, but this voyage added nothing to what had been done before. For a long time no attempt was made, probably because Magalhaens had succeeded in entering the Pacific by the Strait of Magalhaens, at the southern extremity of America.

The spirit of maritime discovery was excited in England about the middle of the 16th century, and lasted more than fifty years. All the numerous attempts made in this period were at the expense of private persons, or rather companies of merchants. The attempts were first directed to the discovery of a North-East Passage, by which it was proposed to reach the Pacific by sailing from west to east along the northern shores of Asia, the real extent of the continent of Asia being then unknown. Three vessels sailed under the command of Sir Hugh Willoughby and Richard Chancellor in 1553. The vessels separated: Sir Hugh perished with his whole crew on the coast of Lapland, but Chancellor entered the White Sea. Chancellor's discovery was of importance: it led to the establishment of a trade between England and Archangel, and to the design of the English of carrying on commerce with India by means of the Volga and the Caspian Sea, which project so completely engrossed the attention of the merchants of London, that all further attempts at discovering the North-East Passage were abandoned. The Dutch merchants afterwards resolved to try if it was possible to reach the East Indies by a North-East Passage. William Barents made two voyages (1594-1596), but was unable to proceed east of Nova-Zembla and the Strait of Waygats, on account of the quantity of ice which covered the sea to the east of that island.

In the meantime the North-West Passage was lost sight of until the year 1576, when the attempt was again made by the English, who prosecuted this object with great ardour for forty years. The first English seaman who did anything decisive towards this object was Martin Frobisher, who made three voyages (1576, 1577, and 1578) to

the northern seas. In the second voyage he discovered Frobisher's Strait, 63° N. lat., and in the third he re-discovered the Strait of Anian, or Hudson's Strait. He was followed by John Davis, who likewise made three voyages (1585, 1586, and 1587). In the first voyage he discovered Davis's Strait, and sailed up it to Mount Raleigh, 66° N. lat., and also found the inlet now called Northumberland Strait, in 65° N. lat. In his third voyage he extended his discoveries along the western shores of Greenland as far as 72° N. lat., and afterwards in sailing southward he likewise found the entrance of Hudson's Strait, which had been seen before that time by Cortereal and Frobisher, but none of these three navigators seem to have advanced any great distance into it. Henry Hudson, after several unsuccessful voyages of discovery to the north-east and north, directed his last voyage to the north-west, and penetrated through Hudson's Strait into Hudson's Bay. He passed the winter on the shores of the bay, hoping to find a passage to the Pacific in the following year, but his crew, which had suffered great hardships during this voyage, mutinied, and abandoned him and some of his adherents in a boat in the middle of the bay. Hudson was never heard of afterwards. In 1612 Sir Thomas Button discovered the strait between Southampton Island and the continent; and Bylot in 1613 discovered Fox Channel between Cumberland Island and Southampton Island. Bylot and Baffin in 1614 penetrated through Davis's Strait and explored Baffin's Bay to its most northern extremity, called Sir Thomas Smith's Sound, 78° N. lat. In returning along the western shores of Baffin's Bay, they passed the wide opening of Lancaster Sound (between 73° and 75° N. lat.), but considered it a closed bay. As their researches had been made with great care, Baffin was of opinion that all attempts to find a North-West Passage in these parts were useless, and this opinion soon became so prevalent as to put a stop to all voyages of discovery in this direction. The voyages were now directed only to the exploration of Hudson's Bay, and were prosecuted with less ardour. In 1631 James discovered James's Bay, the most southern part of Hudson's Bay, and in 1741 Middleton explored Wager River and Repulse Bay on the Melville Peninsula.

While the English were pursuing their discoveries on the north-eastern shores of North America nearly without interruption, the Spaniards made some feeble attempts along the north-western coast with a view of finding a North-West Passage. Their voyages led to no important result, except that Juan de Fuca seems to have visited the coast, as the southern strait by which Vancouver Island is separated from the continent still bears the name of Fuca Strait.

The question as to the existence of a North-West Passage seemed now to have been considered as decided in the negative, when the whalers who annually visit the sea on both sides of Greenland reported that in the years 1816 and 1817 the arctic seas were much less encumbered with ice than had ever been observed. The British government now resolved to make an attempt to settle this question. In 1818 two vessels were despatched, under the command of Captain John Ross and Lieutenant Parry, to re-examine the shores of Baffin's Bay. All the bays and inlets which these navigators entered were closed by great masses of ice, and Captain Ross was also of opinion that this was the case with Lancaster Sound, and that a North-West Passage did not exist in these quarters. But Parry thought that Lancaster Sound, considering its great width, had not been examined with sufficient care. Parry was sent in the following year (1819), for the purpose of examining it more closely than had been done by Captain Ross. On entering the sound he sailed in a westerly direction 30 degrees of longitude, or 540 miles, having on the north a series of elevated tracts, broken apparently into islands by intervening channels. The larger of these islands were named by him respectively Cornwallis Island, Bathurst Island, and Melville Island. On the south side of the sound were two large islands, of which the eastern was called Cockburn Island; the western remained nameless, as it was supposed to form a part of the American continent. The channel which divides these two islands received the name of Regent's Inlet. West of 100° W. long. no land was in view on the south. Parry and his crews passed the winter on Melville Island, hoping in the following summer to reach the Pacific. He was unable however to advance west of Melville Island, the sea being covered with thick and impenetrable ice: but no land was in sight, except that at a great distance to the west-south-west there appeared a bold coast, to which Parry gave the name of Banks' Land.

All hope of reaching the Pacific by Lancaster Sound being frustrated, Parry proposed to try if the object could be effected by any of the inlets which open into Hudson's Bay, the northern portion of which had not been explored. In 1821 he entered that Bay, and passing between Cumberland Island and Southampton Island, he advanced to Repulse Bay, which he examined, and found to be completely inclosed, as Middleton had described it. He then explored a part of the contiguous coast to the northward, in which he found another large indentation, which he called Lyon's Inlet. His vessels were soon afterwards frozen up in the midst of the sea, near Winter Island, 65° N. lat. In the following summer he continued his voyage northward, and discovered the whole coast between 65° and 70° N. lat., in which no deep indentation occurred, with the exception of a wide sound between 69° and 70°, which he explored for more than 60 miles, when he found that it was closed by a barrier of ice, lying south and

north across the strait, but he ascertained that beyond this barrier there was an open sea, a circumstance which agreed with the information that he had obtained from the natives. This opening therefore was not a bay, but a strait, which he called, after the two vessels under his command, Fury and Hecla Strait. At the time of this discovery the season was far advanced, but he hoped to be able to reach the open sea west of the strait the following summer, and accordingly he passed the second winter on the island of Igloolik, at the eastern extremity of the strait. But though he waited to the middle of August in the following year, the strait continued to be covered with ice, and he was obliged to give up all hope of effecting his purpose.

The result of this attempt showed that Fury and Hecla Strait did not allow a navigable North-West Passage. Parry, whose success had deservedly secured the confidence of government, again obtained the same vessels for the purpose of trying whether Regent's Inlet might not allow a passage southward. On arriving at the entrance of Regent's Inlet, he found it much encumbered with ice, and was obliged to pass the winter from 1824 to 1825 in Port Bowen, on the western coast of Cockburn Island. In trying to sail southward the following July, one of the vessels (the Fury) was lost in the ice, and Parry returned home in the Hecla. Government did not think fit to continue these voyages, which led to no useful result; but as the last attempt of Parry had been merely interrupted by an accident, it seemed still probable that a navigable North-West Passage might exist through Regent's Inlet. A wealthy individual, Sir Felix Booth, furnished all the expenses for a new adventure, the direction of which was given to Captain John Ross, who, after passing through Lancaster Sound, entered Regent's Inlet in 1829, and sailed along the western shores of the Inlet as far south as Felix Harbour, 70° N. lat., where he passed the winter. The following seasons were unfavourable, the sea being constantly encumbered with heavy ice, and he was obliged to remain nearly on the same spot two more winters. This circumstance gave him an opportunity of examining the districts west of the position of his ships. To this tract of land he gave the name of Boothia Felix, and found it to be united on the south by a low isthmus to another tract which seems to be the northern part of Melville Peninsula. The shores of the continent itself, west of the isthmus, were examined to a distance of 70 miles, and the most western cape which was reached was called Victory Point, 69° 46' N. lat., 98° 33' W. long. In another excursion he reached what he considered to be the Magnetic Pole, 70° 0' 5" N. lat., 96° 46' 45" W. long. Not being able to extricate his vessels from the ice, Captain Ross and his crew returned in 1832 in boats to Hudson's Bay, where they were received on board of a whaler.

The whole line of the American coast from Behring's Strait to Melville Peninsula has now been traced. Between the discoveries of Captain Beechey, who advanced to Point Barrow, 71° 23' N. lat., 156° 10' W. long., and those of Sir John Franklin, who went as far as Point Beechy, 70° 30' N. lat., 150° W. long., only a coast-line of about 130 miles remained undiscovered, and this tract was explored in 1837 by Messrs. Dease and Simpson, agents of the Hudson's Bay Company. East of the Mackenzie River the coast-line as far as Point Turnagain, near 68° 30' N. lat., 109° W. long., was discovered by Sir John Franklin and Dr. Richardson. Dease and Simpson advanced to 106° W. long. in 1838. Captain Beck, in his expedition in search of Captain Ross, found a sea between 67° and 68° 30' N. lat., 95° and 96° W. long., which Dease and Simpson in 1839 found to be joined to the seas of the American coast by a strait since called Dease and Simpson Strait. These enterprising travellers in the same year followed the coast to 94° 35' W. long., and Dr. Rae has since traced its connection with Melville Peninsula.

In the year 1845 the British government sent out another expedition to the Arctic Seas for the purposes of discovery and survey, consisting of the Erebus and Terror, under the command of Sir John Franklin. They sailed from the Thames on the 23rd of May, and on the 26th of July were spoken by the Prince of Wales whaler at the entrance of Lancaster Sound. In consequence of the ships not having been afterwards seen or heard of, a series of searching expeditions were successively fitted out and sent to the Arctic Seas, all of which failed in the main object of finding the missing ships or their unfortunate crews, but one of which discovered the long-sought secret of a North-West Passage.

In 1848 the Enterprise and Investigator, under the command of Sir James Ross, were sent out, and reached Lancaster Sound on the 28th of August. They were not able to get farther west than Leopold Harbour, near the entrance of Prince Regent's Inlet, 73° 50' N. lat., 90° 12' W. long., where they wintered. After the ships were liberated from the ice, they were swept eastward by a mass of drift ice into Lancaster Sound, and Sir James Ross brought his ships back to England early in November 1849. In 1848 Sir John Richardson and Mr. Rae made a voyage in boats from the mouth of the Mackenzie River eastward, but without success.

Another searching expedition was fitted out by the British government at the end of 1849. Captain Collinson was appointed to the command of the Enterprise, and Captain M'Clure to that of the Investigator. The two ships left the Thames January 10, 1850, and sailed in company round Cape Horn. Captain M'Clure reached Point Barrow,

at the north-eastern extremity of Behring's Strait, August 5, 1850, and then bore to the east, just keeping clear of the American coast. Captain Collinson having failed to force his way through the pack-ice of Behring's Strait, sailed for Hong-Kong, where he wintered. Captain M'Clure reached Cape Parry on the 6th of September. From this point high land was observed to the east-north-east, and named Baring Island, and two days afterwards, still farther to the east-north-east, more land was observed, and named Prince Albert Land. This land is continuous with Wollaston Land and Victoria Land, and extends northward to 73° 21' N. lat. The Investigator was then navigated northward through a channel which separates Baring Island from Prince Albert Land, and which Captain M'Clure named Prince of Wales Strait. In sailing up this strait the Investigator several times narrowly escaped destruction, but on the 8th of October was firmly frozen in near the northern extremity of the strait, and remained there during the winter. Parties were sent out to explore, by whom it was ascertained that Prince of Wales Strait opens into Barrow Strait, and thus was made the first discovery of a North-West Passage.

On the 14th of July 1851 the Investigator was freed from the ice, when great exertions were made to pass out of Prince of Wales Strait into Barrow Strait, but on the 10th of August, being then in 73° 14' N. lat., 115° 32' W. long., strong winds from the N.E. drove the masses of ice against the ship, and Captain M'Clure, thus baffled, resolved to sail southward back again down Prince of Wales Strait. Having accomplished this, he sailed along the southern coast of Baring Island, and then northward along the western coast. At length, after incurring many risks and encountering difficulties which could only have been overcome by a rare combination of indomitable courage, admirable seamanship, and scientific resource, the Investigator, having rounded the whole island except the north shore, was got to the station which Captain M'Clure named Mercy Bay, Sept. 24, 1851. This station is at the north-west corner of Baring Island, in 74° 6' N. lat., 117° 54' W. long., on the south side of Barrow Strait. Here then was the discovery of a second North-West Passage; and had there been open water to the east the whole voyage into Baffin's Bay might have been easily accomplished, but unfortunately the Investigator was frozen up in Mercy Bay on the very day when it was entered. The north side of Baring Island was ascertained to be the Banks' Land which Captain Parry saw from Melville Island in 1819.

Melville Island is distant about 60 miles N.E. from Mercy Bay, and in April 1852 Captain M'Clure sent a travelling party across the ice to it, who deposited a document there, giving an account of the proceedings of the expedition, and of the position of the Investigator. In April 1853, only a few days before Captain M'Clure had made arrangements for deserting his frozen-up ship, the document was discovered by Captain Kellett's officers, and Lieut. Pim, with a party of sailors, carrying provisions, was sent from Melville Island to Mercy Bay. As nothing had been heard of the Investigator from the time of her rounding Barrow Point in August 1850, where Captain Kellett was then stationed with the Herald, and who made Captain M'Clure a signal of recall, till April 1853, when Captain Kellett sent this party to the relief of Captain M'Clure and his crew, the excitement of the meeting may be easily imagined. Captain M'Clure remained with his ship till the spring of 1854, when he and his crew were brought to England by the ships belonging to Sir Edward Belcher's expedition. The Investigator, as far as is known, still remains frozen-up in Mercy Bay.

Captain Collinson, after wintering at Hong Kong, passed through Behring's Strait in 1851, and followed very nearly the track of Captain M'Clure up Prince of Wales Strait, whence he also was obliged to return. He wintered in 1851-2 in 71° 35' N. lat., 117° 35' W. long. The winter of 1852-3 was passed in Cambridge Bay, Wollaston Land, 69° N. lat., 105° 30' W. long. Still struggling on, the winter of 1853-4 found the Enterprise in 70° 8' N. lat., 145° 30' W. long. On the 15th of July 1854 the Enterprise was released from the ice, when Captain Collinson commenced his return voyage. He reached Point Barrow on the 9th of August, and Point Clarence on the 21st.

The other searching expeditions may be more briefly noticed. In 1850 Captain Kellett with the Herald and Plover reached 72° 51' N. lat., 163° 48' W. long. In the same year the Advance and Rescue, two small brigs, were fitted out at the expense of Mr. Grinnell, an American merchant, and placed under the command of Lieutenant De Haven. In August, 1850, Captain Ommanney and Captain Penny conducted travelling parties by order of Captain Austin, who commanded an expedition sent out by the British government. Captain Penny discovered that Sir John Franklin's expedition had passed the winter of 1845-6 at the mouth of the Wellington Channel, in a bay between Cape Riley and Beechey Island. Captain Penny also explored the Wellington Channel to a distance of 80 miles from the mouth, and discovered a strait bearing to the north-west, which he named Victoria Channel. Dr. Rae and Commander Pullen also conducted expeditions in 1850.

In May, 1851, the Prince Albert, a small vessel, was equipped at the expense of Lady Franklin, and placed under the command of Mr. William Kennedy. The Prince Albert passed through Lancaster Sound, and wintered in Batty Bay in Regent's Inlet, on the east side of North Somerset. In March, 1852, Mr. Kennedy, with M. Bellot, an enterprising young French naval officer, and six seamen, travelled

southward along the east side of North Somerset till they reached Brentford Bay, which they ascertained to be a channel connecting Regent's Inlet with Victoria Strait, the northern part of which strait, called Peel Sound, enters Barrow Strait. They thus discovered a third North-West Passage, and proved that North Somerset is a large island, separated from Boothia Felix by the Brentford channel, which they named Bellot Strait, and found to be 15 miles long and 2 miles wide. They next travelled over the ice of Victoria Strait, then over Prince of Wales Land due west as far as 100° W. long., then northward to the south-east angle of Ommanney Bay, then eastward to Browne's Bay in Peel Sound, whence, following the coast-line northward they arrived at Cape Walker. They reached the Prince Albert in Batty Bay, May 30th, after an absence of 96 days, and having travelled on foot and with sledges 1100 miles.

Captain Inglefield, in the small screw-steamer Isabel, sailed from the Thames July 6th, 1852. He proceeded along the east side of Baffin's Bay, and entering Whale Sound found that it contained two large openings to the north-eastward. He entered Smith's Sound at the head of Baffin's Bay, and on the 27th of August attained 78° 35' N. lat., where he found himself in a great sea, only partially encumbered with ice. He was driven back by a violent gale, and afterwards entered Jones's Sound, which he penetrated to 84° W. long., the north coast there suddenly trending to the north-west, whilst the south shore continued its direction westward as far as the eye could reach. The Isabel returned to England in November, 1852.

A searching expedition under Sir Edward Belcher was sent out in 1852. He proceeded up the Wellington Channel, and wintered in 76° 52' N. lat., 97° W. long. While here explorations with boats and sledges led to the discovery of various coasts and lands. The eastern side of Wellington Channel was named North Devon; the western side is Cornwallis Land, which is separated by a strait from Bathurst Land still farther west. A group of islands in 78° 10' N. lat. was named Victoria Archipelago. On the 20th of May, 1853, Sir E. Belcher found the sea open in the latitude of Jones's Strait. His words are, "Polar Sea as far as the eye can reach." The gallant young Frenchman, Lieutenant Bellot, in attempting to convey the government despatches from Captain Inglefield to Sir E. Belcher, was blown from the top of a hummock of ice, and was drowned. Sir E. Belcher's ships were liberated from the ice July 14, 1853, and he returned to England the same year.

In October, 1854, Dr. Rae returned suddenly to England from the vicinity of Boothia Felix, for the purpose of announcing to the British government that he had obtained some relics which had belonged to Sir John Franklin's companions. He stated that he had met with some Esquimaux in Pelly Bay, who were in possession of watches, silver-spoons, telescopes, and other things, which had belonged to the officers and seamen of the Erebus and Terror. These he purchased, and brought with him to England; and he stated that the Esquimaux had informed him, that in the spring of 1850 about forty of the ships' crews were seen (but not by Dr. Rae's informants) near the north shore of King William's Land; that they were dragging a boat over the ice, looked worn and emaciated, and had purchased a seal of the natives. Later in the year, but before the ice had broken up, the Esquimaux had, it seems, fallen in with the spot where Franklin's party had been encamped, none of whom were living. Thirty bodies were found; some partly buried, some in a tent where they had died, and others under the boat, which they had overturned to form a shelter. They seemed to have perished from starvation. In consequence of this information, the Admiralty, in November 1854, resolved to send out two expeditions, one of which is to descend the Frobisher River (Back River), in order to search and make enquiries in the regions about Point Ogle and Montreal Island; the other to descend the Mackenzie River, and proceed eastward along the American coast.

The result of all these searching expeditions—of which we have only noticed the most important—has been the discovery of three or four passages by which the Pacific Ocean may be entered from the Atlantic, or the Atlantic Ocean from the Pacific, namely, by the west coast of Baring Island, by the east coast of the same island, through Prince of Wales Strait, by Regent Inlet through Bellot Strait into Victoria Strait, and probably also by Peel Strait into Victoria Strait. These passages, being all more or less encumbered with ice, may be of little or no commercial importance; but the long-sought North-West Passage has been discovered, many extensive lines of coast have also been traced, and large islands and countries have been found and partly examined. Besides the geographical discoveries which have been incidentally noticed in the course of this narrative, it has been ascertained, by the explorations of Dease and Simpson, Dr. Rae, and Captain McClure, that Wollaston Land and Victoria Land are continuous, forming the south coast of the largest of all the islands of the Arctic Seas, the western boundary being Prince of Wales Strait, the eastern boundary Victoria Strait with its continuation Peel Strait, and the northern boundary Barrow Strait. The northern coast of this large island is deeply indented near the eastern end by Ommanney Bay and Osborne Bay, so named from the explorers. North Somerset is also, as has been stated, a large island, separated from Boothia Felix by Bellot Strait, previously called Brentford Bay; whilst Boothia Felix seems to be united to the American continent by an isthmus.

In many parts of these cold regions there is an extraordinary

abundance of animal life, consisting of moose-deer, hares, ptarmigan, and other game. In 1851, Captain McClure says, "On the 1st of April we had 1000 lbs. of venison hanging at the yard-arms;" and, in 1853, he says, "A supply of game has been kept up during the winter which has enabled us to issue a meal twice weekly." It seems also to have been ascertained that north of Smith's Sound and the Wellington Channel there is an extensive Polar Sea, comparatively unencumbered with ice.

(Barrow, *Chronological History of Voyages into the Arctic Regions; Voyages of Ross and Parry; Franklin, Expeditions to the Polar Regions; London Geographical Journal*, vols. v., viii, ix., xxii, and xxiii; notices in the *Athenæum* and other journals.)

NORTH-WEST TERRITORY, was an unorganised territory of the United States of North America, lying between 43° and 49° N. lat., 99° and 112° W. long. In the statement of the area of the several states and territories, drawn up by the United States Land Office, for the Seventh Census of the United States, the area is given as 528,725 square miles, but it does not certainly exceed 225,000 square miles. No estimate has been made of the population. The North-West Territory formed a portion of the vast tract included within the Louisiana purchase. [LOUISIANA.] Up to the present time its only occupants have been the native Indians, who do not probably exceed 60,000, with a few trappers. No regular settlement has been made in any part of the territory.

This extensive tract is the country extending from that described under NEBRASKA territory, northward up to the British Hudson Bay territories; its western boundary being the Rocky Mountains, its eastern the Missouri River. When the territories of Kansas and Nebraska were about to be constituted, their limits were such as are given under those titles: but in the Act for their organisation, as it was actually passed by Congress, the territory of Nebraska was made to include the entire area between the Rocky Mountains and the Missouri River from 40° up to 49° N. lat., and consequently to embrace within its boundaries the whole of this North-West Territory, power being reserved to the United States Government to divide the new territory into two or more territories. The territory of Nebraska therefore, instead of being limited as described under Nebraska, must be understood to embrace also the country described in the present article. This extensive country has as yet been very imperfectly explored, and its surface and capabilities remain therefore comparatively unknown. It is described generally under AMERICA. A large portion of the surface is mountainous and hilly. The Rocky Mountains, which form an almost impassable barrier between it and Oregon, are of great altitude, many of the summits rising far above the line of perpetual snow. The Great South Pass, the only really practicable pass over this part of the Rocky Mountain range, is near its south-west corner; Fremont's Pass, 13,570 feet high, is some distance farther north. That part of the range on the south-west, known as the Wind-River Mountains, extends for some distance eastward, while the Black Hills stretch from them northward. Spurs extend everywhere from the Rocky Mountains into this territory. Between the several hill-ranges are numerous principal and lateral valleys. On the north-west is another divergent range of low mountains, dividing the waters of the Missouri from those of the Saskatchewan. From the Rocky range the country has a general slope towards the east, but the surface west of the Yellowstone River is considerably broken. The valley of the Missouri is generally level from the junction of the White Earth River. Along the lower part of its course there are extensive plains; in some parts are sandy deserts.

The territory lies almost wholly within the basin of the Missouri, the sources of which are within its boundaries. To the confluence of the White Earth River, a distance of 1250 miles, the Missouri belongs entirely, and its tributaries almost entirely, to this territory; from this point, for 700 miles more (in each case of course following the windings of the river) it belongs equally to this territory and to Minnesota. The Missouri is navigable for steam-boats for about 750 miles in this territory, or up to the Yellowstone, the principal tributary of its upper course. The Yellowstone rises in several branches in the south-western part of this territory, to which it wholly belongs: it is said to be navigable by steam for 300 miles. Both the Missouri and the Yellowstone, with the other more important feeders of the former river, are noticed under MISSISSIPPI RIVER.

The capabilities of the country seem to be very great. The mountain districts appear to belong chiefly to the primary formations, and it is believed that there exists considerable mineral wealth. Over a great part of the lower country cretaceous and tertiary rocks prevail. The soil of the valleys, judging from the heavy timber in many of them, is generally rich; and the broad plains, where not sandy, appear to be very fertile. The hilly slopes and adjoining plains are said to constitute a fine pasture country. Every part too, as above indicated, is well watered, and the larger rivers offer a remarkable extent of inland navigation. The climate is cold but healthy, and is said to be well adapted to the usual farming operations. Altogether it is a country of great promise; and it is scarcely probable that many years will elapse before some hardy settlers will pioneer the way for its permanent occupation by the white man.

NORTH-WESTERN PROVINCES. [HINDUSTAN.]

NORTH-WESTERN TERRITORY. [Hudson's Bay Territory.]

NORTH WITCHFORD, Cambridgeshire, a hundred in the Isle of Ely, which has been constituted a Poor-Law Union. North Witchford hundred, which is co-extensive with the Poor-Law Union, contains seven parishes and townships, with an area of 52,828 acres, and a population in 1851 of 18,243.

NORTHALLERTON, the capital of the North Riding of Yorkshire, a market-town, parliamentary borough, and the seat of a Poor-Law Union, in the parish of Northallerton, is situated on the Great North road, in 54° 20' N. lat., 1° 27' W. long., distant 33 miles N.N.W. from York, 225 miles N.N.W. from London by road, and 250½ miles by the Great Northern, North Midland, and York and Newcastle railways. The population of the borough in 1851 was 4995. The living is a vicarage in the archdeaconry of Cleveland and diocese of York. The borough returns one member to the Imperial Parliament. Northallerton Poor-Law Union contains 40 parishes and townships, with an area of 68,132 acres, and a population in 1851 of 12,424.

The town of Northallerton consists chiefly of one wide street, with numerous diverging lanes. The river Wiske passes near the town. The town is lighted with gas, and has a handsome modern sessions-house, to which is attached a house of correction. The church is a spacious cruciform edifice, erected near the end of the 14th century. There are chapels for Independents, Wesleyan and Primitive Methodists, Baptists, and Quakers. Besides the Free Grammar school, which is free to four boys, has a small endowment, and had 35 scholars in 1851, there are National, British, and Infant schools; Kaye's Charity; Widow Baine's Charity; Dr. Kettlewell's Charity; a savings bank, and the Maison Dieu, or hospital, founded in 1476, and subsequently rebuilt by the inhabitants. Quarter sessions and a county court are held in the town. In the vicinity are some flour-mills, including a steam-mill; linen and leather are made, and brick- and tile-making, malting, and brewing are carried on. Wednesday is the market-day, and there are five yearly fairs. Races are held annually in October. A castle, founded here by Hugh Pudsey, bishop of Durham, was raised to the ground by order of Henry II.

NORTHAMPTON, the county town of Northamptonshire, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Nen, in 52° 14' N. lat., 0° 54' W. long., distant 66 miles N.W. from London by road and 67½ miles by the London and North-Western railway. The population of the borough in 1851 was 26,657. The borough is governed by 6 aldermen and 18 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Northampton and diocese of Peterborough. Northampton Poor-Law Union contains 17 parishes and townships, with an area of 20,453 acres, and a population in 1851 of 30,544.

Northampton is a very ancient town. Simon de St. Liz, on whom the Conqueror conferred the earldom of Northampton, built a castle here; and in the following reigns several ecclesiastical councils and parliaments were held in this town. In the civil wars of John, Northampton Castle was held for the king, and besieged in vain by the barons in 1215. In 1265 Northampton was taken by the barons, but recovered by the party attached to Henry III. In the commencement of the War of the Roses, a great battle was fought near the town on the 10th of July, 1460, in which the Lancastrians were defeated by the Earl of March (afterwards Edward IV.) and the Earl of Warwick. The king, Henry VI., was taken; and the queen and the young Prince of Wales escaped with difficulty. In the civil war of Charles I. Northampton was taken by Lord Brook, and fortified for the Parliament. In 1675 the town was nearly consumed by fire. In 1720 it was considerably damaged by a flood.

Northampton is pleasantly situated on a slope rising from the Nen, over two branches of which are three bridges. The houses are well built, chiefly of freestone, and the streets are well paved, and lighted with gas. The market-square is a large open area in the centre of the town. Among the principal edifices are the shire-hall, a spacious building of Grecian architecture; the county jail; the town-hall; the borough jail; the new corn-exchange; the temperance-hall and public-rooms; the theatre; the barracks; and the infirmary. All Saints church, in the centre of the town, at the intersection of the principal streets, was erected after the great fire of 1675: at the west end is the original embattled tower, which escaped the fire. St. Giles's church is a large cruciform building of early English character, with windows of the Norman, decorated, and perpendicular characters; a tower rises from the intersection of the nave and transepts. St. Peter's church, a remarkably fine and curious specimen of enriched Norman, has been recently restored. St. Sepulchre's was built probably about the beginning of the 12th century, and is one of the very few round churches. It has eight piers with Norman capitals, and plain pointed arches of later date; there is a chancel with a north and south aisle on the east side of the round part, and a good tower and spire of perpendicular character on the west side. There are several district churches. Among the numerous dissenting meeting-houses is the Castle Hill meeting, which contains a mural tablet to the memory of Dr. Doddridge, who exercised his ministry, and conducted an academy for the education of ministers in this town for more than 20 years. The Independents have two other chapels; the Baptists have five chapels; the Wesleyan Methodists two; and the Primitive and Aso-

ciation Methodists, Unitarians, Quakers, Roman Catholics, and Mormons, have one each. Of the religious houses which existed before the Reformation the hospitals of St. Thomas and St. John still remain. The Free Grammar school, founded in 1541, is free to 25 boys. There are a Blue-coat school for 25 boys; a Yellow school for 20 boys; a Blue-coat school for 30 girls; several Parochial, National, British, and Infant schools; and a school supported by the Wesleyan Methodists. There are also a mechanics institute, which in 1851 had 670 members, and a library containing 10,000 volumes, a natural history and an archaeological society, a savings bank, the general infirmary, the royal Victoria dispensary, and the general lunatic hospital and asylum. The architectural society of the archdeaconry of Northampton holds its meetings in the town.

The principal branch of trade carried on in Northampton is boot- and shoe-making, in which about 2500 persons are employed. The articles are sent to London and other parts of England, or are exported. Considerable business is done in currying leather; some stockings and lace are made. There are iron- and brass-foundries, corn-mills, breweries, and coach-works. Markets are held on Wednesday and Saturday, the principal, that held on Saturday, being a cattle-market. About 12 fairs are held in the course of the year; the one held on the 19th of September is called the cheese fair. There is also a wool fair. In the vicinity of the town are numerous market-gardens. The assizes for the county, quarter sessions, and a county court are held at Northampton. The Pythley Hunt races are held annually in March.

NORTHAMPTON. [Massachusetts.]

NORTHAMPTONSHIRE, an inland county of England, is bounded N. by the counties of Leicester, Rutland, and Lincoln; E. by those of Cambridge, Huntingdon, and Bedford; S. by those of Buckingham and Oxford; and W. by Warwickshire. It lies between 51° 59' and 52° 40' N. lat., 0° 8' and 1° 20' W. long. Its greatest length from north-east to south-west is 66 miles; its greatest breadth at right angles to the length is 26 miles, but the average width is hardly so much as 16 miles. Its area is 1016 square miles. The population in 1841 was 199,228; in 1851 it was 212,330.

Surface and Geology.—The surface of the county is undulating; the hills do not rise to a great height, but present gentle declivities, separated by intervening vales watered by rivulets and rivers. A nearly continuous range of heights runs just within the northern boundary, commencing near Duddington, and running in a south-western direction to the neighbourhood of Watford, where it turns more to the south, and meets at Woodford another range that crosses the southern division of the county to the north of Towcester. At a short distance east of Woodford a chain of hills runs nearly due south from the range north of Towcester to the most southern part of the county. The highest land is about Daventry, where Arbury Hill rises to the height of 804 feet above the level of the sea. The general elevation is about 300 feet above the sea level. The north-eastern extremity of the county, near Peterborough, belongs to the great fen district, and is only a few feet above the level of the sea.

The eastern border of the county, comprising the heights east of the valley of the Nen, adjacent to Huntingdonshire and Bedfordshire, is occupied by the Oxford clay, which forms the separation between the middle and lower divisions of the oolitic series. The north of the county, the central parts, and the south-eastern border are occupied by the oolites. At Collyweston and Easton, near the Welland, beds of forest marble are quarried for roofing-slates. On the slope of the hills on the right bank of the Nen, at Raunds and Stanwick, near Higham Ferrers, a shelly stone of a blue colour is quarried, sufficiently compact to take a tolerable polish. At the base of the oolitic formation, all along the line of railway from Peterborough to Towcester, an important bed of iron-stone has been recently discovered. The western border of the county and one or two valleys penetrating into the interior are occupied by the lia. Limestone is obtained in great plenty in almost all parts of the county. Good clay for making bricks and tiles is found in various places.

Hydrography and Communications.—The greater part of the county belongs to the basin of the Nen, which river is formed by the confluence of two streams which unite their waters near Northampton, where the Nen becomes navigable, and flows north-east through the county by Wellingborough, Higham Ferrers, Thrapston, and Oundle; below Oundle it reaches the border of the county, which it separates for some distance from Huntingdonshire. At Peterborough the navigable channel of the Nen leaves the county altogether; but the Catswater drain, which is an ancient channel or arm of the river, follows the border some miles farther, till it unites with an arm of the Welland from near Croyland. The length of the Nen in this county or on the border is about 60 miles; that of the Catswater drain about 8 miles. Its principal tributaries are the Ise (24 miles long), and the Harper's Brook and the Willow Brook (each about 15 miles long). These tributaries are not navigable. The Welland rises at Sibbertoft in this county, 5 miles south-west of Market Harborough, and flows to the border of the county, which it separates successively from Leicestershire, Rutlandshire, and Lincolnshire. That part of the course of the Welland which belongs to Northamptonshire is about 50 miles. The navigation commences at Stamford, from which town there is a navigable out to Deeping. The Avon rises at Naseby, and has the upper part of its course in this county, and the

Leam, a feeder of the Avon, rises in the hills west of Daventry. The Ouse rises near Brackley, and has part of its course on the southern border. The Tow rises in the neighbourhood of Sulgrave, and flows north-east to Towcester, whence its course is first east, and then south-south-east, to its junction with the Ouse, below Stony Stratford. The Cherwell, or Charwell, rises at Charwellton, 5 miles S.W. from Daventry, and, after crossing an angle of Oxfordshire, runs for some miles along the south-western boundary of the county past Banbury, on its way to join the Thames at Oxford.

The Grand Junction Canal enters the county near Stony Stratford, and runs north-west, passing between Northampton and Daventry, until it joins the Oxford Canal, near Braunston, just within the western boundary of the county. There is a navigable out from near Stony Stratford to Buckingham, the greater part of which is within this county. The Union Canal unites with the Grand Junction Canal, not far from the Braunston tunnel; and with the Leicester Canal at Foxton.

The principal roads that traverse the county are the road through Newport Pagnell, Northampton, and Market Harborough; the road through Higham Ferrers, Kettering, and Rockingham; the Great North road, which crosses the northern part of the county to Stamford in Lincolnshire; and the road which branches off from it at Norman Cross in Huntingdonshire, to Peterborough and Deeping. The London and North-Western railway crosses this county between Wolverton and Rugby. From the Blisworth station another line runs through Northampton, down the valley of the Nen, to Peterborough, where it meets the Great Northern, the Eastern Counties, and other lines. The Rugby and Stamford line joins the county on the north-west, near Market Harborough, and passing Rockingham, skirts the Welland as far as Stamford, where a branch of the Midland Counties connects it with Peterborough and Leicester. The southern part of the county is crossed by the Buckinghamshire railway, which, connecting Banbury and Buckingham, passes through Brackley.

Climate, Soil, &c.—The county of Northampton has many advantages in point of climate and soil, and has for a long time been comparatively well cultivated and productive. The soil is generally adapted to produce both corn and pasture of a superior quality. The climate is mild and healthy. Owing to its inland situation, and the absence of lofty hills, this county is not so subject to heavy and continued rains as the counties which lie farther west. The surface is pleasingly diversified by gentle swells and depressions, interspersed with woods and plantations.

The black mould of the fens, and the brown crumbling loam of the uplands, produce abundant crops of wheat, beans, barley, and oats; the upland soil is peculiarly adapted to turnips and green crops. The pastures are rich, and great numbers of cattle are fatted for the London market. The fattening of cattle is a principal object of the Northamptonshire farmers, some of whom are great cattle-breeders. But the majority of the farmers buy Scotch and Welsh cattle in autumn, turn them into the pastures to eat the coarse grass remaining after the fat beasts are sent to market during the winter, and finish them on grass in the following summer. Many Hereford long-horns and Durham short-horns are bought in spring, carried on at grass till near winter, and then finished with turnips, oil-cake, and chopped straw. The short-horned breed is a favourite stock. The breed of sheep most common in Northamptonshire is the improved Leicester. Some very fine flocks of breeding ewes are kept in the county.

Besides the natural woods, many plantations have been made in the neighbourhood of the numerous residences of the nobility and gentry. Rockingham Forest, formerly one of the largest in the kingdom, is now inclosed.

Divisions, Towns, &c.—The county of Northampton is divided, for parliamentary purposes, into two divisions—North and South. At the time of the Domesday survey it contained 30 hundreds. There are now only 20 hundreds, 10 in each division of the county. The hundreds in the Northern division, with their relative positions in the division, are as follows:—Corby, west; Hamfordahoe, south; Higham Ferrers, south-east; Huxloe, east; Navisford, central; Nassa-burgh, or Peterborough Liberty, north-east; Orlingbury, south, and central; Polebrook, east; Rothwell, south-west; Willybrook, north-west. The hundreds in the Southern division are—Chipping Ward, west; Cleley, south-east; Fawley, west; Greens Norton, central; Guilsborough, west; King's Sutton, south; Nobottle Grove, central; Spelhoe, north-east; Towcester, central, and south; and Wymersley, east. There are in the county, the county and market-town and borough of NORTHAMPTON; the city of PETERBOROUGH; the borough and market-towns of BRACKLEY and Higham Ferrers; and the market-towns of DAVENTRY, KETTERING, OUNDLE, THRASTON, TOWCESTER, and WELLINGBOROUGH. Kingsliffe and Rothwell formerly had markets. Those printed in small capitals are described under their respective titles; the others we notice here:—

Higham Ferrers, population 1140 in 1851, stands on a rocky eminence half a mile from the right bank of the Nen, 15 miles E.N.E. from Northampton. It has a large and curious church, partly of the decorated, and partly of the perpendicular style. The western entrance is much enriched with sculpture. The tower is surmounted with a crocketed octagonal spire. The Wesleyan Methodists and Baptists have places of worship. Near the church are a Grammar-school (a fine stone building), and an old bede-house or almshouse.

The town-hall is a neat building of modern erection. The shaft of the ancient market-cross, composed of one stone 16 feet high, stands in front of the town-hall. The principal business of the place is shoe-making. There are several yearly cattle fairs. The corporation consists of a mayor, 7 aldermen, and 18 burgesses.

Kingsliffe, population 1407 in 1851, is 12 miles W. by S. from Peterborough. The church, dedicated to All Saints, is built partly in the transition decorated style, and partly in the perpendicular style. There are National, British, and Endowed schools. The Independents, and Wesleyan and Calvinistic Methodists have chapels. The only industrial product of the town is wooden turnery. There is a yearly fair (October 29th) for cheese, linen, and turnery ware.

Rothwell, population 2278 in 1851, about 14 miles N. by E. from Northampton, is situated on the southern slope of a hill. The ruin of the market-house, begun by Sir Thomas Treaham in 1577, but never finished, consists of a square area surrounded by large pointed arches, designed for the market, and a suite of rooms above with wide square-headed windows; the whole is ornamented with Doric pilasters, shields with arms, &c. The building was repaired in 1827. The church, which is of great length, has an embattled tower and a fine doorway. The Wesleyan Methodists and Independents have places of worship, and there are National, British, and Free schools. An institution called Jesus Hospital, founded in 1590, provides rooms for 18 poor men, who have also a weekly allowance and other perquisites. There is a large yearly fair for live-stock, pedlery, and leather.

The following are some of the more important villages: the populations given are those of the parishes in 1851:—

Barnack, 8 miles N.W. from Peterborough, population 998, an ancient village, with a church, the tower of which is in part of Anglo-Saxon character. The neighbourhood suffered from the Danes in the beginning of the 11th century. Extensive quarries were formerly worked here. With the stone were built Peterborough, Crowland, Thorney, and Ramsey monasteries, and other ecclesiastical structures. *Blakesley*, population 798, is 4 miles W. by N. from Towcester, in the midst of a thickly-wooded district. The church is of late perpendicular character. The Free Grammar school, founded in 1669, has an endowment of about 80*l.* a year, and had 35 scholars in 1853. There are several parochial charities. Near the village is Blakesley House, which in the 14th century belonged to the Knights of St. John. *Blisworth*, population 951, about 4½ miles S.W. from Northampton. The North-Western railway has a station about a mile from the village. The Grand Junction Canal here passes through a tunnel one mile and three quarters long. The parish church is a handsome building, with nave, aisles, and an embattled tower. There is a chapel for Baptists. *Braunston*, population 1253, is situated near the union of the Grand Junction and Oxford canals, and about 3 miles N.W. from Daventry. The church is a large and handsome structure, in the decorated style, recently erected by subscription, at a cost of upwards of 6000*l.* The Wesleyan Methodists and Baptists have places of worship, and there is a National school. On the canal banks are extensive warehouses and wharfs. *Brigstock*, population 1231, about 20 miles N.N.E. from Northampton, had formerly a market. Three annual fairs are still held. An ancient market-cross is in the centre of the village. Besides the parish church, there are chapels for Independents and Primitive Methodists, and two charity schools. *Buckby, Long*, population 2341, distant 9 miles N.W. from Northampton. The church has undergone frequent repairs and alterations; the tower is early English. There are chapels for Independents and Baptists, a National school, and a branch of the Northampton savings bank. *Bugbrook*, population 860, about 6 miles W.S.W. from Northampton. The North-Western railway and the Grand Junction Canal pass to the west of the village. Besides the parish church, there are chapels for Wesleyan Methodists, Calvinistic Baptists, and Quakers. There is a National school. Soap-works, limekilns, and brick- and tile-works are in the neighbourhood. *Burton Latimer*, population 1007, pleasantly situated about 4 miles S.E. from Kettering, has a handsome church, with an embattled tower, surmounted with a spire; chapels for Wesleyan Methodists and Baptists; a Free school; an Infant school; and a Girls school. A large carpet-mill gives considerable employment. *Castor*, population 1396, near the left bank of the river Nen, consists chiefly of houses scattered along the high road, about 5 miles W. from Peterborough. The church has a large central tower, of early English style, surmounted with a pyramidal spire, resting upon four circular arches. There are a chapel for Independents, a National school, and a school with a small endowment. Fragments of pavements, baths, pottery, and other Roman remains have been found here. Castor is supposed to occupy the site of the Roman station Durnomagus. The ancient Ermine-street passed through the village. A convent existed here in the Saxon times. Milton Abbey, the magnificent seat of Earl Fitzwilliam, which stands in an extensive park to the north-east of Castor, was built in Henry VIII's reign. *Crick*, population 994, about 12 miles N.W. from Northampton, is situated near the Derby and Leicester Grand Union Canal. The church, originally early English, but considerably altered, has a tower surmounted with an octagonal spire of great beauty. There are chapels for Wesleyan Methodists and Independents; a National school; a Girls' and Infant school, chiefly supported by the rector; and some minor charities. Basket-making,

brick-making, and rope-making are carried on, and there are some corn-mills. *Desborough*, population 1350, situated about 6 miles N.W. from Kettering, had formerly a considerable manufacture of silk-plush for the covering of hats, but this branch of industry has somewhat declined. The parish church has a tower surmounted with a spire. There are chapels for Wesleyan Methodists, Calvinists, and Baptists; also National schools. *Earl's Barton*, population 1277, about 6 miles E.N.E. from Northampton, has a very ancient church. The tower is of Anglo-Saxon architecture, and very rude; the summit of the tower, which is embattled, is of late date. The southern doorway is of highly-enriched Norman workmanship. There are chapels for Wesleyan Methodists and Baptists, and National schools. *Finedon*, or *Thingdon*, population 1538, is about 6 miles S.E. from Kettering, in a retired situation. It possesses an elegant church, of the 14th century, with a beautiful tower and spire; in the parvise over the porch is a valuable library of theological works. There are in the village a chapel for Wesleyan Methodists, a Free Grammar school, and an Infant school. Malting, shoemaking, and the making of rush-mats give considerable employment. *Guisborough*, population 982, about 9 miles N.N.W. from Northampton. The church is ancient; at the west end is a tower in the early English style, surmounted with a spire of decorated character. The Baptists have a chapel. The affairs of the Free Grammar school, founded in 1668 for 50 children, have been in Chancery for more than 20 years; the endowment is 80*l.* a year, but the school is shut up. There is also a Writing school, founded in 1609, of which the endowment is about 73*l.* a year; in it about 30 children are taught reading, writing, and arithmetic without charge. At *Hollowell*, or *Holywell*, a hamlet in Guilsborough parish, is a neat chapel of ease, erected in 1840, in the early English style, at the expense of the vicar. On the summit of the Burroughs, or Borough Hill, between the sources of the Avon and the Nen, is the site of an extensive Roman encampment. *Haddon, West*, population 989, is about 10 miles N.W. from Northampton, on the road to Rugby. The church is an ancient edifice with a massive square tower. There are chapels for Wesleyan Methodists and Baptists, a National and a British school. **HARDINGSTON.** *Irthlingborough*, population 1577, is 2 miles N.W. from Higham Ferrers. The river Nen is here crossed by a stone bridge. Many of the inhabitants are employed in shoe-making. Brick-making is carried on. The church was formerly collegiate. There are places of worship for Wesleyan Methodists and Baptists, and an Endowed school. In the centre of the village is the shaft of an ancient cross. *Kingshorpe*, population 1586, is 2 miles N. by W. from Northampton. There is a town-hall in the village for the meeting of the trustees of the manor, which is a royal demesne, held in trust for the benefit of the townsmen. In the vicinity are stone-quarries, lime-works, and a brick-kiln. The church, partly Norman in style, is spacious. The Baptists have a chapel, and there are National and Infant schools. *Middleton Cheney*, population 1330, is 7 miles W.N.W. from Brackley. The church is a handsome gothic building, with a lofty spire. The Baptists have a neat chapel in the village, and there is a National school. On May 6th, 1643, the Earl of Northampton, at the head of a royalist force, defeated the Parliamentarians at Middleton Cheney. *Moulton*, population 1511, is a village a mile in length, on the left bank of the river Nen, 4½ miles N. by E. from Northampton. The church is partly of Norman architecture. The Wesleyan Methodists and Baptists have places of worship, and there is a National school. *Moulton Park*, which is extra-parochial, called in some early documents Northampton Park, was at one time a feudal appendage to the castle of Northampton. *Naseby*, population 848, about 12 miles N. by W. from Northampton, was formerly a market-town; the market-cross is still standing near the church. The village stands on very high ground. The houses are generally constructed of clay. The parish church, which is ancient, has a western embattled tower, with a crocketed spire, which being unfinished, the stone-work has been surmounted with a wooden framework 15 feet high, at the top of which is a large copper-ball. The Methodists have a chapel in Naseby, and there is a National school. On June 14th, 1645, the decisive battle of Naseby, in which Fairfax and Cromwell defeated Charles and his forces, was fought about a mile north from the village. The field of battle, then an open heath, is now inclosed and divided. A pyramidal monument has been placed near the spot. *Paulerspury*, population 1162, about 11 miles S. by W. from Northampton, consists of two portions, called Church End and Pury End, about a quarter of a mile apart, and extending in all about a mile in length. The parish church is placed between the two portions of the village. There are chapels for Independents and Methodists, and a National school. The population is chiefly agricultural. *Raunds*, population 1870, is a straggling village, 4 miles N. by E. from Higham Ferrers. The church has a remarkably fine and lofty tower and spire. There are chapels for Wesleyan Methodists and Baptists, and a National school. The manufacture of shoes is carried on. In the vicinity are some quarries of ragstone; this stone, used for chimney-pieces, window-slabs, &c., has been called Raunds Marble. *Rockingham*, population 261, about 10 miles S.W. from Stamford by railway, had formerly a market; an ancient castle, of which the grand entrance gateway remains, was fortified for Charles I., and besieged by Cromwell. *Rushden*, population 1460, a mile and a half from Higham Ferrers, has a large and handsome cruciform church, with a fine tower and spire

of perpendicular character: the piers and arches, the transepts and part of the chancel, are of decorated English character. The Baptists and Wesleyan Methodists have chapels. The making of boots and shoes employs many of the inhabitants. *Stamford Baron*, population 1778, on the border of the county, forms part of the parliamentary borough of STAMFORD, in Lincolnshire, the two counties being here separated by the river Welland. *Weedon-Beck*, population 2833 (of whom 837 were in Weedon barracks), 4 miles S.E. from Daventry, so named from a religious house established here as a cell to the abbey of Bec in Normandy. It is situated on the Watling-street. Wulfhere, king of Mercia, had a palace here. The church is an ancient building: the body of the church was rebuilt and enlarged in 1825 by the vicar. There are chapels for Wesleyan Methodists, Independents, and Roman Catholics; a Free and an Infant school. The Grand Junction Canal passes through the village, and near it the line of the North-Western railway is carried through a tunnel 400 yards long. The royal military dépôt at Weedon, which covers about 150 acres, contains extensive barracks; spacious storehouses for artillery, small-arms, and ammunition; an hospital, and workshops for artisans: it is one of the finest establishments of the kind in Europe. *Welford*, population 1153, about 12½ miles N.N.W. from Northampton, on the border of the county, is passed on the west by the Grand Union Canal, from which there is a short branch to the village. The church has portions of early English, decorated, and late perpendicular architecture. There are a chapel for Independents, a Free school, and a Girls school. The boot and shoe manufacture employs many of the inhabitants. *Yardley Hastings*, population 1210, about 7 miles E.S.E. from Northampton, near the border of the county, contains a considerable number of good houses. The church, which is ancient, has an embattled tower. There are chapels for Independents and Methodists, a National and two Infant schools. Lime-burning and brick-making are carried on. Nearly 2 miles S.W. from the village is Yardley Chase, which abounds with fine timber, and is stocked with deer. In this chase are some very large trees, including the Yardley oak, mentioned by the poet Cowper. An avenue three miles long extends from Yardley Hastings to Castle Ashby, the seat of the Marquis of Northampton. Castle Ashby is an extensive pile in the form of a square, erected in 1624.

Divisions for Ecclesiastical and Legal Purposes.—The county is almost entirely comprehended in the diocese of Peterborough and archdeaconry of Northampton. Northamptonshire is in the Midland circuit. The assizes are held at Northampton, quarter-sessions at Northampton and Peterborough; and county courts at Brackley, Kettering, Northampton, Oundle, Peterborough, Thrapston, Towcester, and Wellingborough. The county jail and house of correction is at Northampton. Borough jails are at Northampton and Peterborough. Nine members were returned to Parliament from this county before the passing of the Reform Act, namely, two knights of the shire, two members each for the city of Peterborough and the boroughs of Northampton and Brackley, and one member for the borough of Higham Ferrers. The county now returns eight members, Brackley and Higham Ferrers being disfranchised, and the county formed into two divisions, each returning two members.

History, Antiquities, &c.—In the Roman division of Britain, Northamptonshire was included in the province of Flavia Cesariensis. Watling-street crossed it in a north-west direction through or near Towcester and Daventry; the Via Devana crossed it near Oundle and Rockingham; the Ermine-street crossed the north-eastern extremity from Castor, on the Nen, to Stamford. Watling-street may be traced for many miles from the summit of Borough Hill near Daventry. On the London side of Weedon it is incorporated with the modern high road. Several Roman stations are usually considered to have been in the county—Tripontium, Bennavenna, Isanavatia, and Lactodorum of Antoninus; and the Brinava and Durnomagus of Richard of Cirencester. Bennavenna was probably on Borough Hill, a short distance east of Daventry, on which is one of the largest ancient camps existing in the island. The foundations of the prætorium were discovered in 1823; and walls, tessellated pavements, and utensils of various kinds were brought to light. Lactodorum is supposed to have stood on Berrymount Hill, an artificial mound on the north-east side of Towcester. The Brinava, or Brinavis, of Richard of Cirencester may be placed at Black Ground, near Chipping Warden, a village nine miles from Daventry on the road to Banbury, where Roman coins and a great quantity of pottery have been discovered. A rampart ran north and south near this station for some distance; it was probably designed for the defence of a frontier. Some small part of this bank is remaining near Warden, and is called Wallow Bank. Arbury Bank, not far off, is probably a part of it; and it is likely that this defence gave name to some neighbouring villages or hamlets, as Walton (Wall-town) near King's Sutton, Aston-in-the-Walls, &c. That a Roman town or station existed at Castor is evident, not only from the name, but from the Roman remains, ruined walls, tessellated pavements, urns and other vessels of pottery, and coins in great number, found there. Similar remains have been found at Chesterton, or rather at Water Newton in Huntingdonshire, just across the river: either Castor or Chesterton was probably the Roman Durobrivæ mentioned in the Itinerary of Antoninus, or the Durnomagus of Richard of Cirencester; perhaps the two may be identical. According to Tacitus, Ostorius Scapula, prætor of Britain under Claudius, fortified the line of the Nen by a

chain of posts; many Roman remains have been discovered along both banks of this river.

The county was included in the Anglo-Saxon kingdom of Mercia. In the invasion of that kingdom by the Danes, the monastery of Medeshamstede, now Peterborough, was destroyed; and, upon the extinction of the Mercian dynasty, the county was divided between the West Saxons and the Danes, the former having all to the south-west and the latter all to the north-east of Watling-street. Of the Anglo-Saxon period there are memorials in Brixworth, Barnack, and Earl's Barton churches. Simon de St. Liz built the castles of Northampton and Fotheringay. William the Conqueror is thought to have built Rockingham Castle. In the reign of William Rufus (1094) a great council or parliament was held at Rockingham to determine the dispute between the king and Anselm, archbishop of Canterbury, respecting the right of investiture. Both Henry III. and Edward I. frequently resided at Northampton, and in the reigns of Edward II., Edward III., and Richard II., several parliaments were held here: at the last of these was voted the poll-tax, which led to Wat Tyler's rebellion. The battle of Northampton in the civil war of the Roses is noticed under NORTHAMPTON. In 1469 a Royalist force, under William Herbert, earl of Pembroke, was defeated at Edgecot, on the border of the county towards Oxfordshire, by a body of insurgents headed by Robin of Redesdale.

Of ancient ecclesiastical or castellated architecture the county possesses several specimens. Brixworth church, 7 miles N. from Northampton, consists of a nave, south aisle, chancel, west tower, and staircase-turret, on the western side of the tower; but foundations of aisles and other parts prove that the original building was more extensive. Portions of Roman work are built up in the walls, and the whole has the appearance of having been constructed out of the materials of a more ancient structure. It is of rude character, apparently of the 11th century, but has been greatly altered at subsequent periods. Brigstock church, between Oundle and Rothwell, is another curious church, partly of Anglo-Saxon date, but the ancient work forms only a small proportion. The tower is of very rough masonry plastered, and has a roughly-built round staircase turret on the west side, like Brixworth. Earl Barton's church has a remarkable tower of Anglo-Saxon date. Barnack church, near Stamford, has a tower partly Anglo-Saxon. Castor church, near Peterborough, is a large and fine cruciform church, with a Norman tower at the intersection, which displays almost every variety of Anglo-Norman moulding and ornament. The two upper stories present a very enriched appearance, having open arches and continued arcades round. Both the parapet of the tower and the spire are of later date. St. Peter's church, Northampton, and Peterborough cathedral, have considerable portions of Norman architecture; and several of the parish churches have some Norman features. Of later date, Barnwell St. Andrew's, Aldwinkle All Saints, Canons Ashby, Easton, Finedon, Fotheringay (formerly collegiate), Lowick, Raunds, Rushden, St. Mary's church at Stamford Baron, Stanwick, King's Sutton, Titchmarsh, Warmington, Whiston, Wilby, and Woolston are perhaps most worthy of notice for their beauty or for the curious features they present. Of St. James's Abbey, Duston, near Northampton, founded by William Fevers, natural son of William the Conqueror, for Augustinian canons, and of Pipewell Cistercian abbey, Great Oakley, near Rockingham, only the foundations and traces of the walls are remaining. A portion of the chapel of Cateby Benedictine nunnery, near Daventry; a portion, supposed to be the refectory, of the Clunian priory at Daventry; the conventual church of the priory of Augustinian canons at Canons Ashby, between Northampton and Banbury; the kitchen and a few other vestiges of Sewardale Cistercian priory, near Towcester, are the principal monastic remains. Queen's Cross at Hardingstone has been already noticed. Geddington Cross, near Kettering, another of those erected by Edward I., is of triangular shape, elevated on eight steps, and divided into three compartments; it is richly adorned with statues and carvings.

The castellated ruins are few. These are, the earthworks of Northampton, Higham Ferrers, Brackley, Fotheringay, and perhaps one or two others, and the gateway of Rockingham. Fotheringay Castle was founded soon after the Conquest; Richard III. was born in it; Mary Queen of Scots was imprisoned in it by her cousin Queen Elizabeth, and here she was tried and executed February 8th 1587. This castle was demolished by Mary's son, James I., soon after he ascended the throne of England. Barnwell Castle is a fine and interesting ruin: it consists of four massy round towers, with their connecting walls inclosing a quadrangular court; the western wall is dilapidated. The grand gateway, which still remains, is flanked by two round towers.

There are a few ancient mansions. Drayton House, near Thrapston, is of the age of Henry VI.: it retains many of the features of an ancient castle. Fawsley House, 3 miles S. from Daventry, the ancient seat of the Knightly family, is an incongruous pile of various dates. Northborough manor-house, between Peterborough and Market Deeping, now a farm-house, is of decorated English character, and some of its portions and details are very beautiful. Burghley House, on the border of the county near Stamford, was built for the most part by the great Lord Burghley, though many additions and alterations have been made by subsequent possessors. It is a vast pile, displaying magnificence rather than taste. Kirby Hall, near Rocking-

ham, was built by Sir Christopher Hatton, lord-keeper: it has been materially altered since.

The battle of Naseby, which decided the great civil war, was fought in this county in 1645. After the Scotch had delivered the king to the Parliamentary Commissioners, he was brought to Holdenby House, about 6 miles N.W. from Northampton, whence he was carried off by Cornet Joyce. Holdenby House, which had been built by Sir Christopher Hatton, was demolished by order of the Parliament.

Statistics: Religious Worship and Education.—According to the Returns of the Census of 1851, there were then in the county 592 places of worship, of which 292 belonged to the Established Church, 118 to four sections of Methodists, 87 to Baptists, 56 to Independents, 6 to Quakers, 6 to Roman Catholics, 4 to the Countess of Huntingdon's Connexion, 4 to Mormons, and 3 to Moravians. The number of Sunday schools was 426, of which 257 were conducted by Episcopallians, 68 by Methodists, 52 by Baptists, and 39 by Independents. The number of Sunday scholars was 33,614. Of day-schools there were 687, of which 276 were public schools, with 18,969 scholars, and 411 were private schools, with 7555 scholars. Of evening schools for adults there were 15, with 305 pupils. There were 8 literary and scientific institutions, with 1451 members, and 14,324 volumes in the libraries belonging to them.

Savings Banks.—In 1853 the county possessed four savings banks— at Kettering, Northampton, Oundle, and Peterborough. The total amount due to depositors on November 20th 1853 was 288,335*l.* 8*s.*

NORTHERN SOVEREIGNTY. This name has been given, but perhaps not definitely, to an extensive tract of country which was annexed in 1848 to the British possessions in South Africa. It includes the whole of the territory west of the Drachenberg Mountains, between the two great branches of the Orange River, the Ky Gareep and the Nu Gareep, comprising a triangular area of about 50,000 square miles.

The Drachenberg Mountains, called also the Quathlamba Mountains, run parallel with the eastern coast of South Africa, at a distance varying from 60 to 90 miles from the shore. They rise to a height of from 6000 to 8000 feet, with towering peaks and rocky ridges, interrupted only by ravines and chasms, and thus form a barrier almost impassable between Kaffraria and Natal on the east, and the Northern Sovereignty on the west. A secondary range, called by the natives Malati, or the Peaks, runs parallel to the principal chain, at no great distance farther inland; and offsets, called the Wittebergen and Sneuwbergen, extend westward from the Drachenberg range, and close in the Northern Sovereignty on the south.

The country immediately west of the mountain ranges is from 5000 to 6000 feet above the level of the sea, and consists of a series of wide plateaus, which, sloping gradually downwards towards the lower course of the Vaal River, terminate in plains of vast extent, sometimes containing numerous isolated and rocky hills, but generally quite flat and without trees. These vast wastes are for the most part without a single human inhabitant, but afford abundant means of subsistence to countless herds of antelopes, quaggas, and other wild animals. All the rivers fall ultimately either into the Ky Gareep or the Nu Gareep. The Ky Gareep, or Vaal River, rises between 26° and 27° S. lat., 29° and 80° E. long., about 200 miles W. from Delagoa Bay, in an interior range of mountains bounding the great plains on the north, and flows west, south, and south-west till it meets the Nu Gareep. The Nu Gareep, or Cradock River, rises in the Drachenberg Mountains, about 29° S. lat., 30° E. long. It flows south-west, west, and afterwards north-west, till it joins the Ky Gareep. Its principal affluent from the north is the Caledon; from the south it receives the Stormberg River, the Oorlogs, the Zeekoe River, and others of less importance.

This portion of the continent, being remote from the sea-coast, receives its rain in thunder-storms, chiefly during the summer months, of which December and January are the hottest; and there being no rain during the rest of the year, the climate and soil are then characterised by great dryness, though copious dews fall at night. The smaller rivers are dried up, and the ponds and lagoons are converted into swamps.

The White-Faced Antelope (*Antelope albifrons*), the Spring-Bok (*A. exchore*), the Gnu (*A. Gnu*), and the Quagga (*Equus Quagga*) seem to be in the greatest abundance. They are often seen in countless herds covering an immense extent of the plains, mixed with other species of the antelope, which are less numerous, and with buffaloes. Hyenas are abundant. Lions are very common. The hippopotamus is very common in the larger rivers. Ostriches appear on the great plains in considerable numbers. Timber grows on the slopes of the mountains, but not in the plains. There are salt-lagoons and salt-marshes, and some of the plains are covered with an incrustation of salt.

The white population is estimated to be about 5000, who are chiefly the residue of the Dutch farmers who, in 1836 and following years, emigrated from the Cape Colony, and are settled in villages and in small groups near the rivers. The native population are supposed to amount to about 150,000, who mostly inhabit the Malati Mountains. The Bushmen live among the isolated hills of the interior. The Griquas, who are a mixed breed, arising from the intercourse of Europeans with the natives, are in considerable numbers. They are

mostly settled along the banks of the Nu Gareep and of the Orange rivers.

The colony has been distributed into four districts—Bloem Fontein, Caledon River, Winburg, and Vaal River. The principal town is *Bloem Fontein*, situated in 29° 8' S. lat., 26° E. long., on the high road from the Cape Colony to Natal. It is about 380 miles N. from Graham's Town. It contains about 1000 inhabitants, has an Episcopal church, a Wesleyan Methodist chapel, and barracks. Smithfield, Winburg, and one or two other villages, are inconsiderable places. There are three or four mission-stations belonging to the British, French, and Prussians.

The country appears to be well adapted for sheep pasturage and the production of wool. The climate seems to have a favourable influence on the fineness of the fleece. Small quantities of gold have been recently found in the neighbourhood of Smithfield.

When the Dutch inhabitants of the Cape Colony emigrated from it in 1836 and following years, they settled themselves at first in various parts of the territory which is now named the Northern Sovereignty. In 1838 a party of them went to Natal, where they were treacherously murdered by the warriors of the chief Dingaan. [NATAL.] When the Dutch, who had conquered the natives and declared a republic, were obliged in their turn to submit to the English in 1842, the greater part of them fled into the Northern Sovereignty, where they founded the village called Winburg, and proclaimed a new Dutch republic. Little notice was taken of their proceedings till they began to expel from their farms the Dutch farmers who continued to acknowledge the British supremacy, and in 1845, under their leader Pretorius, prepared a large expedition to attack Adam Kok, a Griqua chief in alliance with the British. The chief applied to the colonial government, and two regiments were immediately sent to his assistance, who repulsed the revolutionary Dutch boers. On the 1st of February 1848, Sir Harry Smith, with the assent of the well-affected boers, erected the whole of the territory inclosed by the Ky Gareep and the Nu Gareep into a British colony. This led to another contest, in which Sir Harry Smith defeated Pretorius and his adherents on the 29th of August, 1848. Pretorius fled beyond the Vaal River, and the majority of the boers laid down their arms and submitted to the British government.

NORTHFLEET. [KENT.]

NORTHLEACH, Gloucestershire, a market-town and the seat of a Poor-Law Union, in the parish of Northleach, is situated in a bottom among the Cotswold Hills, near the source of the Lech, in 51° 50' N. lat.; 1° 50' W. long., distant 20 miles E. by S. from Gloucester, and 82 miles W.N.W. from London. The population of the parish in 1851 was 1352. The living is a vicarage in the archdeaconry of Bristol and diocese of Gloucester and Bristol. Northleach Poor-Law Union contains 30 parishes and townships, with an area of 67,647 acres, and a population in 1851 of 10,984. The church is a large handsome building, with an elegant south porch, and a lofty tower at the west end. In 1559 a Free Grammar school was founded here by Hugh Westwood; its income is about 600*l.* a year. There is also an Infant school.

NORTHOP. [FLINTSHIRE.]

NORTHUMBERLAND, a maritime county in the north of England, is bounded N. by the Tweed, which separates it for a few miles from the Scotch county of Berwick; E. by the North Sea; S. by Durham, from which it is divided in one part by the Derwent, and in another by the Tyne; and W. by Cumberland and the Scotch county of Roxburgh. By the Act 7 and 8 Vict., cap. 61, Northumberland, Islandshire (including Holy Island and the Farnes Islands), and Bedlingtonshire were transferred from the county of Durham to that of Northumberland. The county lies between 54° 48' and 55° 42' N. lat., 1° 22' and 2° 36' W. long. Its greatest length from north to south is 60 miles; from east to west, between Tynemouth and the point where the Irthing enters Cumberland, 54 miles. The most southern part of the county however, lying between the Tyne and the Derwent, is only 28 miles wide; and the greater part of the northern division hardly exceeds 24 miles in breadth. The area is 1952 square miles, or 1,249,299 acres. The population in 1841 was 266,020; in 1851 it was 303,568.

Surface and Geology.—Northumberland has a rugged surface and a naked aspect. The highest hills are the Cheviot, which in their northern part, near the Common Burn River, a little south-west of Wooler, reach the height of 2658 feet. At King's Seat, near the head of the Breamish, the true Cheviots are met by the Hedgehope and Standrop range (2347 feet), and by a lower range that runs north-west along the border to the Beaumont River. From King's Seat the ridge of the Cheviot Hills runs generally south-west round the sources of the Coquet, the Reed, and the North Tyne. These hills have in several instances a conical form, and some are nearly perfect cones; they are covered with a fine green turf, and afford excellent pasture for vast numbers of sheep peculiar to the district. Along the Cumberland border, and especially towards the south-west, the hills are extremely broken, dreary, and barren, but are valuable for their lead-mines. From these highlands numerous offshoots run, generally eastward, separated by fertile dales, and stretching out in the centre of the county into dreary wastes, on which arise a few rocky hills of no great elevation. The hills south of the Coquet form part of the extensive moorlands which occupy a third part of the county, and have an average elevation of from 500 to 1000 feet above the level of

the sea. South of the Tyne is a group of hills separating the valleys of the Tyne and the Wear. The valley of the Reed is wet, and in some parts so boggy as to be impassable. Woods are chiefly confined to the banks of the rivers.

The coast is low. It runs generally south by east from Warren Bay, opposite the Farnes Islands, to the mouth of the Tyne, and is marked by numerous headlands and bays. Coquet Island, lying off Hawksley Point, is nearly a mile long from north to south, and about half a mile broad. It contains some rich pasture, and abounds with rabbits. A lighthouse has been lately erected by the Trinity board, at a cost of 14,000*l.*, upon the island. Islandshire has no cliffs, neither has Bedlingtonshire. From Islandshire sand-banks (Fenham flats) run out and connect Holy Island with the main land, so as to render the island accessible at low-water to vehicles of all kinds; though the sands are dangerous to persons not acquainted with them. Holy Island is of an irregular form, nearly 4 miles long from east to west by north, and nearly 2 miles broad from north to south. The parish had in 1851 a population of 908 persons. This island was called by the Britons *Inis Medicante*, and was afterwards known by the name of *Lindisfarne*. It was the seat of a bishoprick, and had a monastery under the government of the bishops, which was subsequently reduced to be a cell of the Benedictine monastery of Durham. The church of the monastery is now in ruins. The soil of the island is rich. On the west side is a small village or town, formerly much more extensive: the inhabitants are chiefly engaged in fishing. There is a small harbour. An old castle, which during the last war was occupied by a garrison sent from Berwick, stands upon a lofty rock of whinstone in the south-east corner of the isle. On the north-east side of the island is a projecting tongue of land a mile long, and in some parts only 60 yards broad, occupied by rabbits; on one side of this tongue the tide may be seen ebbing while it is flowing on the other. The Farnes Islands lie to the south-east of Holy Island. The group consists of several small islets or rocks, some of which are visible only at low water. They produce kelp, and some of them a little grass. There are two lighthouses on two islets of the group. The population in 1851 was 20.

The south-eastern part of the county is included in the great coal-field of the counties of Northumberland and Durham. This coal-field is skirted on the north-west by a belt of land occupied by millstone-grit beyond which is a still narrower belt of land occupied by the carboniferous or mountain limestone. Nearly all the rest of the county is occupied by a series of formations comprising sandstones of various kinds. Trap rocks occur in connection with both coal formations. A small district along the Tweed is occupied by the new red-sandstone. The chief mineral products are coal and lead: most of the coal raised is sent coastwise to London and to various southern ports. The principal pits in the great coal-field are in the neighbourhood of the Tyne.

The most important lead-mines are in the south-west of the county, near Allendale. Some gypsum is obtained in the red-sandstone district, near the Tweed. Zinc-ore abounds in most of the veins producing lead. There is abundance of ironstone in the strata which occur in the coal-measures. Limestone and building-stone are quarried in different parts of the county.

Hydrography and Communications.—The rivers of Northumberland rise for the most part in the eastern slope of the hills on the western boundary, and flow, with the exception of the Till and its feeders, eastward across the county to the North Sea. The Tweed belongs chiefly to Scotland, but bounds the north-western angle of this county. The *Till* rises in the eastern slope of the border range, near the Hartside Hills, and, under the name of the Breamish, flows first east, then north; on reaching the neighbourhood of Belford it turns north-west, and, assuming the name of *Till*, flows into Northumberland, where it joins the Tweed on the right bank a little below Coldstream, after a course of about 40 miles. The Breamish, the Beaumont (which rises on the west side of the hills), and the *Till*, inclose the true Cheviot district. The *Aln* rises near Alnham, and flowing east 20 miles past Whittingham and Alnwick, falls into the sea at Alnmouth. The *Coquet* rises in the Cheviot Hills, and flowing first south-east, and then east past Rothbury, falls into the North Sea just below Warkworth, after a course of about 37 miles. The *Aln* and the *Coquet* are both navigable for a short distance, the former up to Alnwick. There is a salmon fishery at the mouth of these rivers, and the *Aln* abounds in trout. At the mouth of the *Coquet*, near the village of Ambleside, are a harbour and docks; the harbour is connected by a branch railway with the Newcastle and Berwick railway. The *Wansbeck* rises in a range of hills which runs through the centre of the county, forming the eastern side of the basin of the Reed, and flows east past Morpeth (where it becomes navigable) into the North Sea. Its whole length is 24 miles, the length of the navigation 6 miles. The *Blyth* rises a little south of the source of the *Wansbeck*; it has a course of above 20 miles nearly parallel to that river, and falls into the sea at the town of Blyth, of which it forms the harbour. The *North Tyne* rises from several springs on the border. After flowing southwards, under the name of the Kielder Burn, for 10 miles, it flows east 14 miles to its junction with the Reed below Bellingham; from this point the stream flows south-east 14 miles to the junction of the South Tyne, just

above Hexham. The *South Tyne* rises amid the hills south of Alston Moor in Cumberland, and after flowing 17 miles northward to Haltwhistle, turns east, and flows 16 miles to its junction with the North Tyne, receiving on its right bank above Haydon Bridge the Allen River. The *Derwent*, another feeder of the Tyne, is noticed under DURHAM. The *Tyne*, thus formed by the junction of the North Tyne and the South Tyne, flows eastward 30 miles, past Newcastle, into the sea between North and South Shields. Its whole length from the head of the North Tyne is about 70 miles. It is navigable for sea-borne vessels up to Newcastle, and for river craft a few miles higher. The spring-tides rise about 18 feet at the mouth of the river and about 11½ feet at Newcastle. From Newcastle to the sea the Tyne may be said to be one continued harbour, the river and the numerous docks adjacent to it being occupied with shipping, mostly colliers, and each bank being lined with wharfs, quays, staiths, and factories. The *Reed* rises on the northern slope of the Kielder Moors, and flows along the base of the Girdle Fell in a south-eastern direction past Otterburn, below which it runs nearly due south to its junction with the North Tyne. Its length is about 24 miles.

The Vale of the Coquet is noted for the excellence of its agriculture; the Vale of the Tyne exhibits great variety of scenery; above Newcastle it is rich and beautiful. There are medicinal springs at Eglingham, Snowhope, and Thurston, but none of them is much frequented.

The county is traversed by two important lines of railway connecting Newcastle with Berwick and Carlisle. The Newcastle and Carlisle railway runs westward up the valley of the Tyne, and passes Hexham and Haltwhistle. Its whole length in this county is 41 miles. The Newcastle and Berwick railway, forming part of the Great Northern railway from London to Edinburgh, runs northward at a little distance from the coast past Morpeth and Belford, sending out short branches to Alnwick and Warkworth. A railway, 7 miles in length, joins Newcastle to North Shields, whence there are short lines to Tynemouth and Blyth. On the south, Newcastle is connected by railway with Gateshead, South Shields, Durham, Hartlepool, and the numerous lines in connection with the Great Northern railway. The Berwick and Kelso railway, which runs up the right bank of the Tweed, is partly in the north-western angle of this county. The railways which converge on Newcastle meet at a central station within that town.

The Edinburgh coach-road enters the county at Newcastle, and runs northward through Morpeth, Alnwick, and Belford, to Berwick-upon-Tweed. Another road to Edinburgh branches off from this beyond Morpeth, and runs by Wooler to Coldstream. A third road to Edinburgh runs from Newcastle by the valley of the Reed to Jedburgh. The coach road from Newcastle to Carlisle runs by Hexham and Haltwhistle.

Climate, Soil, and Agriculture.—The climate is considerably colder and the harvest later than in the southern and midland counties. In that part of the county which skirts the sea-shore, although it is exposed to cold easterly winds, the air is much milder and more genial than in the western and mountainous part, which, although too high and bleak for cultivation beyond a certain elevation, produces sufficient herbage to maintain large flocks of hardy sheep, known by the appellation of the Cheviot breed.

Along the coast, and for some miles inland, the soil consists of a strong fertile clayey loam, well adapted to the growth of wheat, beans, and clover, and there are some excellent natural meadows and pastures. Along the banks of the Tyne and the Coquet, and along the Aln from Alnwick to the sea, the soil is chiefly a light gravel, sand, or dry loam, which is likewise the case to a great degree in the vales of the Breamish, Till, and Beaumont. In the middle and south-eastern parts of the county the soil is a moist loam on a cold impervious clay bottom. On the hills there is a mixture of peat-bogs, stony and gravelly heaths, and some good dry green pasture.

Northumberland has been one of the foremost of the English counties in adopting improved methods of agriculture. Wheat and barley are generally raised, and it is common for clover and grass-seeds to be sown amongst the grain. Turnips are extensively raised. On light gravelly soils, where the clover and grasses soon fall off, the turnips are fed off with sheep. There are some very heavy and wet soils in the county, which are fallowed once in six or seven years. In other respects they are cultivated in a similar manner with the good loams. The practice of thorough draining is spreading rapidly. Potatoes are grown in large quantities. The instruments of tillage are mostly of improved make. Threshing-machines, moved by water, wind, or horses, and seed-drills, are general on the larger farms.

The cattle in Northumberland are generally of good breeds, mostly short-horned. Those bought to fatten are chiefly Scotch. The cows kept for the dairy are almost invariably of the short-horned Durham breed; and many remarkably fine heifers are reared in the county. Great attention is paid to the breeding of bulls. Excellent farm-horses are bred. The sheep are chiefly of the native Cheviot breed, a useful hardy sheep with a small fleece. On highly-improved farms the Leicester and South-down breeds, and almost every other, may be found. The principal farms in Northumberland are let on lease for 21 years.

There are no very extensive old woods in the county, but many

thriving plantations; there is a constant demand for small timber for the use of the coal-mines, which makes it profitable to cut young saplings, and the trees are not often permitted to acquire the size of large timber. The larch is a profitable and favourite tree in all young plantations, and thrives well in most situations, from the sides of the rivers to near the tops of the highest hills.

The principal manufactures of Northumberland are those that depend chiefly on the collieries—namely, glass, pottery, and iron. Large quantities of dried and pickled salmon are exported.

Divisions, Towns, &c.—Northumberland is in the diocese of Durham, and constitutes the archdeaconry of Northumberland. It is in the northern circuit. The assizes are held at Newcastle; quarter-sessions at Newcastle, Morpeth, Hexham, and Alnwick alternately. County-courts are held in Alnwick, Belford, Bellingham, Haltwhistle, Hexham, Morpeth, Newcastle, North Shields, Rothbury, and Wooler. The county jail and house of correction is at Morpeth; there are houses of correction also at Tynemouth, Hexham, and Alnwick. Northumberland is divided into six wards—Bamborough, north-east; Castle, south-east; Coquetdale, central; Glendale, north-west; Morpeth, central; and Tindale, south-west. Besides these there is the county of the town of Newcastle. Before the Reform Act Northumberland returned six members to Parliament, two for the county, and two for each of the boroughs of Newcastle and Morpeth. By the Reform Act the county was formed into two divisions, each returning two members; Morpeth was reduced to one member, but the new borough of Tynemouth was created, returning one member, so that the number of borough members remained as before.

Northumberland contains the parliamentary borough and assize town of NEWCASTLE, the parliamentary boroughs of MORPETH, TYNEMOUTH, and NORTH SHIELDS, and the market-towns of ALLENDALE, ALNWK, BELFORD, BELLINGHAM, HALTWHISTLE, HEXHAM, ROTHBURY, and WOOLER. To these may be added, as places of some importance, though without markets, ALNMOOUTH, BAMBOROUGH, BLYTH, HARTLEY, SEATON, and WARKWORTH.

Wooler is an ancient market-town, in the east division of Glendale ward, 45 miles N.N.W. from Newcastle; population of the parish 1911 in 1851. The streets are lighted with gas and paved, and the houses are supplied with water. The parish church is a neat building, erected in 1765, and enlarged in 1835. The Baptists, English Presbyterians, United Presbyterians, and Roman Catholics have places of worship. A National school, a subscription library, and a dispensary are in the town. The market is on Thursday; there are two yearly fairs. There are several entrenchments near Wooler, the most remarkable of which is a circular entrenchment on a hill called Humbleton Hugh, about a mile from the town. In the plain beneath this hill is a stone pillar, commemorative of the victory gained here in 1402 by Percy, earl of Northumberland, over a Scotch army of 10,000 men under Earl Douglas. Another remarkable monument of British times exists near Wooler, on the flat top of a mountain called the Yevering Bell, which is 2000 feet above the plain at its base. It consists of a stone wall 8 feet thick, with an entrance on the south side, and inclosing a large cairn: on the sides of the hill are remains of circular buildings; there are also traces of a grove of oaks. *Alnmoouth*, 5 miles E. from Alnwick, at the mouth of the Aln: population of the township 488 in 1851. It may be considered as the port of Alnwick: there is a considerable export of corn and wool here; the fisheries too are valuable, and ship-building is carried on. The hill at the mouth of the Aln, on which the parish church of Alnmoouth stood, has for some time been completely insulated by the floods and tides; a portion of the ancient structure still remains on the hill. Alnmoouth is much resorted to for sea-bathing. *Hartley*, in Castle ward, 10 miles N.E. from Newcastle, population of the township 1627 in 1851, consists of one long street of mean houses, extending to the shore, where there is a small fishing harbour. Half a mile north from Hartley is *Seaton Sluice*, or *Seaton Delaval*, a harbour formed by Sir Ralph Delaval in the time of Charles II., at the mouth of the Seaton Burn. In order to prevent the harbour being filled up with mud and sand, he formed a sluice, with flood-gates, to scour the haven. This haven was improved by the late Lord Delaval, who made a new entrance from the North Sea by a cut through the solid rock, which is guarded by immense locks. This improvement has rendered the harbour accessible at all times, and in every state of the wind: 12 or 15 vessels of 300 tons can here ride in safety, and enter or leave the harbour fully laden. The principal trade of the place is in coals; there are besides extensive bottle-works. The English Presbyterians and Methodists have chapels. *Warkworth*, formerly a market-town, now a village, 14 miles N.N.E. from Morpeth, population of the township 834, is situated on the right bank of the Coquet, at a short distance from its mouth. The town contains several good modern houses, leading from the castle down a steep hill to the ancient cross, where the market was formerly held. A cattle fair is held on November 23rd. The parish church is a handsome building, with a tower and spire, above 100 feet high. There are places of worship for Methodists and Presbyterians. The town is governed by a borough-reeve and constables. On an eminence close to the town are the noble ruins of Warkworth Castle, one of the strongholds of the Percys. The keep is an octagon, surmounted with a tower. The building is very large, and comprehends many apartments. The great baronial hall is nearly 40 feet long by 24 feet wide,

and 20 feet high; and there is another state-room of rather smaller dimensions. Just within the entrance, on the ground-floor, are eight apartments with vaulted roofs of stone. The masonry of the castle is in excellent preservation, but the roof, windows, and floor are for the most part gone. A bridge of two spacious arches, which crosses the Coquet at the north side of the town, has a tower at the town end, with an archway through which the road passes; in the middle of the bridge is a stone pillar, with the Percy arms carved on it. In the perpendicular rocks which form the north bank of the Coquet, about a mile above the bridge, is an ancient hermitage, with a small neat chapel and two other apartments hewn out of the rock; the chapel contains an altar, and a monumental alab with a recumbent female figure. This retreat is celebrated in Dr. Percy's poem of the 'Hermit of Warkworth.'

Of villages the following may be mentioned; the populations given are those of 1851:—

Ambie, 2 miles S.S.E. from Warkworth, situated on an eminence on the right bank and near the mouth of the Coquet, population of the township 1040, is a neat well-built village, which has considerably increased of late years. The streets and shops are lighted with gas, and valuable coal-mines are worked in the neighbourhood. A branch line from the Newcastle and Berwick railway passes through the village to the harbour at the mouth of the Coquet. The Independents and Roman Catholics have chapels in Ambie. *Benwell*, 2 miles W. from Newcastle, population of the township 1272, is situated in an exceedingly fertile district, which abounds also with excellent seams of coal. At a short distance south of the village is Benwell House, surrounded by extensive plantations. *Blanchland*, situated on the Derwent, is famous for its lead-mines. Of its Premonstratensian Abbey, founded in 1175, some portions still remain. One of the abbey towers was converted into a chapel in 1752. There is an Endowed Free school here. The Abbot of Blanchland was elevated to the House of Peers by Edward I. *Corbridge*, a large village, population of the township 1363, is situated 4 miles E. from Hexham, on the left bank of the Tyne, over which there is a bridge of seven arches. There is a spacious market-place, which contains a cross and a fountain, erected in 1814 by the Duke of Newcastle. The parish church is a very ancient structure; and at the north-east corner of the market-place is an ancient tower, which formed part of the old town-jail. Corbridge was formerly a market-town, and had four parish churches, three of which have disappeared. There are traces of extensive buildings between this place and the neighbouring Roman station of Corstopitum. Two altars with Greek inscriptions have been dug up in the churchyard; one of them was dedicated to the Tyrian Hercules. The Independents and Wesleyan Methodists have chapels in Corbridge. Earthenware and fire-bricks are largely manufactured. Coal, lead, and limestone are raised in the parish. *Cowpen*, a village and township, about one mile W. from Blyth, is situated amidst extensive coal-mines: population of the township 4045. The Roman Catholics and Primitive Methodists have chapels. Several collieries have been recently opened. *Chirton*, a populous straggling village, one mile W. from North Shields, has a population of 3960, who mainly derive their support from the collieries. *Cullercoats*, population 695, about 2 miles N. from Tynemouth, is built close to the cliffs that here overhang the North Sea; it has a mineral spring, and is frequented in the season by sea-bathers. *Earsdon*, population of the township 551, is 4 miles N. from North Shields, situated on an eminence in a fertile country, abounding also with coal and stone. The parish church of St. Alban, a venerable structure, occupies the highest ground in the village, and commands extensive views of the coast and of the interior. *Elsdon*, 8 miles N.E. from Bellingham, on a small feeder of the Reed, population of the township 313, is supposed to have been a Roman town. *Elsdon Castle*, erected by David, king of Scotland, is a strong tower, the lower story of which is spanned by a single arch. The parish church is a large cruciform structure. Coal, limestone, and ironstone abound in the neighbourhood of Elsdon. *Ford*, near the Scottish border, on the right bank of the Till, about 9 miles N.N.W. from Wooler: population of the parish 2322. The village consists of one irregular street, on an eminence rising from the river, over which is a bridge. *Ford Castle*, on the north side of the village, originally built in the reign of Henry III., by Sir William Heron, was in great part rebuilt by the late Lord Delaval. Of the original structure only two towers on each flank of the present edifice remain. The castle was taken by James IV., in 1513, just before the battle of Flodden. Besides the parish church, there are two Dissenting places of worship. *Haydon Bridge*, formerly a market-town, is situated 6 miles W. from Hexham, on both banks of the South Tyne: population of the chapelry 2085. It contains Episcopal, Independent, and Wesleyan Methodist chapels. There are here a well Endowed Free school, and 20 almshouses. *Haydon Bridge* is the mid-station on the Newcastle and Carlisle railway, being about 29 miles distant from each of these towns. *Howden Pans*, 5 miles E. by N. from Newcastle, is situated in the parish of Wallsend, on the left bank of the Tyne: population of the township 1276. Wallsend coals are shipped from the staiths along the river here. There are large docks for ship-building, a rope-walk, a tar and varnish factory, and an extensive brewery. Wesleyan and New Connexion Methodists have chapels in Howden. The village got its distinctive

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name from the numerous salt-pans that formerly existed here. *Jemond*, a township, with a population of 2089, situated in a vale about a mile and a half N.E. from Newcastle, is noteworthy for its extensive iron-works. Here was formerly an hospital dedicated to the Virgin Mary, the chapel of which was much resorted to by pilgrims. *Long Benton*, population of the township 2238. The village is 3 miles N.E. from Newcastle, and occupies a pleasant and healthy situation. The parish church is about a quarter of a mile from the village. Part of the parish skirts the left bank of the Tyne, which is lined with factories of different kinds, and with coal-wharfs. *Lowick*, a pretty village 8 miles N. from Wooler, population of the parish 1941, contains a parish church and a Presbyterian chapel. *Barmoor Castle* and grounds are close to the village. Coal and limestone are obtained in the neighbourhood. *Newbiggin*, a small bathing village about 4 miles N. from Blyth, population of the chapelry 717, contains some good houses. The chapel, an ancient structure, with a low spire, occupies a site near the shore. Some of the inhabitants are engaged in fishing. *North Sunderland*, a village 3 miles S.S.E. from Barmoor, population of the township 1208, has a small harbour, from which corn, fish, and lime are exported; many herrings are cured at this place. The church, a neat structure, was opened in 1833. The English and United Presbyterians have chapels. *Walker*, is situated on the left bank of the Tyne, 3 miles E. from Newcastle: population of the chapelry 3201. At the village is a station of the Newcastle and Tynemouth railway, and along the banks of the Tyne are iron-works, coal-staiths, iron shipbuilding-works, alkali- and copper-works, &c. *Wallend*, a flourishing village 3½ miles E. from Newcastle, on the road to North Shields, derives its name from its position at the extremity of the wall of Severus: population of the township 2161. The district is celebrated for its coal-mines; there are also large ship-building yards, extensive lime-works, copper-foundries, and potteries. The parish church is a neat building. The Wesleyan Methodists and United Presbyterians have chapels. *Wark*, an agricultural village 9 miles N.W. from Hexham, is situated on the road to Bellingham, and near the right bank of the North Tyne: population of the township 483. Besides the parish church, there are chapels for Presbyterians and Methodists. *Wylam*, is situated on the Tyne, 9 miles W. from Newcastle: population of the township 1091. The principal industrial establishments are an extensive colliery and pig-iron works. Near the colliery is Florist Hall, with extensive gardens. The land in the vicinity of Wylam is very fertile.

History, Antiquities, &c.—In the earliest period of the history of the island, the eastern side of the county and the adjacent parts of Scotland were inhabited by the Otadeni, and the western side by the Gadeni, who also occupied Cumberland and a part of Scotland. There are several remains of the primitive inhabitants of the country, consisting chiefly of rude hill-forts, cairns, stone circles, and similar monuments. The Romans do not appear to have attacked this part of the country until the time of Agricola, who, in the second year of his command (Tacit., 'Agric. Vita,' c. xx.), formed a line of forts extending from the mouth of the Tyne to the Solway Frith, nearly in a line with the great wall subsequently erected by Severus. Agricola pushed his conquest northward, and secured the newly-acquired territory by a second line of forts extending from the Forth to the Clyde. The northern conquests of the Romans were by no means permanent. Agricola was recalled, and the Roman power languished. The Caledonians continued hostilities, and several tribes, who had submitted, revolted; and the emperor Hadrian found it expedient to abandon all the country between the two lines of forts built by Agricola, and to defend the southern part of the island by a rampart of earth.

In the reign of Antoninus Pius, the district between the two lines of forts formed by Agricola was reconquered by Lollius Urbicus, lieutenant of the emperor, who raised a rampart of turf across the island in the direction of the northern line. In the following reigns Northumberland and the rest of the country between the two walls appear to have regained their independence. Severus engaged in active warfare against the natives (A.D. 207-10): he lost 50,000 men, but ultimately obliged them to submit. He built a strong wall across the island nearly in the line of Hadrian's rampart. Hostilities were soon renewed by the natives, and Severus died at York, in the midst of his preparations to extirpate them. The subsequent history of the county during the Roman period is obscure.

The most remarkable monument of the Roman dominion is the great line of defence formed and augmented by the successive labours of Agricola, Hadrian, and Severus; and sometimes called 'the Picts' Wall,' sometimes the 'Roman Wall.' Some account of these great works has been given under BRITANNIA. The principal Roman stations in the line of the wall along Northumberland were Segedunum, Wallsend; Pons Ælii, Newcastle; Condercum, Benwell Hill; Vindobola, Rudchester; Hunnum, Halton Chesters; Cilurnum, Walwick Chesters, on the right bank of the North Tyne; Procolitia near Carraw; Borcovicus, near House Steads, 6 miles N.E. from Haltwhistle; Vindolana, Little Chesters; Æsica, Great Chesters; and Magna near the Cumberland border, between the Toppald and the Irthing. Borcovicus is the most perfect station on the line; it is on high ground, with a precipitous descent towards the north: it covered an area of 15 acres, and had a large suburb on the south. A

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great number of Roman remains have been found here. Besides these stations on the line of the wall there were several other places of note in the Roman times in this county. Of these we enumerate the following:—Bremenium, or Bramanium, at Rochester in Redesdale; Corstopitum, or Corstopium, at Corchester, near Corbridge; Ad Fines, at Chew Green, near the head of the Coquet. There are Roman camps in different parts of the county. Indeed, in the number of Roman remains existing or found in it, Northumberland surpasses any other English county. A great Roman road, the northern Watling-street, entered this county from Durham, and passing near Corbridge divided into two branches, one of which ran by Habitancum (near Bellingham), Bremenium, and Ad Fines into Scotland, the other ran to the west of Morpeth and Alnwick into Scotland by Berwick. Another Roman road, called the Maiden Way, entered the county from Alston in Cumberland, and ran to the station Magna on the great wall.

Upon the departure of the Romans in the 5th century, Northumberland became the prey of the Picts and other barbarians, who broke through the wall and ravaged the island. When the Saxons were invited to oppose these invaders, a body of them were posted with their ships at the east end of the Roman wall (about A.D. 454); but it was not till 547 that a serious attempt was made at the permanent conquest of this part of the country. The invaders were Angles; and their leader, Ida, though he experienced a stout resistance from the natives, laid the foundations of an Anglo-Saxon kingdom of Bryneich, or Bernicia, which extended from the Tyne to the Forth. He built a castle on the coast, to which he gave the name of Bebban Burgh, since better known as Bamborough. Ida died in 560. One of the succeeding chieftains, named Ella, separating himself from the other Angles of Bryneich, founded the kingdom of Deifyr or Deira, separated from Bryneich by a vast forest that occupied what is now the county of Durham. The two kingdoms of Bryneich and Deifyr, when united, constituted the kingdom of Northumbria, which extended along the eastern shore of the island from the Humber to the Forth, and was bounded on the west by the British kingdoms of Strathclyde, or Vale of Clyde, and Cumbria, which extended south to Lancashire.

In 844 and again in 867 the Danes attacked Northumberland. They made an entire conquest of the country, and settled in it. Halfdene became sovereign, and divided the kingdom among his followers. In the treaty which Alfred made with the Danes, Northumbria was included in the Danelagh, or Danish territory. Against the successors of Alfred the Northumbrian Danes carried on a succession of petty wars and anarchical struggles till the dissolution of the kingdom of Northumberland in 950. Northumbria was then divided into earldoms or counties; of these Bernicia, or Northumbria north of the Tyne, which was nearly coterminous with the county of Northumberland, was one, Deira (Yorkshire) another, and Lothian (south of Scotland) a third. The county of Northumberland, as well as Cumberland, Durham, and Westmoreland, is omitted in 'Domesday Book.'

As the Scottish princes augmented their territories and consolidated their power, and as the Anglo-Norman princes on the other hand grew in wealth and resources, Northumberland became subject to the evils and received the constitution of a border county. The earldom became merely titular, and the government of the county was given to the high-sheriff, who was intrusted with unusual powers. Excursions for plunder became the occupation of the borderers on both sides of the frontier, and they alternately inflicted and endured the miseries of a state of war. Agriculture was neglected, and cattle became the chief property of the landowner. Castles and towers were erected in almost every part, and every habitation was constructed with a view to defence as well as residence. Resistance to the plunderers led to scenes of blood, and bloodshed laid the foundations of deadly feuds. The fierce and unsettled habits caused by such a condition continued till modern times. The inhabitants of the eastern border, toward Berwick-upon-Tweed, were first brought into a more peaceful way of life; but amid the wastes and fastnesses of the western side of the county the borderers only at a comparatively late period became assimilated to the rest of their countrymen.

The most important occurrences connected with the stirring history of Northumberland, from the Conquest to the early part of the 16th century, are the following:—The defeat and death of Malcolm Canmore, king of Scotland, while besieging Alnwick Castle, 1093, by Robert de Moubay, earl of Northumberland; the capture of William the Lion, king of Scotland, under the walls of Alnwick Castle in 1174; the destructive incursions of the Scots, 1296 and 1297, in retaliation for the cruelties of Edward I. after the storming of Berwick-on-Tweed; another Scotch invasion in 1314, after the battle of Bannockburn; the victory of the Scotch at Otterburn in 1387, when Hotspur was taken prisoner, and Earl Douglas, the Scotch commander, slain (this battle is supposed to have furnished the subject of the old ballad of 'Chevy Chase'); the battle of Homildon, or Humbleton, near Wooler, in 1402, where the Earl of Northumberland, his son Hotspur, and the Scotch Earl of March, defeated about 10,000 Scots under the Earl Douglas, who was taken prisoner; the defeat of an English army, 4000 strong, under Hotspur's son, at Pepperden, in 1436, by Earl Douglas at the head of 4000 Scots (this battle, and not the fight of Otterburn, has furnished, according to

some, the origin of the ballad of 'Chevy Chase'); the capture of Alnwick in 1462, and of Bamborough Castle in 1464, by Margaret of Anjou, whose forces were soon after routed at Hedgley Moor near Alnwick, and at Hexham.

In the reign of Henry VIII. a large body of Scots, under Lord Hume, were cut off, on their return from a marauding incursion into the county, at Millfield, near the bank of the Till, and a little south of Ford Castle (1515). The king of Scotland, James IV., eager to revenge the defeat of his subjects, entered Northumberland the same year with 40,000 men, forced the garrison of Norham to surrender, and took and partly demolished Wark, Etal, and Ford castles. Meanwhile the Earl of Surrey advanced with an English army of about 30,000 men. The two armies met at Flodden, about two miles west of the spot where Hume, whose defeat the king desired to avenge, had been overthrown. The Scots were utterly defeated. James fell on the field, with the greater part of the brilliant train of nobles who had accompanied him, and probably about 15,000 men. Soon after the accession of James I. the office of lord warden of the marches fell into disuse, the garrison of Berwick was reduced, and the frontier lost its military character. It was long indeed before border feuds entirely died away; but they assumed the character of private quarrels or marauding expeditions. In the Great Civil War the inhabitants of the county generally joined the Royalist party.

Of the many centuries of strife and consequent misery this county contains many memorials. The ruins of Norham and Wark castles still overlook the Tweed, and those of Heton, Dudhowe, and Ford rise on the banks of the Till or its tributary streams. Norham is the most striking ruin: the walls of the keep are now reduced to a mere shell; the keep is a square tower of four stories above the vaults, built of red freestone very liable to decay. The outworks have been demolished, and part of the hill on which the castle stands has been washed away by the river. Two towers of Ford Castle remain incorporated in a more modern building.

Bamborough and Dunstanborough castles are on the coast. [BAMBOROUGH.] Dunstanborough Castle is protected by steep cliffs on the north and east sides; on the south and west sides it was defended by a wall and towers, which are for the most part yet standing. There are also remains of a chapel. The entrance gateway on the south side is yet standing.

In the interior of the county are ALN Wick and Warkworth castles, which have been described elsewhere. Of Callaley Castle, near Whittingham, the western tower is of great antiquity; the rest of the building is more modern. Bothall Castle on the Wensbeck, Mitford, Belsay, and Harnham castles, are all near Morpeth. The picturesque ruins of Bothall, which consist chiefly of the gateway, with its flanking towers, and the outer wall of the court in which the keep stood, are on an eminence on the bank of the river. There are considerable remains of Langley Castle near Hexham, and ruins of Blenkinsop, Bellester, Thirwall, and Featherstone castles, near Haltwhistle; of Staward Castle on the banks of the Allen; and of Prudhoe Castle, the ancient seat of the Umfravilles, on the south bank of the Tyne, between Newcastle and Hexham. This last is one of the finest ruins in the county; it stands on a precipitous bank of the river 60 feet high. The gateway, a lofty embattled square tower, the outer wall, and the keep, are yet standing; and there are ruins of the chapel and other buildings. The hostility to which the county was exposed rendered it necessary for the smaller proprietors to have their dwellings strongly built; their habitations were towers, with the basement vaulted to shelter the cattle of the neighbourhood. Whitton Tower, near Rothbury, now converted into a rectory-house, may be taken as a specimen of these fortified dwellings. The walls are 11 feet thick at the foundation, 9 feet in the kitchen, and 6 feet in the chambers over it. In the basement vaults is a deep well. Remains of similar towers occur in different parts of the county.

The chief ecclesiastical antiquities of the county are noticed under the towns before referred to. Of Hulne Abbey, for Carmelite friars, close to Alnwick, there are some remains. Of Brinkburn Augustinian Priory near Rothbury, the tower of the church, part of the side walls, and several pillars and arches, remain. They contain various examples of transition from the Norman to the early English styles. There are several ruined churches in different parts of the county.

Statistics: Religious Worship and Education.—According to the Returns of the Census in 1851 there were then in the county 488 places of worship, of which 198 belonged to four sections of Methodists, 154 to the Established Church, 68 to Presbyterians, 20 to Roman Catholics, and 14 to Independents. The total number of sittings provided was 136,066. The number of Sunday schools was 359, of which 181 were conducted by Episcopalians, 115 by Methodists, 55 by Presbyterians, and 18 by Independents. The number of scholars was 29,657. Of day schools there were 642, of which 301 were public schools with 24,765 scholars, and 341 were private schools with 12,524 scholars. There were 22 evening schools for adults, with 629 scholars. Of literary and scientific institutions there were 40, with 3688 members, and 58,575 volumes in the libraries belonging to them.

Savings Banks.—In 1853 the county possessed seven savings banks, at Allendale, Alnwick, Berwick-upon-Tweed, Hexham, Morpeth, Newcastle-upon-Tyne, and Tyne-mouth. The total amount owing to depositors on November 20th 1853 was 669,975*l.* 1*9s.* 9*d.*

NORTHUMBERLAND STRAIT. [NORTH-WEST PASSAGE.]

NORTHWICH, Cheshire, a market-town and the seat of a Poor-Law Union, in the parish of Great Budworth, is situated on the banks of the Weaver, near the confluence of that river with the Dame, in 53° 16' N. lat., 2° 30' W. long., distant 17 miles E.N.E. from Chester, and 174 miles N.W. from London. The population of the township of Northwich in 1851 was 1377. The living is a perpetual curacy in the archdeaconry and diocese of Chester. Northwich Poor-Law Union comprises 60 parishes and townships, with an area of 65,445 acres, and a population in 1851 of 31,202. The high road from London to Liverpool passes through the town, and is there intersected by the road joining Manchester and Chester. Many of the houses in the town are of considerable antiquity. The church is large, and chiefly remarkable for its semicircular chancel. The Wesleyan and Primitive Methodists, Independents, and Baptists, have places of worship. There are a National school, a school with a small endowment, and a savings bank. A county court is held. Both the salt-mines and brine-springs are believed to have been wrought during the occupation of Britain by the Romans. At present these mines are exceedingly productive. The brine-springs are usually met with at from 90 to 120 feet beneath the surface. The salt is conveyed to Liverpool by the rivers Weaver and Mersey. The Grand Trunk Canal, uniting the rivers Trent and Mersey, passes the town on the north. Ship-building, rope- and sail-making, brick-making, iron and brass founding, and brewing, are the principal sources of employment. The market-day is Friday; fairs are held April 10th, August 2nd, and December 6th.

NORTON. [DURHAM.]**NORWALK.** [CONNECTICUT.]

NORWAY, a country in Europe which comprehends the western portion of the Scandinavian peninsula, extends from 58° to 71° N. lat. Its most southern point, Cape Lindesnaes, is in 57° 58' N. lat., and the most northern, Cape Nordkyn, in 71° 8' N. lat. It lies between 5° and 28° E. long. Its length is about 1100 miles, but its width varies: the width is greatest near 61° N. lat., where it is about 250 miles wide, and smallest between 67° and 68° N. lat., where the deep inlets of the sea terminate at a distance of less than twenty miles from the boundary of Sweden. Its area is 122,711 square miles, and its population at the end of 1845 was 1,328,471. On the north and west it is surrounded by the North Atlantic, and on the south by the North Sea and the Skagerack. East of it is Sweden, and towards the northern extremity Russia.

By far the greatest part of this extensive country is covered with mountains, which constitute an immense rocky mass, called in the southern part *Norraka Fiellen*, and in the northern *Kiölen*. [NORRKA FIELLEN.] From near *Trondhjem* (63° N. lat.) to the north cape the mountains generally cling to the coast, and form a ridge of comparatively narrow width; but southward from the *Trondhjem* Fiord they expand so as to cover by far the greater part of the breadth of Norway. The *Kiölen* Mountains form a range diminishing in height as it goes northward, broken by many depressions, but distinguished by summits of noble forms, though their absolute elevation is nowhere very great. The highest part of the range is the mass of *Sulitelma* (66° 1' N. lat.), the highest mountain in the Arctic circle. This range is 4906 feet high, but is surmounted by several summits, of which the highest towards the north is 6200 feet above the level of the sea, and the southern 5518 feet. It is covered with vast snow fields, from which descend glaciers of great width. [NORRKA FIELLEN.] On the eastern declivity of the *Kiölen* Mountains there is a remarkable chain of lakes, one or more of which occur upon almost every river that runs from it into the Gulf of *Bothnia*: they are nearly equidistant from the west coast, and occur at a pretty uniform level of 1200 to 1500 feet, showing a remarkable symmetry in the fall of the ground nearly through the whole peninsula.

In the southern division the mountains do not form a ridge, but consist of elevated barren table-lands of great breadth and almost perfectly level, generally more or less connected together, though occasionally separated by deep narrow valleys. These flat-topped mountains are called *Fjelds*, which in their highest and most expanded parts are distinguished by specific names. The chief of them proceeding from south to north are the *Hardanger-Fjeld*, the *Fille-Fjeld*, the *Sogne-Fjeld*, the *Horungerne*, the *Ymes-Fjeld*, the *Lange-Fjeld*, and the *Dovre-Fjeld*. The *Sneehättan*, the most elevated point of the *Dovre-Fjeld*, was formerly considered the highest hill in Norway (7487 feet), but it is exceeded by the *Skagtolstund* (8000 feet) and other summits of the *Horungerne*, and by the *Ymes-Fjeld*, which lies farther east, and rises to 8400 feet above the sea, being the highest known point in the Scandinavian peninsula. About 40 per cent. of the whole surface south of the *Trondhjem* Fiord exceeds 3000 feet above the sea. The average height of the mountain table-lands is about 4000 feet. The ratio of arable land to the whole area of Norway is not more than 1 to 10; and if we exclude the local enlargements of the places near *Christiania*, *Christiansund*, and *Trondhjem*, the ratio would not exceed 1 to 100. (Professor *Forbes*, 'Norway and its Glaciers.') About one-tenth of the surface rises to the height of 800 feet, and perhaps about one-thirtieth part is below 300 feet. The lowest tract, that which does not rise to 30 feet, is situated on both sides of the Bay of *Christiania*. The more elevated country, that which rises to between 300 and 800 feet, partly surrounds this low tract, and partly extends along the shores of the *Skagerack*, or incloses the Bay of *Trondhjem* on the south and east.

Cultivation is nearly limited to these two regions. In all the other parts of the country cultivation occurs only in the narrow valleys by which the rocky masses are indented. A large portion of the mountain masses is always covered with snow, and glaciers in many parts occupy the depressions in the high table-lands, and the heads of the valleys in which the numerous *Fjords* that indent the western coast terminate. The *Suphelle* glacier in the eastern valley at the head of the *Fjaerlands-Fjord* is the lowest in Norway proper, being only 105 feet above the sea, but the glaciers of the *Jökuls-Fjord* in *Finnmarkens* are much lower, in some instances reaching to the very shore. As to the nature of the lower country see *CHRISTIANIA*; *CHRISTIANSUND*; and *TRONDHEJEM*. A railway connects *Christiania* with *Lake Mjösen*; the lake itself is navigated by steamers.

As all the rivers of this country rise at a great elevation above the sea, and have a comparatively short course, they are not fit for navigation. Some of them however are used to float down timber, at least in a part of their course. The largest of these rivers is the *Glommen* Elf, which rises near 62° N. lat., on the declivities of the *Rute Fiell*, and after traversing the *Lake of Oresund*, which is nearly 15 miles long, about 3 miles wide, and 2400 feet above the sea, passes near the town of *Röraas*, and running in a south-south-western direction skirts the base of the high peak of the *Tron-Fiellet*, which is nearly 3600 feet high, and then turning nearly south it enters the cultivable region, in which it continues its southern course to *Kongsvinger*. At this place it turns abruptly to the west, but after running a few miles in that direction it again changes to the south-south-west, and passing through the *Lake of Oiern*, which is 15 miles long and about 3 miles wide, it enters the *Skagerack* near *Fredrickstadt*. The last of its numerous cataracts occurs near *Hafslund*, about 10 miles from its mouth; it is called the *Sarpe Foss*, and is 60 feet high. Below this place the river is navigable for large boats. It is remarkable that during the high floods, after the melting of the snow in spring, a part of the water of this river is discharged into *Lake Wenern* in Sweden, by the *Wrangs* Elf, at the sharp turning of the river near *Kongsvinger*. The whole course of the *Glommen* probably exceeds 400 miles. Below *Kongsvinger* it is joined by the *Wormen* Elf, the outlet of *Lake Mjösen*, which receives its waters from the mountain plain lying south-west of the *Sneehättan* by the river *Lougen*. This river originates in a series of small lakes, called *Lessöevarks Vand*, west-south-west of the *Sneehättan*, which are more than 2000 feet above the sea, and discharge their waters by two outlets, the *Romsdals* Elf, which runs north-west, and the *Lougen*, which flows south-east. After a course of nearly 150 miles the *Lougen* enters *Lake Mjösen*, which is nearly 60 miles long, and from one to more than five miles wide; it is more than 420 feet above the sea-level, and lies in the middle of the best cultivated portion of Norway. The *Wormen* Elf runs about 20 miles with a gentle current. The *Drammen* Elf originates on the eastern declivity of the *Norraka Fiellen* in two branches, the *Beina* Elf and the *Snarum* Elf. After a rapid course of more than one hundred miles the two branches unite about forty-five miles above their influx into the Gulf of *Christiania*, into which the *Drammen* Elf enters by a wide estuary called the *Drammen* Fiord. Much timber is floated down this river.

The other rivers remarkable for the length of their course are—the *Louvan* Elf, the *Skeem* Elf, and the *Otter*, or *Torrisdals* Elf, which run from 120 to 150 miles each; and, like the *Glommen* Elf and *Drammen* Elf, fall into the *Skagerack*. No considerable river falls into the Atlantic south of the *Namsen* Elf, which has its mouth between 64° and 65° N. lat., and runs nearly one hundred miles through a well-wooded valley. The *Alten* Elf falls into the *Alten* Fiord, near 70° N. lat. It runs northward about one hundred miles, first through an inclined plain, but against the declivity of the plain, so that its bed sinks lower and lower below the surface of the country as it proceeds farther north. In the lower part of its course it crosses the *Kiölen* Mountains by an exceedingly deep and narrow valley, which at last becomes a mere fissure, into which no person has yet been able to penetrate. It issues from this fissure by the cataract of *Pursorunka*, 15 miles from its mouth. [ALTEN.] The *Tana* Elf, which for the greatest part of its course forms the boundary-line between Norway and Russia, originates east of the source of the *Alten* Elf, and descends from a plain which declines towards the north-east, in which direction the river flows more than two hundred miles, until it approaches the *Varanger* Fiord, where it suddenly turns to the north and falls into the *Tana* Fiord, after a course of nearly three hundred miles. It is the least rapid of the rivers of Norway, but it flows through so sterile a region as to be entirely useless.

Norway, like a huge breakwater, defends Sweden from the tremendous force of the North Atlantic Ocean, and the state of its western coast with its rugged outline, the depth of its fjords, the boldness of its headlands, and the multitude of its islands, prove the long continuance of the struggle. Towards the north it has been observed that the sea sweeps along the very base of the mountains; but towards the south, where enduring crystalline rocks have borne the whole brunt of the wash of the sea, there is a considerable expansion of coast, though it is rent and torn by narrow bays of great length. These inlets of the sea; some of which in several places extend 70 or 80 miles inland, would be of great advantage if the adjacent country possessed only a moderate degree of fertility. But on the shores of these inlets, with

very few exceptions, high and bare rocks rise above a thousand feet; they are flanked however by the only habitable places along the western coast, and they abound in fish. The fiords of Christiania and Trondhjem are an exception, being surrounded by fertile tracts of considerable extent. The other inlets, which are remarkable for their extent, are the following, from south to north.

Bukke Fiord is wide at its entrance, and penetrates by two of its branches more than fifty miles inland. Hardanger Fiord is about seventy miles long; Søgne Fiord, which is narrow, and 120 miles long, reckoning to its extremity the Lyster Fiord, is surrounded by the highest region of the Norraka Fiellen. There is a great number of narrow deep fiords between Søgne Fiord and Trondhjem Fiord, and of bays farther north. The largest and widest occur at the northern extremity, where the Porsanger Fiord is above one hundred miles long and twenty miles wide on the average. The Laxe Fiord, Tana Fiord, and Varanger Fiord are considerable, but of less extent. The fiords, with their continuous screen of precipitous cliffs, the number and singular forms of the rocks and islands, the frequent appearance of perpetual snow, and the close approach of glaciers to the sea, superadded to noble cascades and luxuriance of vegetation, form the most distinguishing features of Norwegian scenery in summer. The deep valleys, which may be considered as a prolongation of the fiords, abound every where with running waters, formed by small streams that trickle or leap down from the edges of the fields or great table-like tops of the mountains. The most remarkable waterfalls are enumerated in the article NORRASKA FIELLEN.

Numerous lakes occur in the southern districts of Norway, on the eastern declivity of the Norraka Fiellen. Many of them are more than 2000 feet above the sea-level, and all of them are very deep. Lake Fämund, near the boundary of Sweden, is 2280 feet above the sea-level, and extends in length more than seventy miles, with an average width of more than three miles. From its southern extremity issues a river, which, under the name of Klar Elf, falls into Lake Wenern in Sweden.

The climate differs considerably in the different districts of a country which extends over 13 degrees of latitude, and on both sides of the polar circle, and also rises in the largest part of its surface to a mean elevation exceeding 2000 feet above the sea. Norway, says Professor Forbes, enjoys an average climate superior to that of any other continental country in the same latitude. The harbour of Bergen is not oftener frozen than the Seine at Paris, while the harbours of Lübeck and Copenhagen are frequently blocked up with ice. Drift ice, which is occasionally seen off the coast of North America in 41° N. lat., is unknown on any part of the Norwegian coast, though it extends to 71° N. lat. The influence of the sea and the Gulf Stream seem to cause this comparative moderation of the climate in the west of Norway. The eastern side of the Scandinavian peninsula has a continental and much colder climate. Between 60° and 62° N. lat. the snow line near the coast is about 4300 feet high; towards the centre of the country it rises to 5300 feet. In 67° N. lat. the line falls in the interior to 3700 feet, and on the coast to 2900 feet. On the west side of the Sulitelma the snow line is 3410 feet, and on the east or Lapland side 3520 feet high. The mean temperature of Christiania is 42° Fahr., or not quite 8 degrees less than that of London. It is probable that in the valleys near Cape Lindesnaes, where the beech grows to a stately tree, the mean temperature is higher. At Bergen it is 46° 7', and even at Trondhjem it is 40°. The difference in the mean temperature between Christiania and Bergen may be chiefly attributed to the difference of temperature of the winter, which is severe on the eastern declivity of the Norraka Fiellen and the adjacent countries, but very mild along the western coast, for the reason above given, and on account of the prevailing western winds and frequent fogs. This is evident from the following table:—

	In Winter.	Mean Temperature.		
		Spring.	Summer.	Autumn.
Christiania . . .	+ 25	+ 38	+ 60	+ 42
Bergen . . .	+ 36	+ 45	+ 58	+ 48
Trondhjem . . .	+ 24	+ 35	+ 61	+ 40
North Cape . . .	+ 24	+ 30	+ 42	+ 32

The mean temperature of North Cape is 32°, or the freezing point, but the winter is not more severe than at Trondhjem. The greatest cold at North Cape is felt when north-easterly winds blow, but the sea is always open, and the drift-ice from Spitzbergen does not approach the coast. The violence of the winds however renders this spot nearly uninhabitable. More than two-thirds of the year are boisterous, and in autumn and winter the storms are incessant, and rage with incredible fury. On the approach of winter the snow-storms frequently last for many days and weeks. They are preceded by heavy fogs, which advance from the ocean in immense masses, like impenetrable walls or moving bodies of water; but they occur only during westerly winds. The weather is fine and clear when the wind blows from the east. The longest day lasts from the 15th of May to the 29th of July, which is two months and a fortnight; the longest night, from the 19th of November to the 26th of January, which is two months and ten days. During the long nights the aurora borealis shines with uncommon brightness, so that the fishermen are enabled to carry on their ordinary occupation just as well as by daylight. (Von Buch.) Gales

are very frequent along the whole of the western coast. Thunder-storms are as common there in winter as in summer, but north of 66° thunder-storms do not occur. No traces of volcanic action are known to exist, except that lava occurs on an island not far from Bergen, and on a mountain in the Bukke Fiord fire is said to appear sometimes. Earthquakes occur, though rarely.

Productions.—The forests constitute the principal wealth of Norway. Beech occurs only south of 59½ N. lat.; oak, elm, and lime-trees as far north as 63°; apples, cherries, and prunes are found as far as 64°, but they do not ripen every year. Gooseberries and hazel-nuts extend to 65° N. lat., and so far oats, peas, beans, and flax are cultivated where the ground admits of it. Hemp and rye are grown to 66° N. lat., and the ash and spruce-fir reach this point. Pines grow as far as 67° N. lat., but north of 67° only birch and juniper grow, and only barley and potatoes are cultivated. Extensive forests of fir and pine cover the eastern declivity of the Norraka Fiellen, and a great part of the hilly and rocky country east of the range; and it is from these regions that the greatest part of the timber is brought to the sea. On the lower country along the Bay of Trondhjem, and in the valley of the river Namsen, there are also great forests of fir and pine. Though agriculture is not neglected, the produce of the crops is not sufficient for home consumption.

Cattle and goats are numerous, but sheep are rare. The horses are of a small size in the southern districts, but larger to the north of Trondhjem: they are strong and hardy. Bears, wolves, foxes, gluttons, ermines, as well as rein-deer, elks, deer and hares abound. The lemming exists in great numbers, and in its migrations destroys every plant in its way. Different kinds of sea-fowl abound along the northern coasts, and their eggs constitute the principal food of the inhabitants of some districts during a part of the year. In these parts the eider-duck is numerous, and the feathers are of great value for beds; a small quantity of them are exported. The sea furnishes the principal means of subsistence to the inhabitants of the western coasts; cod and herrings are most abundant, and this fishery gives occupation to many families. [BERGEN.] Salmon abounds, and is finer than in any other country in the world. Lobsters are found in the greatest abundance on both sides of Cape Lindesnaes. The geological structure and mineral productions are given under NORRASKA FIELLEN. Salt is made from sea-water at some places along the Skager-rack, but not in sufficient quantity for home consumption.

Inhabitants.—The Norwegians are of Teutonic origin, and speak a language which differs very little from the Swedish. In the most northern districts, north of 69° N. lat., there are many families of Finlanders and Laplanders: the former are here called Quäna, and the latter Finners. The Quäna cultivate barley and potatoes, and rear cattle. The Finners are mostly fishermen, except a certain number of families who live on their herds of rein-deer.

Political Division, Population, Manufactures, &c.—Norway was from an early period divided into four bishoprics—Christiania, Christiansand, Bergen, and Trondhjem. Under the Danish dominion a civil governor, called Stifthauptmann, was appointed for every bishopric. The bishopric of Trondhjem has been divided into two, Trondhjem and Nordland; but both continue to constitute one civil administration. Norway is subdivided into 17 districts, the area and population of which are as follows:—

Districts.	Area in Square Miles.	Population in 1845.
Smaalehønes . . .	1,663	73,622
Aggerhuus . . .	2,004	109,432
Hedemarkens . . .	10,303	87,118
Christians . . .	10,396	102,730
Buakeruds . . .	5,746	83,918
Jarlsberg and Laurvigs . . .	886	63,070
Bradsbergs . . .	5,383	72,891
Nedensæns . . .	4,603	53,932
Mandals . . .	2,056	61,918
Stavanger . . .	3,521	78,210
S. Bergenhuus . . .	5,781	116,989
N. Bergenhuus . . .	6,713	77,978
Romsdals . . .	6,001	81,214
S. Trondhjem . . .	7,159	89,329
N. Trondhjem . . .	8,769	66,570
Nordlands . . .	14,550	65,512
Finmarkens . . .	27,186	43,938
Total . . .	122,720	1,328,471

Less than half the population gain their subsistence by cultivating the ground; the remainder employ themselves chiefly in the fisheries, forests, and mines. Saw-mills, the erection of which is much facilitated by the rapid course of the various rivers, are very numerous. There are also several iron- and copper-works, potash-factories, glass-works, powder-mills, nail-forges, and salt-manufactories. Linens and coarse woollen-cloths are made by the country people for their own use. In Christiania and Trondhjem there are some manufactures of cloth, cotton stuffs, and tobacco; there are also a few sugar-refineries and tanyards. Ship-building is carried on in most of the towns along the coast.

The foreign commerce is considerable; the greatest part of the produce of the forests, the fisheries, and mines is exported to Great Britain, Spain, the Mediterranean, and partly to the Baltic. Iron is not exported, there being hardly sufficient for home consumption, but copper and cobalt are exported to Hamburg and Holland. The chief items of export are—planks, deals, masts, tar, fire-woods, salt-herrings, cod, and lobsters; the minor articles are—furs and eider-down. This commerce is almost entirely carried on in Norwegian vessels. The inhabitants are excellent seamen, a great number of them being occupied during the greatest part of the year, and during the coldest season, in fishing off the Lofoden Islands. A large number of Norwegian vessels are engaged in Swedish commerce.

History and Constitution.—The Norwegians first appear in history as pirates, who frequently visited and laid waste the countries bordering on the North Sea. Norway was then governed by a great number of small princes, whose ambition led them to continual wars. They discovered and settled Iceland. In the second half of the 9th century (875) the small kingdoms were united under king Harold Harfagra, and from that time they became still more troublesome to their neighbours, until Norway was connected with Denmark, and then the Norwegians accompanied Sven and Knut to the conquest of England. But the two kingdoms were soon separated again, and remained so till 1387, when Margaret became queen of Denmark and Norway. From that time till 1814 both countries remained united, and Norway was administered by a governor appointed by the king of Denmark. By the convention of Kiel, agreed to on the 14th of January, 1814, between Denmark and Sweden, Norway was ceded to the king of Sweden. A Danish prince, Christian Frederick, who was governor of Norway at that time, and had succeeded in gaining the affections of the nation, made an attempt to constitute Norway a separate kingdom; but the Swedes entered the country with an armed force, and the prince, who had assumed the title of king, was obliged to abdicate the royal dignity on the 7th of October. On the 20th of the same month the union of Norway and Sweden was determined in the Storting, and the constitution received its present form on the 4th of November, 1814. On the 31st of July, 1815, it was promulgated as the fundamental law of the country, and was assented to by the Swedish legislature on the 6th of August.

The legislative body, or Storting, is composed of the representatives of the people: they are not however elected immediately by the people, but by electors who are chosen by the citizens. In the cities 50 citizens, and in the country 100 citizens, elect one elector. The electors unite and choose the representatives either from among themselves or other persons. The number of the representatives must not be less than 75 nor above 100: two-thirds must be chosen by the electors of the country, and the remaining third by those of the cities. The king or his lieutenant opens the Storting, immediately after which it separates into two bodies, the Lagthing (or legislative body) and the Odelething (assembly of landed proprietors). The Lagthing consists of one-fourth of the members of the Storting chosen by the whole assembly. The Storting is empowered to abolish old and to enact new laws, to impose taxes or abolish or change them, to determine the civil list of the king and the salaries of the persons employed by government, &c. Every bill must originate in the Odelething; it may be proposed by a member or by one of the state councillors. When the bill has passed, it is brought into the Lagthing, which may adopt or reject it. When a bill has passed the legislative bodies it is sent to the king, whose signature (if he affix it, for he has the power of refusal), gives it the force of law. The king must sign a bill that passes three successive Storthings. The Storting meets once in three years, on the 1st of February, and the session cannot last more than three months. The members are only chosen for one Storting. The order of nobility was abolished in 1821, a bill having passed in three Storthings for the purpose.

The executive power is vested in the king. There is a Norwegian ministry composed of the governor of the kingdom, a minister, and councillors of state. When the king is not in Norway the minister and two of the councillors are with him, and the others, who remain in Norway, govern the country in conjunction with the governor, who must not be a Norwegian, but may be a royal prince, in which case he is called viceroy. All the other members of the ministry must be Norwegians. When the king has informed the Norwegian government of his intention to declare war he assembles the Norwegian and Swedish councillors of state, explains to them the motives which compel him to take such a step, and asks their opinion. The opinion of each member is taken down in writing, and the decision of the matter is left to the king.

The annual expenses, according to the budget for 1851-54, are fixed at 3,200,000 crowns of five francs each. The customs dues amount to about 2,000,000 crowns a year. The public debt in 1849 amounted to nearly 10,000,000 crowns. The army in time of peace numbers 23,484 men, including 9160 national guards. The fleet consists of 4 frigates, 4 corvettes (1 propelled by a screw), 1 brig, 5 schooners, 5 steamers, and 136 gun-boats.

(Von Buch, *Travels through Norway*; Everest, *Journey to Norway*; Laing, *Residence in Norway*; Schubert, *Reise durch Schweden, &c.*; Forbes, *Norway and its Glaciers.*)

NORWICH, a city and county of itself, and capital of the county

of Norfolk, a municipal and parliamentary borough, is situated in 52° 38' N. lat., 1° 17' E. long., distant 108 miles N.E. from London by road, and 126 miles by the Eastern Counties railway. The population of the city in 1851 was 68,195: it is governed by 16 aldermen and 48 councillors, one of whom is mayor; and returns two members to the Imperial Parliament. The livings are in the archdeaconry and diocese of Norwich. For Poor-Law purposes the city of Norwich is managed under a local act; it contains 43 parishes, with an area of 4325 acres.

Norwich is not mentioned in history before the time of the earlier Danish invasions: It appears to have risen gradually from the decay of Caister, or Castor St. Edmund's, now an inconsiderable village about 3 miles S. from Norwich. Caister was first a British and then a Roman town under the name of Venta Icenorum. It is thought by some that during the time of the Romans the site of Norwich was covered by water, and that by the gradual accumulation of alluvial matter islands were formed. It is probable that even as late as the period of the Norman conquest what is now the lower part of the city consisted of such islands. During the existence of the separate kingdom of the East Anglians their kings had erected, upon what was then a promontory and is now the Castle Hill, a royal fortress; and merchants and fishermen sought the protection of the castle, and thus formed a town which, from its situation relative to their former town (Venta), obtained the name of North-wic, the northern station or town. Norwich became a place of some importance under the Anglo-Saxon princes, and had a mint. In the invasion of the Danes under Sweyn, in 1004, Norwich was taken and much injured by them. It was in the time of Edward the Confessor a flourishing town, having 1320 burgesses and 25 parish churches. In the Conqueror's time the constablership of the castle, with the earldom of Norfolk, was conferred on Roger Bigod, to whom the erection of the present keep has been ascribed. In 1094 the bishopric of the East Angles was removed from Thetford to Norwich, and the foundations of the cathedral were laid by Herbert Losinga, or Losinga, the bishop. Henry I. granted the citizens a charter in 1122, and soon after this the Flemings began to settle here, and introduced the worsted manufacture. In the time of John, Roger Bigod having joined the insurgent barons, Norwich Castle was seized by the king. In 1267 the barons took and plundered the place, and did great damage. The city was afterwards strongly fortified. The walls were embattled, and 12 gates and 40 towers were constructed in them. In the reign of Edward III. the Flemings settled here in considerable numbers. In the reign of Richard II., in 1381, the popular tumults which agitated nearly the whole country broke out in Norfolk, and the mob entering Norwich, and being headed by John the Lister, or Dyer, committed great outrages, until they retired to North Walsham, on the approach of Henry Spencer, the warlike bishop of Norwich. In 1403 Henry IV. separated the city of Norwich from the county of Norfolk, and made it a county of itself. In the reign of Edward VI., in 1549, the city suffered from the rebels under Ket, the tanner of Wymondham. In the earlier years of Elizabeth's reign about 4000 Flemings settled at Norwich, and much increased the prosperity of the town by the introduction of the bombazine manufacture.

The county of the city of Norwich extends about four miles from north to south, and as many from east to west; the town itself is in the north-east part of this district, and extends about a mile and a half in length from north-west to south-east, and about a mile and a quarter in breadth. The streets are narrow and winding; some of them follow the line of the ancient walls, which are partly standing. The houses are much intermixed with gardens, so that Norwich has been designated 'a city in an orchard.' The market-place is 600 feet long by 340 feet wide. There are many good houses and shops; the best are in the market-place and its vicinity; in the precincts of the cathedral are large and handsome private residences. Considerable increase has taken place in the town during the last few years. The river Wensum enters Norwich on the north-west side, and winds partly through, partly round the town, until it leaves it on the south-east side: it is crossed by ten bridges in the town or close to it.

The most interesting of the public buildings are the castle and the cathedral. The site of the castle is considerably elevated. The whole of the works originally comprehended an area of not less than 23 acres. The inner ditch and the bridge over it still remain. In the ditch, which is inclosed and planted, stands a newly-erected shire-hall, in the Tudor style. The bridge is 150 feet long, and has one arch of about 40 feet span, which is one of the largest and most perfect examples of an Anglo-Norman arch remaining. There are remains of two round towers, part of the original gateway, at the inner end of the bridge. The keep is a substantial quadrangular building 110 feet 3 inches from east to west, including a small tower, through which was the principal entrance; from north to south it is 92 feet 10 inches; its height to the battlements is 69 feet 6 inches. The interior has been so much altered, in order to adapt it to the purposes of a jail, to which it has been long applied, that the original arrangement of the apartments can scarcely be traced. The keep, the entrance tower, and the eastern front have been to some extent restored.

The foundation of the cathedral was laid in 1094 by Bishop Herbert Losinga; succeeding bishops added to the building; the spire was erected by Bishop Percy in 1361. Losinga laid the foundations of a

Benedictine monastery at the same time as those of the cathedral; the monastery, of which a few traces remain, was completed in 1101. The cathedral consists of a nave with side-aisles, two transepts without aisles or columns, a choir occupying part of the nave and the area under the tower, a chancel with side-aisles, several chapels, a tower and spire at the intersection of the transepts with the nave, and a cloister, nearly perfect, on the south side of the church. The length of the building from east to west is 407 feet; the breadth at the transepts is 178 feet; the breadth of the nave and side-aisles is 72 feet. The cloisters, with the included space, form a quadrangle with the sides not quite parallel, but averaging about 176 feet each. The height of the tower and spire, with the weathercock, is 315 feet. The plan is almost wholly Norman; the east end has a circular apsidal termination, and some of the chapels are circular. In various parts of the building there is much Norman work of excellent character. The architecture of the nave is very bold, and the arches of the triforium are very large. There are various insertions of later styles: the spire is of decorated English or early perpendicular; the cloisters present a series of work from early decorated to perpendicular; and a considerable portion of the west front is of perpendicular character.

On the north side of the cathedral is the episcopal palace, a large and irregular edifice, built by different prelates; there are in the garden some remains of the ancient hall of the palace, now in ruins. Near the west end of the cathedral is the free school (formerly the chancel-house), containing some good ancient work; and not far off are two ancient gates—St. Ethelbert's Gate, of decorated English character, and the Erpingham Gate, of late perpendicular; both valuable specimens of their respective styles.

There are 36 parish churches in Norwich. Some of them are valuable specimens of ancient architecture. Those of St. Bennet, St. Ethelred, and St. Julian have round towers; these towers are usually considered to be of early Norman date, but their original openings have been so disturbed by alteration that their period and style cannot be exactly ascertained. St. George's, Tombland, has a square tower, with pinnacles, 120 feet high, which was rebuilt in 1445. The church of St. Michael Coslany is of mixed character; part is early English, and part of perpendicular character; in the latter the tracery mouldings and other embellishments are carved in stone, and the interstices filled up with flints. The churches of St. Andrew, St. George Colegate, St. Giles, St. John Sepulchre, St. Lawrence, St. Michael at Plea, St. Saviour, and St. Stephen are all handsome churches, of perpendicular character, some of them with lofty and elegant flint and stone towers. But the most conspicuous church is that of St. Peter Mancroft, a large and fine perpendicular church, with a lofty tower and handsome windows. The nave of the church belonging to the monastery of the Dominican or Black Friars is now the common hall of the city, called St. Andrew's Hall; the choir, long used as the Dutch or Walloon church, with the convent kitchen, dormitory, infirmary, and other parts, were lately used as a workhouse. St. Giles' Hospital (popularly the Old Man's Hospital) comprehends portions of the ancient church of St. Helen's.

The total number of places of worship in Norwich in 1851 was 80, of which 41 belonged to the Church of England, 10 to three sections of Methodists, 8 to Baptists, 3 to Independents, and 1 each to the Countess of Huntingdon's Connexion, Quakers, Swedenborgians, Roman Catholics, Mormons, Unitarians, and Jews. The Free Grammar school was the first foundation of King Edward VI.; it was founded in 1547. The school has an income from endowment of about 2000*l.* a year; it is under the charge of a head master and a second master, assisted by five other teachers. The endowment yields in all about 8000*l.* a year, which is chiefly devoted to the support of St. Giles' Hospital for old people. The number of scholars in 1853 was 95. There are National, British, and Infant schools; Diocesan, Training, and Model schools; schools supported by Independents, Unitarians, and Roman Catholics; and several well-endowed Charity schools. There are several libraries, one of which, designated the Norwich Public Library, contains about 20,000 volumes; a museum; a school of design; and other educational institutions. The Norfolk and Norwich Literary Institution has a valuable library of about 15,000 volumes, for which a fine new building has been erected.

The Guildhall is a large old building, erected in the 15th or 16th century, but since repaired and altered; it includes courts for holding the city assizes and sessions, and contains some good paintings and other articles of interest. The new city jail is a massive and appropriate building; there is also a bridewell. The shire-hall, in the castle ditch, is a brick building in the Tudor style cased with cement. The new county jail, in connection with the castle, is a commodious building. There is a cavalry barrack.

The most important trade of the town consists of the manufacture of silk and worsted into shawls, crapes, bombazines, damasks, camlets, and imitations of the Irish and French stuffs. The manufacture of mousselines de laine, challis, and other light cotton fabrics is an important part of Norwich industry. Iron-founding, agricultural-implement making, tanning, dyeing, brewing, malting, coach-making, and boot- and shoe-making are carried on. There are several powerful corn-mills. Markets are held on Wednesday and Saturday; the Saturday market is a great market for corn and cattle. There are three yearly fairs. The corn-market is held in a large Grecian build-

ing, the Corn Exchange, 96 feet by 85 feet, and 27 feet high; and the cattle-market is in an open area adjacent to the castle. There are also a fish-market, a market for seeds and skins, and a hay-market. Trade in agricultural produce, coal, and other heavy goods is carried on by means of the river, chiefly in lighters or wherries of from 15 to 20 tons burden. An entrance from the sea into the navigable channel of the Waveney, by Lake Lothing, and a ship-canal from the Waveney to the Yare or Wensum, facilitate the approach of sea-borne vessels of small tonnage. There is another short canal near Norwich. These various cuts, with the river, are navigable for vessels not exceeding 10 feet draught of water. The harbour, lock, and sluice at the sea-entrance of this navigation are extensive works. The assizes and quarter-sessions for the county of Norfolk are held at Norwich. A county court is held in the city.

The benevolent institutions and charities are very numerous. The Norfolk and Norwich Hospital, a large building of red brick, erected in 1771, can receive above 100 patients. It is partly supported by a triennial musical festival in St. Andrew's Hall. The Norfolk and Norwich Lunatic Asylum is at Thorpe, about two miles from the city. There are a dispensary, an eye-infirmary, the Bethel hospital for poor lunatics, an asylum and school for the blind, and several hospitals or almshouses for the indigent—St. Giles' hospital, the Boys' and Girls' hospitals, and Doughty's hospital, are the chief of these. There is a savings bank.

The see of Norwich is in the province of Canterbury. The diocese includes Norfolk and parts of Suffolk, and comprises 911 benefices. It is divided into the archdeaconries of Norwich, Suffolk, and Norfolk. The chapter consists of the dean, 3 archdeacons, 4 canons, 14 honorary canons, 5 minor canons, and a chancellor. The income of the bishop is fixed at 4600*l.* a year.

NORWICH, U. S. [CONNECTICUT.]

NORWOOD. [SURREY.]

NOSSA SENHORA DE DESTERRO. [BRAZIL.]

NOTLEY, BLACK. [ESSEX.]

NOTTINGHAM, the county town of Nottinghamshire, a county in itself, a market-town, municipal and parliamentary borough, and the seat of a Poor-Law Union, is situated on the left bank of the river Lene, about a mile N. from the Trent, in 52° 57' N. lat., 1° 8' W. long., distant 124 miles N.W. by N. from London by road, and 130½ miles by the North-Western and Midland railways via Rugby. The population of the borough in 1851 was 57,407. The borough is governed by 14 aldermen and 42 councillors, and returns two members to the Imperial Parliament. The livings are in the archdeaconry of Nottingham and diocese of Lincoln. Nottingham Poor-Law Union contains the three parishes of the town, the area being 1870 acres.

Nottingham was included in the kingdom of Mercia. It was taken by the Danes, to whom it was confirmed by the treaty between Alfred and Guthrum about 880. William the Conqueror built a strong castle here. In the troubles of Stephen's reign the town was taken and burnt by the partisans of the empress Mand. In the troubles of the reign of Richard I. the castle was an object of contest: in those of the reign of John it was held throughout by the king. In 1330 Roger Mortimer, the favourite of Queen Isabella, was seized in Nottingham Castle. Charles I. set up his standard at Nottingham in August 1642; but the place came next year into the hands of the Parliament, who garrisoned the castle, of which Colonel Hutchinson (whom the 'Memoirs' of his lady have made so well known) was governor. During the Protectorate the castle was dismantled; and after the Restoration the old building was replaced by the present one, which has nothing of a castle but the name. It was built by the Duke of Newcastle, into whose possession the property had come by purchase, and it now belongs to the present duke. The only later occurrences of any importance have been the 'Luddite' disturbances in 1811-12, and the riot arising out of the political excitement of 1831, on which occasion the castle was burnt by the rioters.

The town is built on a slope which commands an extensive view of the Vale of Trent. The streets in the central and more ancient parts of the town are narrow and crooked; but considerable improvements have taken place of late years, and several spacious streets of good modern houses have been built. The market-place covers an area of about 5½ acres, and is surrounded with lofty buildings, under the first floor of which a piazza is formed. A handsome line of street, called Albert-street, leads from the market-place to the railway station. A large area, hitherto held as common ground, has been inclosed for building purposes. About 18 acres have been formed into an arboratum, and laid out and planted in an ornamental manner; the margin of the ground is to be occupied by terraces of handsome houses. The arboratum was opened May 11th 1852.

There are several bridges in the town over the arms of the Lene or over the Nottingham Canal; and about a mile S. from the town is Trent Bridge, of 19 arches, over the Trent, a very ancient structure. Connected with this bridge are a causeway over the meadows and an embankment to protect the lower part of the town in the time of floods. There are also railway bridges over the Trent, and a fine road bridge over the railway, and some adjacent meadow land. The Trent is here about 200 feet wide. The environs of Nottingham are very pleasant. Several caverns, or rooms, cut out of the rock on which Nottingham stands, have been converted into cellars and store-rooms.

Among the principal buildings are the New Exchange, at the east end of the market-place, a brick building erected early in the last century, and repaired in 1814. The lower part is appropriated to shops, behind which are the shambles; the upper part contains a suite of noble rooms for the transaction of public business or for assemblies. The County-Hall, rebuilt in 1770, is a commodious and handsome building, with two convenient courts and apartments for the judges, jury, &c. The Town-Hall is a spacious edifice, of which the town-jail forms the ground-floor. The House of Correction is built upon the site of a convent of Hospitallers of St. John of Jerusalem. There are a new post-office; a small theatre; a grand-stand on the race-course, which is to the north of the town; extensive cavalry barracks in the castle park; and a building erected as a riding-house for the yeomanry, and now used as a circus or for other public amusements.

St. Mary's church, a commodious edifice, stands on high ground in the central part of the town. It is a large cruciform church, with a fine tower at the intersection of the nave and transepts, rising two stages above the roof of the church, crowned with battlements and eight crocketed pinnacles. The number of places of worship in Nottingham in 1851 was 37, of which 8 belonged to the Established Church, 7 to Methodists, 7 to Baptists, 5 to Independents, 2 to Roman Catholics, and one each to Quakers, Moravians, Swedenborgians, Irvingites, Unitarians, Jews, and Mormons. The number of sittings provided in all was 11,484. The Roman Catholic chapel is a handsome stone building in the early English style, erected in 1841; it has a tower surmounted with a spire 164 feet high. The Free Grammar school, founded in 1513, which has an income from endowment of about 1000*l.* a year, had 93 scholars in 1851. There are several National, British, and Infant schools; schools supported by Roman Catholics and Unitarians, a government school of design, a Blue-Coat school, a Charity school for boys, a school of industry for girls, several libraries, a mechanics institute, a natural history society with a museum, and a savings bank. Plumtree Hospital for poor and aged widows, Collins's Hospital for 24 aged widowers or widows, Lambly Hospital for decayed burghesses or their widows, with several other hospitals or alms-houses, are among the charitable foundations of the town. The general hospital on Standard Hill, and the county lunatic asylum, are spacious buildings. There are also a general dispensary, the Midland Institution for the Blind, and public baths and wash-houses.

The principal manufactures carried on at Nottingham are those of bobbin-net and lace, and cotton and silk hosiery. There are several mills for spinning cotton- and woollen-yarn, and for throwing silk, and much cotton-yarn is obtained from the mills of Derbyshire. The machines for making bobbin-net and lace, which are very expensive, are let out at a weekly rent to the workmen by capitalists, who invest a considerable sum in this kind of property. Steam-power has been extensively introduced into this manufacture, and the number of factories has been increased, both in the lace and the hosiery departments. There are several dye-houses; also white-lead works and an iron-foundry. Wire-drawing, pin-making, and the manufacture of brass fenders are carried on to some extent. There are several breweries and malt-houses. The market-days are Wednesday and Saturday for corn, cattle, and general provisions; the Saturday market is one of the principal in the midland counties. There are several yearly fairs for cattle, cheese, and cloth: at one of these fairs, distinguished as 'goose fair,' a considerable number of geese are sold. The trade of the town is much promoted by its proximity to the Trent, which is navigable, and the communication thus afforded with the various canals connected with that river. The Nottingham Canal passes close to the town, and joins the Trent at Trent Bridge, a mile distant. The assizes and quarter-sessions for the county are held here; also quarter-sessions for the borough, and a county court.

NOTTINGHAMSHIRE, an inland county of England, is bounded N.E. and E. by Lincolnshire, S. by Leicestershire, W. by Derbyshire, N.W. and N. by Yorkshire. It lies between 52° 47' and 53° 30' N. lat., 0° 40' and 1° 20' W. long. Its greatest length from the junction of the three counties of York, Lincoln, and Nottingham, to the right bank of the Soar on the Leicestershire border, is 51 miles; the average breadth from east to west is about 20 miles. The area is 822 square miles, or 526,076 statute acres. The population in 1841 was 249,910; in 1851 it was 270,427.

Surface and Geology.—The surface of the county is undulating, except in the Vale of Trent and the Vale of Belvoir; but there are no very high hills. The northern boundary runs through the marshes that surround the Isle of Axholme. Beacon Hill rises to the east of Newark; and a ridge of upland skirts the immediate valley of the Trent, at a little distance from the right bank of that river, from the neighbourhood of Newark to Nottingham. The eastern side of this ridge has a very gradual slope towards the Vale of Belvoir, which is watered by the Deven and its tributary the Smite.

Quite in the south part of the county, and inclosed by the Soar and one of its feeders, the Trent, the Grantham Canal, the Smite, and a small portion of the Leicestershire border, are the Wolds, a region of upland moors and pastures, furrowed by many picturesque and fertile dales. To the south of the Fareham Brook lie the Leake Hills, the highest part of the Wolds.

On the west side of the Trent the ground rises gradually towards

the Idle in the north-west and the Erewash in the south-west. The western slope of the hills which skirt the valley of the Idle, and indeed of the Idle generally in this county, is steeper than the eastern. West of the Idle the ground rises again, but it is intersected by the valleys through which the tributaries of the Idle flow. Near the head of the Maun, one of these tributaries, are the high lands of Sherwood Forest, traditionally known as the principal haunt of Robin Hood. Sutton-in-Ashfield Hill, near Mansfield, is about 600 feet high.

The strata which occupy the surface of this county succeed each other in order from east to west. The eastern and southern districts of the county, including the Wold Hills, and the eastern side of the valleys of the Smite and the Deven, are chiefly occupied by the lias. The Vale of Trent and the uplands to the west of it are for the most part composed of new red-sandstone. In the northern part of the county these formations sink beneath the fens surrounding the Isle of Axholme, in which isle they emerge again. Among the beds of this formation is a sandstone so soft as to be easily excavated, and in the vicinity of Nottingham there are many caverns of artificial formation, some of them of great antiquity. Gypsum occurs plentifully in this formation, and is quarried in several places. The newer magnesian or conglomerate limestone underlies the red-sandstone; but in some parts these formations are separated by beds of quartzose gravel, extending to the depth of from 600 to 900 feet, and often consolidated into a soft pudding-stone, of which the Castle Hill at Nottingham is a specimen. This gravel is the prevailing stratum throughout Sherwood Forest.

The magnesian limestone occupies a tract varying from four to seven miles wide in the south-western part of the county, west of a line drawn from Mansfield to Nottingham. West of the magnesian limestone occurs the South Yorkshire coal-field, of which a small part is in this county. There are numerous coal-pits in the county, which yield abundance of coal. The seams of coal vary from one or two to five or six feet in thickness. The quality of the coal is good, but rather inferior to that of Newcastle. Blue limestone approaching to marble in texture, a good bluish stone, and a reddish stone sufficiently hard for building, and limestone for burning, are quarried in different parts of the county. Coarse paving-stone is quarried at Luby, a few miles south of Mansfield.

Hydrography, Communications, &c.—The whole county belongs to the basin of the Trent [TRENT and HUMBER], which river first touches the south-west border of the county at the junction of the Soar, flows along the border about 3 miles to the junction of the Erewash, and then entering the county flows through it 25 miles in a north-east direction to the neighbourhood of Newark, below which it turns to the north, and flowing first within and then upon the border of the county 25 miles farther, to below Gainsborough, finally quits the county and flows through the marshes of the Isle of Axholme to the Humber. It is a broad river, bordered by a belt of low lands, and navigable throughout the county for river craft, and up to Gainsborough, on the Lincolnshire border, for sea-borne vessels of 200 tons. The Maun rises near the village of Hardwick, to the south of Mansfield, and flows north-east 12 miles past Mansfield and through Clipstone Park, to Ollerton, where it receives the Rainworth, which rises in Sherwood Forest. From Ollerton the Maun flows 4 miles north by east, till it is joined on the left bank by the Meden, then flows north-east 4 miles to West Drayton, where it receives on the left bank the Poulter, forming by the junction the river Idle. From West Drayton the Idle flows northward in a winding course of 18 miles to Bawtry, receiving on the left bank, just above that town, the Ryton, and flows eastward 2 miles to the border of Lincolnshire, and 7 miles more along the border, or just within it, into the Trent at West Stockwith. The Idle is navigable from East Retford, 12 miles above Bawtry. None of its tributaries are navigable.

The Soar has about 8 miles of its course, navigable throughout, on the border of this county and Leicestershire. The Erewash rises in the county, very near the head of the Maun, and flows south-west to the border, and south-south-east along the border of this county and Derbyshire to its junction with the Trent. The Lene rises near the grounds of Newstead Abbey, 5 miles south of Mansfield, and flows southward into the Trent near Nottingham. The Dover Beck rises in Sherwood Forest, not far from the source of the Rainworth, and flows 10 miles south-east into the Trent, to the east of Thurgarton. The Deven rises in Leicestershire, and flows northward into the Trent, through the Vale of Belvoir. Of its whole course of more than 20 miles, 8 or 9 miles belong to this county. Its tributary, the Smite, 18 miles long, belongs chiefly to this county. The tongue of land at the junction of the Deven and the Trent is insulated by a navigable channel communicating between these two rivers.

By means of the Trent and the canals and navigable rivers connected with it, Nottinghamshire has water communication with almost all the principal towns in England. The Grantham Canal crosses the south of the county, and connects the Witham at Grantham, in Lincolnshire, with the Trent, near Nottingham. There is a branch from the Grantham Canal to Bingham, in this county. From the eastern border of the county, at a point nearly east of East Retford, the Fosse Dyke Canal joins the Trent again with the Witham, and so with the city of Lincoln and the Wash. The Chesterfield Canal crosses the north of the county, leaving the Trent near Stockwith,

and passing through East Retford and Worksop, whence it runs first north-west into an angle of Yorkshire, and then south-west into Derbyshire, where it terminates at Chesterfield. The Erewash Canal leaves the Trent opposite the mouth of the Soar, and runs up the valley of the Erewash, partly in this county, to Langley Bridge, where it is joined by the Cromford Canal. From Langley Bridge the Nottingham Canal runs direct, but by a very circuitous route, to the Trent, south of Nottingham. A cut which leaves this canal at Nottingham joins the Trent, 4 miles higher up. The Humber, into which the Trent runs, and the Trent and Mersey Canal, which joins the Trent in Derbyshire, just without the south-western boundary of this county, open to Nottinghamshire the whole system of the internal navigation of England.

The principal coach-roads are those through Newark, Ollerton, and Worksop, into Yorkshire; the branch road from Newark, through Tuxford, East Retford, and Bawtry; and the road through Nottingham and Mansfield into Derbyshire.

The Derby, Nottingham, and Lincoln branch of the Midland Counties railway has 30 miles of its length in this county, which it enters near the Long Eaton junction; it passes through Nottingham and Newark. A branch from this line leaves the Carlton station 3 miles east from Nottingham, and runs eastward across the county, through Bingham to Grantham. The Manchester, Sheffield, and Lincolnshire railway traverses the north of the county, passing through Worksop and East Retford, and on to Gainsborough and Great Grimaby, in Lincolnshire; from East Retford a branch from this line runs through Cottam and Tootsey to Lincoln. The southern branch of the Midland Counties railway runs up the valley of the Soar from Leicester, entering the county a little north of Loughborough, and joining the Derby, Nottingham, and Lincoln branch at the Long Eaton junction. From Nottingham a railway runs north to Mansfield, whence the Mansfield and Pinxton railway runs to the Cromford Canal at Pinxton Mills, near Alfreton in Derbyshire, with a branch to the Codnor Park iron-works. It is joined by the Erewash Valley line, which runs along the western boundary of the county, to the greater lines just mentioned at the Long Eaton junction. The Great Northern railway from London to York crosses this county, coming from Grantham, through Newark and East Retford, and passing through Bawtry northwards. Another line, intended to join the North Midland, has been constructed from Newark to Southwell.

Climate, Agriculture, &c.—The climate of this county is dry and healthy, and upon some of the light lands the harvest is as early as in many counties more to the south. The high hills of Derbyshire intercept the westerly winds, and cause the clouds to discharge their moisture before they reach Nottinghamshire; the heaviest rains are when the wind comes from the east.

The county may be divided into three districts with respect to soil. In the first, sand and gravel prevail. This extends along the Vale of Trent to the borders of Lincolnshire, and to the north of Nottingham along the ancient forest-land and border, in a strip of land about 30 miles long and from 7 to 10 miles broad. The next is the clay, which lies between the Trent land and the last-mentioned strip, and in a part of the southern extremity of the county towards Leicestershire. The third district is that where limestone and coal are found. This lies partly on the borders of Derbyshire, and partly on the south-east towards Leicestershire and Lincolnshire.

This county, of which a great portion was once forest-land, contains many fine parks and seats. The principal parks are those of Clumber, Thoresby, Worksop, and Welbeck Abbey, south of the town of Worksop; those of Newstead Abbey and Annesley, south of Mansfield; and Wollaston Hall, west of Nottingham. There are many fertile spots; but the land is in general not above mediocrity, and some of it is very poor. The farms are of moderate size, and the tenants are mostly at will. Improvements in agriculture are very generally followed. Turnips are cultivated to a great extent; other crops are wheat, beans, peas, oats, potatoes, &c. Along the river Trent are some good meadows and pastures, in which bullocks are grazed to advantage. The breeds which are preferred are the Hereford and the short-horn for the best pastures, and the small Scots for inferior. There are not many dairies, although some good cheese is made. The dairies are chiefly along the Soar. The sheep are mostly of the Leicester breed. There are many hop plantations in the county. In the neighbourhood of Newark, Nottingham, and other towns there are excellent market gardens, the sandy soil being very favourable to the cultivation of roots and vegetables. There are some good orchards on the heavier soils.

The remains of the old forest-trees are still to be met with in parks, where they have been preserved as ornaments. A better system of forest management has been introduced of late years, and considerable attention is now paid to the growth of navy timber. Many new woods and plantations have been made in those parts of the forests which have been granted to individuals or allotted on inclosures. Very extensive woods have been planted on the estates of the Dukes of Newcastle and Portland.

Divisions, Towns, &c.—Nottinghamshire is divided into six wapentakes—Bassetlaw, north; Bingham, south-east; Broxtow, west; Newark, east; Rushcliffe, south; and Thurgarton, central. Each wapentake consists of a north and south division, with the exception

of Bassetlaw and Thurgarton, which have each three divisions. Besides the divisions just enumerated, there is the county of the town of Nottingham.

The county town of NOTTINGHAM; the boroughs of NEWARK and EAST RETFORD; and the market-towns of BINGHAM, MANSFIELD, SOUTHWELL, and WORKSOP, are noticed under their respective heads. The only other market-towns in the county are Ollerton and Tuxford.

Ollerton, 19 miles N. by E. from Nottingham, population of the township 937, is situated on the Maun, and has a neat modern gothic chapel, a chapel for Wesleyan Methodists, a National and a Free school. The market is held on Friday; there is a hop-market every Tuesday in September, and a yearly cattle and sheep fair is held. The village of *Edwinstow*, which is on the Maun, above Ollerton, is extremely rural. The parish church of Edwinstow, a venerable gothic building, with a lofty spire, has been renewed and in part restored. At Clipstone, in the parish, are some ruins of a palace of King John.

Tuxford, about 28 miles N.N.E. from Nottingham: population of the parish, 1211. The town was rebuilt after a great fire in 1702. The church, which exhibits a mixture of various styles of architecture, was repaired in 1814. There are chapels for Wesleyan Methodists and Independents, a Free school, and an Infant school. The market is held on Monday; and there are two yearly fairs, one for live-stock, the other for hops.

The following are the more important villages, with the population of the parishes in 1851, and a few other particulars:—

Arnold, population 4704, is 4 miles N. from Nottingham, on the road to Mansfield. The village extends nearly a mile in length. The inhabitants are chiefly frame-work knitters. Besides the parish church, an old building, there are chapels for Wesleyan and Primitive Methodists and Baptists, an Endowed Free school, and an Infant school. *Basford*, population 10,093, is situated about 2½ miles N.N.W. from Nottingham, in the vale of the Lene. Besides the parish church, a commodious structure with a handsome tower, there are chapels for Wesleyan, Primitive, and New Connexion Methodists and Baptists, and National schools. The chief occupations are frame-work knitting, lace-making, and the manufacture of hosiery. *Beeston*, population 3016, is about 4 miles S.W. from Nottingham. The hosiery, silk, and lace manufactures are the principal occupations. There is a canal from the river Trent at Beeston to Nottingham. There are here a parish church, opened in 1844, of which the sittings are all free; chapels for Wesleyan and New Connexion Methodists and Baptists; National and Infant schools; and a library. *Blidworth*, population 1376, about 6 miles S.E. from Mansfield, occupies high ground in the neighbourhood of Sherwood Forest. The parish church, of Norman date, was repaired in 1839. The Wesleyan Methodists have a chapel, and there are National and Infant schools. *Blyth*, population 3982, about 7 miles N.W. from East Retford, on the right bank of the river Ryton, had once a market, which was removed to Bawtry, 4 miles from Blyth, when the Great Northern mail-road was opened. The church, which occupies an elevated site, is an embattled structure, partly of Norman date. The Wesleyan Methodists and Quakers have places of worship, and there is a National school. Cattle-fairs are held on Holy Thursday and on October 29th. *Bridgeford-on-the-Hill*, or *East Bridgeford*, population 1155, about 10 miles E.N.E. from Nottingham, on the right bank of the Trent, has a commodious church, rebuilt about 1780; chapels for Wesleyan and Primitive Methodists; and National schools. Here was the site of the Roman station Margidunum. Malting and brick-making are carried on. Gypsum is obtained in considerable quantity. *Bulwell*, population 3786, about 4 miles N.W. from Nottingham, in the valley of the Lene, has an ancient church with a tower, chapels for Wesleyan and Primitive Methodists and Baptists, and a Grammar school. Frame-work knitting and lace-making employ some of the inhabitants. Malting and lime-burning are carried on. *Calverton*, population 1427, about 7 miles N.N.E. from Nottingham, is situated on the Dover Beck. It has a parish church, chapels for Wesleyan and Primitive Methodists and Baptists, and a Free school. Frame-work knitting is the chief occupation. The Rev. William Lea, inventor of the stocking-frame, was a native of Calverton. *Carlton*, population of the township 2329, about 3 miles E. by N. from Nottingham, has chapels for Wesleyan and Association Methodists and Baptists, and an Infant school. The manufacture of lace and hosiery affords employment. Malting and brick-making are carried on. *Farnsfield*, population 1149, about 14 miles N.N.E. from Nottingham, has a neat and respectable appearance. The parish church is a plain stone building. There are a chapel for Wesleyan Methodists, a parochial school, and a school supported by the Wesleyan Methodists. An annual feast and a fair, chiefly for forest-sheep, are held at Michaelmas. Brick-making, rope-making, and malting are carried on. *Gotham*, population 792, is situated among the Leake Hills, near the border of the county. The church is a good stone edifice with a square tower. The Wesleyan and Primitive Methodists have chapels, and there are National and Infant schools supported by Earl Howe, who is lord of the manor. *Graby*, population 515, near the Leicestershire border, 4½ miles S.E. from Bingham, gives the title of Marquis to the Rutland family. The church is an ancient and commodious structure with a square tower; there are a Wesleyan chapel and an Endowed school. *Greasley*, population 5284, is 7 miles N.W. from Nottingham. The church is

handsome and spacious, with a lofty embattled tower. The inhabitants are chiefly employed in the manufacture of hosiery, lace, and lace machinery. The Nottingham Canal passes through the parish; there are several coal-wharfs on its line. *Hucknall Torkard*, population 2970, about 7 miles N.N.W. from Nottingham, is situated on a feeder of the Lene. Besides the parish church, there are chapels for Wesleyan, Primitive, and New Connexion Methodists and Baptists. The population is chiefly engaged in frame-work knitting. Brick-making and lime-burning are carried on. *Kimberley*, population of the ecclesiastical district 2392, about 6 miles N.W. from Nottingham, has a church, a chapel of ease, chapels for Wesleyan and Primitive Methodists, and an infant school. In the neighbourhood are an extensive corn-mill, collieries, and a brewery. *Kirkby*, population 2363, about 5 miles S.W. from Mansfield, has a parish church, chapels for Wesleyan Methodists and Baptists, and a Free school. The rivers Erewash, Lene, and Maun rise in the neighbourhood of Kirkby. There are several collieries, connected with which is the Mansfield and Buxton tramway. Frame-work knitting is the chief occupation. *East Leake*, population 1148, about 9 miles S.W. from Nottingham, has an ancient church, chapels for Methodists and Baptists, and an Endowed school. The inhabitants are chiefly stockingers. Three statute fairs for hiring servants are held in the year. *Lenton*, population 5589, about 2 miles W. from Nottingham, has a handsome gothic church, built of stone in 1842; chapels for Wesleyan Methodists, Independents, and Baptists; and National and Infant schools. Lace-factories, chemical-works, tanneries, agricultural-implement works, and machine- and starch-works employ many of the population. Two cattle-fairs are held, on Whit-Wednesday and November 11th. A priory of Cluniac monks formerly existed here. *Mansfield Woodhouse*, population 1972, nearly 2 miles N. from Mansfield, is a neat village, pleasantly situated near the western border of the county. The church, an early English edifice, has a tower surmounted with an octagonal spire. There are chapels for Wesleyan and Primitive Methodists and Independents, a Blue-Coat school, and National schools. Roman remains have been found in the vicinity. Frame-work knitting is the chief employment. Malting and lime-burning are carried on. *Misterton*, population 1743, in the north-eastern corner of the county, on the north side of the Chesterfield Canal, 9 miles E. by N. from Bawtry. The parish church, rebuilt in part in 1848, has a tower surmounted with a spire. The Wesleyan and Primitive Methodists have chapels, and there is an Endowed Free school. Malting is carried on. There is a considerable trade in cattle and pigs. *Radcliffe*, or *Radcliffe-on-Trent*, population 1273, is about 6 miles E. from Nottingham, on the right bank of the river Trent. The parish church, an old edifice, underwent thorough repair in 1829. There are a chapel for Wesleyan Methodists, and a Free school. On the Trent is a wharf for landing goods, and there is a good carrying-trade on the river. Malting is extensively carried on. Several families are employed in making skeen baskets. *Radford*, population 12,637, about a mile W. by N. from Nottingham, has a parish church, rebuilt in 1812; a church for New Radford district; chapels for Wesleyan, Primitive, and New Connexion Methodists, Independents, and Baptists; and National schools. Lace-making and the stocking manufacture are the chief occupations. There are several breweries, machine-making establishments, iron-foundries, and corn-mills. *Sneinton*, population 8440, a suburb of Nottingham, on the east side, contains many good houses, the residences of merchants and others connected with Nottingham. It has a recently-erected cruciform church, in the early English style, a chapel for Wesleyan Methodists, and National schools. The occupations generally are similar to those of the inhabitants of NOTTINGHAM. Brick-fields, Roman-cement works, and chemical-works are in the vicinity. *Stapleford*, population 1968, on the western border of the county, 6 miles W. by S. from Nottingham; the Erewash River forms here the boundary. The Nottingham Canal passes a short distance north of the village. Besides the church, which has a tower surmounted with a spire, there are chapels for Wesleyan and Primitive Methodists; National and Infant schools, built and endowed by the late Lady Warren; and a library. Lace-making, particularly the making of tatting lace, employs many of the inhabitants. At Stapleford are some primeval remains. *Sutton-in-Ashfield*, population 7692, about 8 miles S.W. from Mansfield, is situated on an eminence. The church is a fine gothic structure, with a tower and a lofty octagonal spire. The Baptists, Independents, and Wesleyan and Primitive Methodists have places of worship, and there is a National school. The population is chiefly employed in the manufacture of cotton-hosiery, lace, and lace machinery. There is a pottery for coarse red ware. A customary market for provisions is held weekly, on Saturday. Several fairs and an annual feast are held in the village. *Sutton-upon-Trent*, population 1262, about 8 miles N. from Newark, on the left bank of the Trent, has a handsome gothic church; chapels for Wesleyan Methodists, Baptists, and Independents; National schools partly endowed; and a Wesleyan school. Malting is carried on, and there are several corn-mills, a seed and bone-crushing mill, and patent oil-cake works. *Sutton Bonnington*, population 1220, about 10 miles S.W. by S. from Nottingham, near the right bank of the Soar, which here separates the county from Leicestershire, has a neat church with a lofty spire, and another church of small size, chapels for Wesleyan and Primitive Methodists and Baptists, a National and an Endowed

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school. Frame-work knitting is the principal occupation. *Warsop*, population 1393, about 4½ miles N. by E. from Mansfield, formerly had a market. Two annual fairs are held. Rope-making and malting are carried on to a small extent. There are some corn-mills. The church is ancient; there are chapels for Wesleyan Methodists and Baptists, and a Parochial school.

Ecclesiastical and Legal Divisions, &c.—The county forms the arch-deaconry of Nottingham; it was formerly included in the diocese of York, but now forms part of the see of Lincoln. It is in the midland circuit. The assizes are held at Nottingham; quarter-sessions at Nottingham, Newark, and East Retford; county courts at Bingham, East Retford, Mansfield, Newark, Nottingham, and Worksop. The county jail is at Nottingham; the county house of correction at Southwell. The county returns four members to Parliament; two for the northern and two for the southern division. Nottingham and Newark return two members each.

History, Antiquities, &c.—In the division of Britain by the Romans this county was included in the province of Flavia Cæsariensis. The Roman stations Ad Pontem, Margidunum, and Verometum, were in the county. Of the Roman roads which connected these stations there are several traces. The Fosse Way may be traced from Verometum for several miles in the direction of Newark. Many Roman remains have been discovered in the neighbourhood of Newark, Mansfield Woodhouse, and in other parts of the county.

In the Saxon period it is likely that Nottinghamshire was possessed at first by the Northumbrian Angles. When the Mercians became independent of the kingdom of Northumbria (A.D. 626), this county appears to have been included in their dominion: it was divided between the northern and southern Mercians, who were separated from each other by the Trent. When the Danes, under the sons of Regnar Lodbrog, invaded England, they passed the winter (867-868) at Nottingham, which they had taken, and which became a Danish burgh. By the treaty with Alfred (878 or 880) they obtained possession of that part of Mercia which was north-east of Watling-street, including Nottinghamshire. After the Conquest, the greater part of the county, together with the castle of Nottingham, was bestowed by the Conqueror on his natural son, William Peverel. The principal events that took place in the county from the Conquest to the great civil war were—the capture of Nottingham Castle and town by the troops of the empress Maud; the death of king John at Newark, October 17th, 1216; the arrest of Mortimer in Nottingham Castle by Edward III.; and the defeat and capture of Lambert Simnel in 1487 by the royal army under Henry VII. at East Stoke, on the right bank of the Trent, 4 miles S.W. from Newark.

At the commencement of the civil war Charles I. set up his standard at Nottingham with great ceremony (1642). Shortly after this Nottingham came into the hands of the Parliament, and continued so to the end of the war. Newark, which was held by a body of Royalists under the command of Sir John Henderson, was besieged (1644) by a body of Parliamentary forces under Sir John Meldrum and Lord Willoughby of Parham, but was relieved by Prince Rupert, who drove part of the besieging forces over the Trent, and compelled another portion to capitulate, with all their artillery and ammunition. In the winter of 1644-45 it was again unsuccessfully besieged by the Parliamentarians. In May 1646 the king surrendered himself at Southwell to the Scotch commissioners, by whom he was conducted to the quarters of the Scotch troops then besieging Newark. The day after his arrival Newark was delivered up by his orders.

Of architectural antiquities Nottinghamshire is somewhat bare, and its ecclesiastical buildings are, with two or three exceptions, such as St. Mary's church at Nottingham and Southwell Collegiate church [NOTTINGHAM; SOUTHWELL], by no means remarkable for splendour. Balderton, Hovringham, and Mansfield churches have some Norman portions; Newark church has some slight Norman remains; the churches of Bingham, Coddington, Hawton near Newark, and Upton St. Peter near Southwell, have considerable portions of early English; Hawton is especially worthy of examination. Of the monastic ruins the most beautiful is Newstead Abbey, founded for Augustinian canons by Henry II. about 1170. The chief part of the abbey buildings were fitted up as a residence by Sir John Byron, to whom they were granted, but the chapel was allowed to go to decay. Its front is an exceedingly beautiful specimen of early English. Of Rufford Abbey, near Ollerton, there are some remains incorporated in a large mansion of later date, which retains the original designation. It was a Cistercian abbey, founded by Gilbert, earl of Lincoln, in 1148. Of Welbeck Abbey some slight remains are incorporated in the mansion of the Duke of Portland. Part of the cloisters, and some other portions of Mathersey Gilbertine Priory, near the Idle, yet remain. There are also some remains of Thurgarton Priory for Austin canons. At Newark is an ancient castle.

Statistics: Religious Worship and Education.—According to the Returns of the Census in 1851, it appears that there were then in the county 630 places of worship, of which 273 belonged to 6 sections of Methodists, 248 to the Established Church, 54 to Baptists, 21 to Independents, 11 to Mormons, 5 to Roman Catholics, 3 to Quakers, 2 to Unitarians, and 1 each to Irvingites, Swedenborgians, and Jews. The total number of sittings provided was 151,742. There were 428 Sunday schools with 43,938 scholars; of these, 183 schools with 17,785

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scholars were under the superintendence of the Established Church. Of day schools there were 739, of which 231 were public schools with 18,286 scholars, and 508 were private schools with 12,892 scholars. Of evening schools for adults there were 32, with 983 scholars. The number of literary and scientific institutions was 10, with 1955 members, and 29,785 volumes in the libraries belonging to them.

Savings Banks.—In 1853 the county possessed 6 savings banks, at East Bedford, Mansfield, Newark-upon-Trent, Nottingham, Southwell, and Worksop. The total amount owing to depositors on November 20th 1853 was 517,624*l.* 12*s.* 1*d.*

NOUVION-EN-THIÉRACHE. [AMER.]

NOVA SCOTIA, a British colony in North America, situated between 43° 20' and 46° N. lat., 61° and 66° 20' W. long., is bounded N. by Northumberland Strait, which divides it from Prince Edward Island; E. by Cape Breton and the Atlantic; S. by the Atlantic; W. by the Bay of Fundy and New Brunswick. It forms a peninsula connected with the continent by Chignecto Isthmus, a neck of land about 10 miles broad at the south-east point of New Brunswick. Its greatest length from Cape Canso on the east to Cape St. Mary on the west is 230 miles; its breadth varies from 40 to 100 miles. The area is 15,607 square miles. The population in 1817 was 84,913; in 1827 it was 123,848; in 1851, excluding that of Cape Breton, it was 248,537.

Coast-line and Surface.—The Atlantic coast is rocky and rather elevated. It contains numerous creeks and inlets from 3 to 15 miles long, many of which form safe and convenient harbours. The shore is lined with numberless islets, within which small craft sail in smooth water while there is the heaviest sea outside. The chief inlets are—Sheet Harbour, eastward from Halifax; and, westward from it, Margaret's Bay, Mahone Bay, and Shelburne Harbour, all of them deep and spacious basins. Halifax Harbour is one of the finest roadsteads in the world. Mahone Bay contains above 200 islands. A similar coast extends along the south-western extremity of the province from Cape Sable to Cape St. Mary's. St. Mary's Bay, from 4 to 10 miles broad, stretches 35 miles parallel to the Bay of Fundy, from which it is separated by Briar Island, Long Island, and the peninsula of Digby Neck. Annapolis Basin, separated by a narrow isthmus from St. Mary's Bay, extends 10 miles in the same direction, with a breadth of from 1 to 4 miles. It forms an excellent harbour. Its entrance, the Gut of Digby, is the only inlet on the coast of the Bay of Fundy between St. Mary's Bay and the Bay of Mines. The shore is generally high and bold, but not so much broken as the Atlantic coast. The only refuge besides the Gut of Digby is at Black Point, where a pier has been erected for the accommodation of coasting vessels. The Bay of Mines is entered by a strait 8 miles wide between Cape Blowmedon on the south and Cape Parshoro on the north. It forms an extensive basin, stretching 50 miles inland to the head of Cobequid Bay, with an extreme breadth of 16 miles. Its shores are low and marshy. From the entrance of the bay to Cape Chignecto, and along the south shore of Chignecto Inlet, the coast is high and rocky. It changes into low and marshy lands along the banks of Cumberland Basin, which forms the upper extremity of the Bay of Fundy, and a narrow division between Nova Scotia and New Brunswick. The waters of Fundy Bay rush into its head branches with great impetuosity, rising in Mines Bay and Cumberland Basin from 50 to 60 feet, and advancing with a tide wave of 5 or 6 feet high. The shore of Northumberland Strait eastward to Pictou Harbour is low and either sandy or marshy, except in the vicinity of Pugwash Bay, where it is elevated. Beyond Pictou it rises to a considerable height, and at Cape St. George becomes rocky and bold. The Bay of St. George, which looks to the Gulf of St. Lawrence, is connected with Chedabucto Bay, which opens to the Atlantic, by the Gut of Canso, a strait running 21 miles between Cape Breton and Nova Scotia, with a breadth varying from a mile to a mile and a half. Chedabucto Bay, bounded on the south by Cape Canso and on the north by Cape Hogan on Madame Island, which belongs to Cape Breton, is free from cliffs and islands, and runs 25 miles inland, with a breadth of from 6 to 12 miles.

The country rises gradually from the Atlantic coast into an extended ridge seldom exceeding 300 feet in height. Other ridges traverse the peninsula in the same direction, separated in many places by deep valleys, and at times intersected by rivers and lakes, but forming towards the centre of the eastern and western divisions of the province an elevated table-land of a broken and irregular surface. Near the middle of the province a low tract of land, not rising more than 100 feet above the sea, stretches across the country from Halifax Harbour to Cobequid Bay. Along the northern shore of that bay, and the Bay of Mines, the Cobequid Hills rise to a height of from 800 to 1000 feet, and extend towards the shore of Northumberland Strait, with a nearly uniform breadth of 10 miles. Within 10 miles of the south shore of the Bay of Mines the central table-land is bounded by a group of hills, of which the principal heights are Horton Mountain and Ardole Mountain, the latter rising 810 feet, and forming the watershed of the rivers flowing to the Bay of Mines and to the Atlantic. Two extended ridges, called the North and the South Mountains, terminate the table-land westward, rising on opposite sides of the valley of the Annapolis. Along the shore of St. Mary's Bay the country rises into long ridges and detached hills, reaching its greatest elevation in the Blue Mountains, a little beyond the centre of this

part of the peninsula. The whole province is agreeably diversified by the succession of lofty ridges and less prominent undulations.

Hydrography and Communications.—About 3000 square miles of the surface are under water. In every part of the province the lakes and rivers are numerous, leaving few places far from convenient water-carriage, or without eligible sites for flour- and saw-mills. Between Halifax and St. Margaret's Bay, an extent of 20 miles, there are as many as 200 lakes. A series of lakes form a continued communication across the country from Liverpool Harbour on the Atlantic coast to Annapolis Basin. The most important rivers are the Annapolis and the Shubenacadie. A canal, supplied by the Shubenacadie River and the lakes from which it issues, forms a communication, for vessels drawing not more than 8 feet of water, between Halifax Harbour and Cobequid Bay. Good roads extend between Halifax and the towns of Windsor, Annapolis, and Pictou. Roads are carried round the peninsula, and one passing into New Brunswick is continued in the great road to Quebec. The forests are penetrated by roads wherever settlements have been formed. A railway has been formed for the conveyance of coal from the Pictou mines to the place of shipment. Steamers sail from Halifax, Annapolis, and Windsor to St. John's in New Brunswick, and in summer there is steam communication between Pictou and Prince Edward Island. Mail steamers leave Halifax weekly for England, the United States, Bermuda, Cape Breton, and Newfoundland. Halifax is connected by electric telegraph with the principal cities of Canada and the United States.

Geology.—The province comprises four geological divisions. Granite of several varieties, gneiss, and mica-slate form a narrow belt along the coast between Cape Canso and Cape Sable. Granite boulders are very numerous in many parts of this tract, especially in the vicinity of Halifax. A parallel section, reaching across the country to the Annapolis Valley, consists of metamorphic rocks. Grauwacke, grauwacke slate, and quartz rock prevail, with occasional masses of transition limestone. The coast of the Bay of Fundy, from Briar Island to the Basin of Mines, including the North Mountain and the islands along the shore, form a trap region, occupied by greenstone, amygdaloid, and tuffstone, containing gems and neolites. The new red-sandstone and carboniferous systems spread over the northern shore between the borders of New Brunswick and the Gut of Canso. The sandstone contains beds of gypsum and rock salt. The coal-measures include several valuable fields of coal, of which the most important are the Cumberland and Pictou fields. The Pictou field occupies an area of more than 100 square miles, and consists of seams from one foot to 50 feet thick. Iron-ore occurs in large quantities in combination with the coal. It is also found in other districts, and was worked for some time on the banks of the Moose River near Annapolis Basin. A large deposit of specular iron-ore of a very rich quality has been found on the south side of the Cobequid Hills. Copper-ore exists in several places, particularly at Cape d'Or, opposite the entrance to Mines Bay. Lead-ore in small quantities occurs among the limestone at Guy's River. Good mill-stones are obtained from the light gray granite near Cape Canso, and grindstones of the finest quality from the hard gray or bluish sandstone which occurs in various districts. On the south side of Mines Bay, at St. George's Bay, and the Gut of Canso, are extensive deposits of gypsum. Along the northern shore there is the finest freestone for building, and in the centre of the province abundance of excellent slate. Salt-springs of great strength are numerous between the Basin of Mines and Northumberland Strait.

Climate, Soil, and Productions.—The climate of Nova Scotia is very much modified by its nearly insular position. The winters vary considerably in length and severity. Sometimes there is a hard frost several weeks before Christmas; in other seasons the ground remains open till near the middle of January. On the Atlantic coast the influence of the Gulf Stream renders the harbours accessible all the year round, while the ports on the northern coast are frozen up for nearly four months. At no time is the cold oppressive, nor is the heat of summer, except occasionally and for brief periods, in excess.

The Atlantic shore is everywhere stony, and many of the headlands are bare of soil, but generally a stiff clay prevails, which, when the stones are removed, yields excellent crops. Improved tracts of this description appear all around Halifax. The heads of bays and banks of rivers along the coast present numerous patches of good alluvial land. The uplands, or hill-lands, as they are called in the province, are generally free from stones, and consist of a stiff clay, varied by a friable loam. They are commonly very productive, and the highest are the most fertile. The intervalles, or tracts of alluvial land formed by the deposit of the rivers, above the head of tide-water, are more in repute and produce excellent crops. The province however is still far from raising its own supplies, and large quantities of flour are yearly imported from the United States and Canada.

The most important crops are wheat, oats, and potatoes. Rye, barley, buckwheat, and maize are raised in large quantities, maize chiefly on the shores of the Bay of Fundy. Beans, peas, and turnips are extensively cultivated, and grasses obtain much attention. In 1851 Nova Scotia produced 297,157 bushels wheat, 67,438 bushels rye, 1,384,437 bushels oats, 170,301 bushels buckwheat, 196,097 bushels barley, and 1,986,789 bushels potatoes: of hay, 287,837 tons were raised. Of butter 3,613,890 lbs. were made, and of cheese 652,089 lbs. Large stocks of cattle, sheep, pigs, and poultry are kept,

especially on the northern shores and around the Bay of Mines. Cattle are exported to New Brunswick to form working teams for the lumbering trade. Newfoundland receives from Nova Scotia all its sheep and live stock. Beef and butter are exported. Nearly 9,000,000 acres are still covered with forests, which form a chief part of the wealth of the province. The most important trees are pine, birch, oak, hemlock, beech, ash, maple, and elm. Others of great beauty are of less commercial value. The wild animals which remain are the moose-deer, tiger-cat, beaver, bear, fox, marten, otter, mink, musk-rat, racoon, weasel, squirrel, and hare. The first four are nearly extinct. Nearly all the small lakes and streams contain trout and salmon. Cod and haddock are taken in great numbers along shore, and especially on banks about 10 miles off. Mackerel, going north in spring and returning in autumn, swarm in prodigious numbers in all the bays and inlets. In Mines Bay vast numbers of shad and bass are caught in weirs at the ebb and flow of the tide. Small herrings, taken in the same way in Annapolis Basin, are smoked for the foreign market. Halibut, sturgeon, sole, and other kinds of fish are found on the coast, which also abounds with lobsters, oysters, and other shell-fish.

The population of the province is of mixed origin. Of the aborigines there are a few hundreds belonging to the Miomac tribe. Free blacks, the descendants of slaves who entered the province at different periods, number some thousands. There are several settlements of Acadian French, of Germans, and of Swiss Protestants. The western and midland counties are chiefly inhabited by the offspring of loyalists from New England. The chief part of the population consists of the descendants of English, Scotch, and Irish immigrants. The Scotch are most numerous in the northern counties. The chief occupations are farming and fishing. A great part of the population engage in both, tilling their lands at the heads of the bays and near the river mouths, and sharing in the fisheries of the coast. Many take part in the more distant fisheries of the banks of Newfoundland and the coast of Labrador. In the midland counties the farmers and their sons are much engaged in ship-building, the ships being often manned by themselves and freighted with their own produce or with lumber. The manufactures, which are limited, are coarse cloths and flannels, bed-linen, blankets and carpets, hats, paper, tobacco, leather, ploughs and other agricultural implements, ropes, stoves for some of the colonies, and chain-cables for the United States. Near Halifax there are distilleries for the preparation of spirits from molasses. The exports of the province are timber of all sorts, planks, deals, spars, staves, and cordwood; fish, dry and pickled, smoked herrings, seal-skins, oil, coal, gypsum, grindstone, beef, pork, butter, live-stock, potatoes, and other vegetables. The imports are chiefly British manufactures, wines, spirits, wheat and flour, beef, pork, sugar, and tobacco. In 1852 the value of the exports was 970,781*l.*, that of the imports was 1,194,175*l.* The number of vessels belonging to the province in 1852 was 2943, with an aggregate tonnage of 189,083.

The province is divided into 10 counties, exclusive of CAPE BRETON, which is comprehended under the same government. These counties are subdivided into 43 townships, the inhabitants of which have the right of assembling to authorize assessments for local purposes.

The only incorporated city in the province is HALIFAX, which is noticed separately, as is also the town of ANNAPOLIS. The following towns may be noticed.—*Akwesht* is a thriving place, near the east shore of Cumberland Basin. *Chester* is favourably situated on the north side of Mahone Bay, and contains several fulling, grist, and saw-mills. It has a considerable lumber trade, and a number of its inhabitants are employed in the fisheries. *Dartmouth*, a small town opposite Halifax, on the eastern side of the harbour, was a place of importance during the war, but has been nearly stationary since. A steamer plies constantly between it and the city. *Dorchester* is a place of considerable trade, on the Antigonish River, a mile above the head of navigation. It contains a court-house, and a Baptist, a Presbyterian, and a Roman Catholic church. *Guyborough* is situated at the entrance to Milford Haven, near the head of Chedabucto Bay. It contains a court-house, and churches for Episcopalians, Roman Catholics, and Protestant Dissenters. *Liverpool*, the chief town of Queen's County, is a well-built place, situated on the west side of Liverpool harbour. Its inhabitants are chiefly employed in fishing and lumbering; and considerable quantities of timber and fish are exported to Europe and the West Indies. *Lunenburg*, situated at the head of Lunenburg Bay, is a regularly built town, containing several churches. It trades in lumber with the West Indies. *Pictou*, situated at the head of Pictou harbour, in Northumberland Strait, is a busy and improving town, with a population of several thousands. It contains a college, and Episcopal, Presbyterian, and Roman Catholic places of worship. Timber and coal are largely exported. The harbour has a bar at its mouth, but is capacious within, and has from five to nine fathoms depth of water. *Shelburne*, situated at the head of Shelburne harbour, was built by American loyalists after the war of independence. It had a population of 12,000 within a year after its rise, but it now contains only a few inhabitants, who are employed in ship-building and the fisheries. *Truro*, a town situated at the head of Cobequid Bay, is mostly built of wood. It contains a court-house and several places of worship. *Windsor*, a neat, clean, well-built town, on the estuary of the Avon River, and near the mouth of the St. Croix, distant about 40 miles N. from Halifax, contains King's College, an

academy, and places of worship for Episcopalians, Roman Catholics, and various other denominations. *Yarmouth*, an improving town, on the west coast of the province, consists of one street nearly two miles long, in which the houses are still considerably detached. It contains a court-house, an Episcopal church, and places of worship for Congregationalists, Baptists, and Methodists. It carries on an active trade with the West Indies. Many vessels belong to the place. From its local advantages and the enterprise of its inhabitants it is likely to become a town of great importance.

The affairs of the province are administered by a governor and executive council, a legislative council appointed by the governor, and a House of Assembly of 43 members, which meets at Halifax. The possession of a 40*s.* freehold forms the elective franchise, and qualifies for a seat in the House of Assembly. The laws are administered by a Court of Queen's Bench and district courts. They include the common and statute law of England, and the statute law of the province.

The religious denominations in the province are Episcopalians, Presbyterians, Roman Catholics, Methodists, Baptists, and some smaller sects. The members of the Church of England are under the direction of a bishop, an archdeacon, and 50 clergymen. The bishop and archdeacon are endowed by the home government, the clergy are supported by the Society for the Propagation of the Gospel. The Established Church of Scotland has 6 ministers in the province, the Free Church has 19 ministers, and from 20 to 30 ministers are connected with the United Presbyterian Church of Scotland. The number of churches in the province in 1851 was 520. Since 1826 a Common School Act has been in operation, which is every three or four years revised by the legislature. It divides the province into districts, in which the people appoint trustees, and maintain their schools on a popular basis, under the control of boards of commissioners appointed by the executive. In 1851 the number of common schools was 1026, with 29,175 children. A Grammar school is maintained in each county. There are several colleges in the province: King's College at Windsor, on the plan of Cambridge and Oxford; Dalhousie College at Halifax, on the model of Edinburgh College; a general institution at Pictou; a Baptist college at Horton; and Acadia College, a Roman Catholic seminary at Halifax. Attempts have been made to unite some of these institutions into one efficient university, but without success.

The revenue of the province is derived from a tax on imported goods, consisting chiefly of an ad valorem duty of 6½ per cent. The income in 1852 was 93,039*l.* 7*s.* 2*d.* The defence of the colony is provided for by two or three British regiments stationed in the garrison towns, and by the visits of the squadron in summer. An organised militia of 26 regiments, constituting a force of 26,248 men, exclusive of officers, is provided for by statute. For the construction and maintenance of lighthouses an annual rate is levied from coasting vessels, and a rate per ton from all other vessels entering and leaving the ports. Twenty-one lighthouses are in full operation around the coast.

Nova Scotia was discovered by the Cabots in 1497. In 1604 the French attempted to settle in it, but were expelled by the Virginian colonists, who claimed the country for Britain in right of previous discovery. Acadia, as the peninsula was called by the French, was granted under the name of Nova Scotia to Sir William Alexander in 1621. The French however retained their footing in it till 1654, when they were reduced by a strong force sent out by Cromwell. The colony was ceded to France by the treaty of Breda in 1667, but after various contests was finally secured to Britain in 1711. Certain designs of the French led the British Parliament in 1749 more actively to promote the settlement of the province. A large grant of public money was made for the purpose, 4000 adventurers embarked with their families for the colony, and the present capital was founded by them. The French, assisted by the Indians, made repeated attacks on the settlement till 1758, when they were finally expelled. In 1784 New Brunswick and Cape Breton were separated from the peninsula, and formed into distinct governments, but in 1818 Cape Breton became again, as it is now, a part of the province of Nova Scotia.

NOVA ZEMBLA, properly NOVAIA ZEMLIA, or 'New Land,' is the name of an island or rather of a chain of islands in the Arctic Sea, which curve round from south to east-north-east between 70° 30' and 76° 30' N. lat., 52° and 76° E. long. The convex or western side of Nova Zembla is washed by the Spitzbergen Sea, the eastern by the Kara Sea, and that part of the Arctic Ocean that lies opposite the mouths of the Obi and Yenisei. On the south it is separated from Waigatz Island by Kara Strait, also called Burrough's Strait. The total length of Nova Zembla is about 500 miles, and the average breadth is about 50 miles. At about 160 miles distant from Felsen Bay (an inlet of Kara Strait) a deep narrow sound called Matotshkin, or Matyushin Shar, connects the Sea of Spitzbergen with the Kara Sea, and cuts off the southern island, the proper Novaia Zemlia. About 40 miles farther north a similar but wider sound, the western part of which is called Cross Bay, cuts off another island. When about half-way through the island, Cross Bay divides into several arms inclosing several small islands. To the north of Cross Bay lie Lutke's Land, which extends to Cape Nassau, and Barentz Land, the most eastern part of Nova Zembla: these it is believed form one connected island. In a geographical point of view the island of Waigatz (50 miles long,

and 20 miles broad), lying south of Kara Strait, and separated from the continent of Russia by Yugoraky Shar, or Pett's Strait, form a part of the series of islands called Nova Zembla; and the whole may be considered as the prolongation of the Ural Mountains, the sounds mentioned merely filling up depressions in the chain.

The western side of the island is mountainous, rising from a steep and bold shore to the height of 1000 and 2000 feet. It is also indented with numerous bays formed by bold and lofty headlands which project from the mountains. A mountain east of Nameless Bay in Nova Zembla proper is 1842 feet high. A little farther north approaching the entrance to Matotahkin Shar is another peak 2547 feet high. Along the strait itself the mountains on the north side rise in three places to 3204 and 3156 feet high, and on the southern side there is a peak 3475 feet above the sea-level. All along Lutke's Land and Barentz Land the mountains run close along the shores. The mountains of Nova Zembla are chiefly composed of a very black clay-slate in the more southern portion; near the Kostin Shar on the south-west coast of Nova Zembla proper gray primitive limestone prevails, similar to that found in the Ural Chain. The eastern shores are comparatively level and barren. Though the heat in summer is very great, owing to the long continuance of the sun above the horizon (four months and a half at the northern extremity), the soil thaws only to the depth of between 6 inches and 2½ feet, and at that distance from the surface ground-ice is always found. The vegetation, which covers some parts of the surface, consists only of lichens and mosses. White bears, foxes, walruses or morsees, and seals abound, as well as reindeer and water-fowl. The islands are frequently visited by fishermen from Archangel and other places in order to take the walrus. Nova Zembla first became known by the voyage of Steven Burrough (1556), but had previously been visited by the Russians. The Dutchman, William Barentz, in 1596 sailed all along the west coast, doubled Cape Desire, the most eastern part of Barentz Land, and wintered from August 26, 1596, to June 14, 1597 in Icy Haven, on the eastern shore of the island. The Russian government in recent times has sent several expeditions to explore the islands. The western coast was explored and laid down by a Russian officer, Lieutenant Lutké. All the east coast of the southern island was explored by Pachtusoff in 1832-3. The Matotahkin Shar and the east coast between 73½° and 75° N. lat. was examined by Pachtusoff and Ziwoika in 1834-5. About 100 miles of the eastern coast remain still to be explored; this part, like all other parts of Nova Zembla, is often visited by whale and walrus hunters. The sea west of Nova Zembla is said to be open for four or five months in the year on an average; but the Kara Sea is almost always encumbered with fields and masses of ice.

(Barrow, *Chronological History of Voyages into the Arctic Regions*; *London Geographical Journal*, vol. viii. and xxiii.)

NOVARA, a division of the Sardinian states containing several provinces, is bounded E. by the Ticino and the Lago-Maggiore, which separate it from Lombardy, S. by the Po, W. by the provinces of Torino and Aosta, and N. by the Lepontian Alps and Switzerland. The portion of the division extending eastward from the spur of Monte-Rosa to the Swiss frontier, and including the Val-d'Ossola or upper part of the main valley of the Tosa, and various lateral valleys which open into it, forms the province of Ossola. This province is covered by the main ridge of the Alps which inclose the valley of the Toccia, or Tosa, which assumes different names at different points of its length. The southern part of the basin of the Tosa, and a fine strip of land between the lakes of Orta and Maggiore, form the province of Pallanza. Into the valley of the Tosa numerous lateral valleys open, each adding its tributary stream to the Toccia, to be by it conveyed into the Lago-Maggiore. The largest of these lateral valleys is the Val Macugnaga watered by the Anza, which flows eastward into the Toccia from Monte-Rosa. The Simplon road across the Alps enters Italy by that part of the valley of the Toccia called the Val-d'Ossola. The provinces of Pallanza and Ossola produce but little corn; the high valleys and lower slopes of the mountains afford pasture for great numbers of horned-cattle and numerous flocks of sheep and goats. In favourable situations and in the lower valleys the grape flourishes. Chestnuts and filberts are abundant. Some iron- and copper-mines are worked. The inhabitants are poor, and some of them annually emigrate to the neighbouring countries chiefly as stone-masons.

The province of Novara extends southward from that of Pallanza to a line running nearly east from the Sesia above Vercelli to the Ticino. It is hilly in the north about the Lake of Orta; but the central and southern portions are level, forming part of the great plain of the Po. The soil is rich and very productive in corn, rice, hemp, maize, pulse, and silk. Pasture is good, especially in the north. Pigs and poultry are very abundant. The pretty lake of Orta, which is partly in the province of Novara, is 10 miles long from north to south, and little more than one mile in breadth. Its southern extremity is about 20 miles north of the town of Novara. Its outlet is at the northern end, from which the waters flow into the Lago-Maggiore, which is 7 miles distant to the east. The banks of the Lake of Orta are hilly and pleasant, and covered with villages, hamlets, and handsome country-houses. In the middle of the lake is the little island of San-Giulio, with a very handsome church, a palace belonging to the Bishop of Novara, and some other buildings and gardens.

This island was once fortified, and is mentioned in the wars of the middle ages. The chief rivers are the Sesia and the Ticino, between which the province lies; the central part of the plain is drained by the Agogna and the Terdopio, which in their lower courses traverse the Lomellina, and ultimately enter the Po from the left bank. Numerous canals for irrigating the rice-grounds are derived from these rivers.

The *Lomellina*, or province of *Mortara*, lies south of the province of Novara, between the province of Valsesia, the Ticino, and the Po. The Ticino is navigable from the Lago-Maggiore to its entrance into the Po. The other streams are the Terdopio and the Agogna, which traverse it from north to south. The country is level; the productions similar to those of the preceding province.

The province of *Valsesia* forms the most western part of the division, and comprises the upper part of the basin of the Sesia to its junction with the Cervo. It is drained by the Sesia and partially by the Dora-Baltea, which is joined to the Sesia by a canal that runs by the town of Santhia. The Valsesia towards its northern part is covered by ramifications of the Alps. Except in the valleys, the climate, like that of Pallanza, is cold. Some rye, millet, a little maize, and chestnuts are the chief productions. In favourable situations however the vine and the mulberry are cultivated. The chief wealth of the country consists in its cattle, butter, and cheese. In the southern part the surface is mostly flat, productive in rice, wheat, maize, oats, hemp, wine, and silk. The rice-grounds, which are laid under water until the rice is ripe in September, both here and all through the valley of the Po, are very unhealthy; but the undulating and highlands to the northward are exceedingly salubrious, and the aspect of the country extremely varied and picturesque.

The area and population of the provinces of the division of Novara are as follows:—

Provinces.	Area in Square Miles.	Population in 1848.
Novara	533	178,069
Lomellina	480	139,849
Pallanza	312	64,030
Ossola	520	36,331
Valsesia	390	35,879
Total	2,135	453,958

Towns.—The province of Novara is named from its chief town *Novara*, an old, irregularly built, but strongly fortified town, which is situated 50 miles N.E. from Turin, and 10 miles from the left bank of the Ticino, on the high road from Milan to Turin, and has a population of about 20,000. It gives title to a bishop, and has an ecclesiastical college, a gymnasium, two hospitals, a public library, and a considerable trade in silk and agricultural produce. Some of the churches, convents, and the palaces of the nobility are handsome structures. The total defeat of the Sardinian army near this town by the Austrians under Marshal Radetzky (March 23, 1849) led to the abdication of the Sardinian King Carlo Alberto, and to the renunciation on the part of Sardinia of all claim to the sovereignty of Lombardy. [ARONA.] *Borgomanero*, 19 miles N. from Novara, on the left bank of the Agogna, is a well-built bustling town, with 7095 inhabitants. *Galliate*, situated near Novara, has 5858 inhabitants, including the commune. *Oleggio*, near the right bank of the Ticino, N. of Novara, has a population of 7420. *Treccate*, on the road from Novara to Vigevano, has a population of 5071.

In the Lomellina, the chief towns are—*Mortara*, the capital, which stands 46 miles S. by E. from Novara in an unhealthy situation among the irrigated rice-grounds; it is surrounded by walls, and has a population of 5316. *Gambold*, on the left bank of the Terdopio, 5 miles E. from Mortara: population, 5075. *Garlasco*, W.S.W. of Mortara: population, 5436. *Mede*, population 4415. *Sannazaro*, with 3980 inhabitants; and *Vigevano*, a large well-built walled town, which gives title to a bishop, and has 15,221 inhabitants, who trade in the produce of the country, and manufacture silk, soap, gauze, hats, and macaroni. Vigevano is 16 miles S.E. from Novara, about a mile and a half from the right bank of the Ticino, and on the southern road from Milan to Turin.

In the province of Pallanza the principal towns are—*Pallanza*, a small place of 2044 inhabitants on the shores of the Lago-Maggiore, with a college and the provincial courts. *Intra*, a little N.E. of Pallanza, which has 3743 inhabitants.

The chief town of the province of Ossola is *Cannobbio*, several miles higher up the lake: population, 2137. *Domo d'Ossola*, a well-built cheerful little town of 2025 inhabitants, situated in a beautiful part of the valley of the Toccia. At Domo-d'Ossola, the traveller who crosses the Alps from Switzerland by the Simplon road, first receives his impression of the Italian sky, scenery, and manners.

The province of Valsesia has for its capital *Varallo*, which is situated on the left bank of the Sesia, and has about 3000 inhabitants.

(*Nuova Circonoscione delle Provincie dei Regii Stati in Terraferma.*)

NOVGOROD SEVERSK. [CZERNIGOF.]

NOVL [GENOA, Province of.]

NOVO MOSKOPFSK. [EKATERINOSLAV.]

NOVOGOROD, one of the eight governments of Great Russia, extends from 57° 18' to 61° 8' N. lat., 30° 10' to 39° 40' E. long. It is bounded N. by the government of Olonetz, E. by Wologda and Jaroslaw, S. by Twer, and W. by Pskow and St. Petersburg. The area including the surface of the large lakes of Ilmen, Bjelo-Osero, and Wosché, is 46,833 square miles. It is divided into ten circles, and the population in 1846 was 907,900.

The face of the country is diversified with hills, rivers, high banks, plains, valleys, marshes, and lakes. The northern part is low and swampy, and for the most part covered only with peat. In the southern part the soil is clayey or sandy. There are fine pastures, and the agricultural produce amply repays the labour of the husbandman. The Waldai Hills, so called from the town of Waldai, traverse the south part of the government to the frontier of Twer, forming a line of detached hills about 100 miles long and not more than 300 feet high, which are close to each other, and almost all of them cultivated. In the narrow intervening valleys there is a pleasing mixture of wood and water scenery. The principal rivers are the Msta, which comes from Twer, and the Wolchow. The Msta has some falls at Borovitschi, but is navigable below them, and runs into Lake Ilmen. The Wolchow, which issues from Lake Ilmen, and flows into the Ladoga Canal, is from 600 to 1200 feet in width, and has sufficient depth of water for barks during the whole summer. These two rivers, which are connected by Lake Ilmen, complete the great water-communication between the Volga and the Neva. The other chief rivers are, the Lovat, the Pola, and the Schelen, all of which fall into the Ilmen; the Schekona and the Wologa, which join the Volga; and the Sias and the Buscha, which run into Lake Ladoga. The government contains 42 rivers, and 3 large and 55 smaller lakes. The Bjelo Osero, or White Lake, in the north-east of the government, is the largest of the lakes; it is above 26 miles in length and as many in breadth, and is connected by the Schekona with the Volga. It covers an area of 432 square miles. Lake Ilmen, which is in the west of the government, is 26 miles long and 16 miles wide, receives many large and small rivers, and is connected by the Wolchow with the Ladoga Canal; its area is 346 square miles. Lake Wosché is about 14 miles long, and has an area of 177 square miles. The Novogorod Canal, 5 miles long, connects the Msta directly with the Wolchow, so as to avoid Lake Ilmen, the navigation of which is often dangerous on account of the frequent storms.

The climate is cold; winter begins a fortnight sooner and lasts a fortnight longer in the northern than in the southern circles. All the rivers and lakes are frozen during the winter, which lasts from November to May. Agriculture is the chief occupation of the inhabitants. The chief products are rye, barley, oats, some buckwheat, and great quantities of peas. Flax and hemp are cultivated for home consumption and for exportation. A variety of common pot-herbs, potatoes, and other vegetables, with some apples, and cherries are grown. A great part of the country is covered with forests; the most common trees are pine, fir, birch, alder, and elm; there is much underwood. Timber is a staple article of the government, but many of the forests are inaccessible in summer on account of the swamps. The crown forests alone cover a fifth part of the whole surface. All the forests abound in berries of various kinds; they likewise contain deer, elks, bears, wolves, lynxes, badgers, martens, hares, and squirrels. Owing to the length of the winter, the breeding of cattle is limited to what is necessary for the purposes of agriculture. The horses, oxen, and sheep are of the common Russian breeds; few swine and goats are kept. The fisheries on the lakes and rivers are extremely productive; in some of the rivers pearls are found. The mineral products are iron, freestone, coal, slate, salt, clay, lime, and marl. The principal salt-springs are at Staraja-Russa, where salt is made for the supply of the provinces of Novogorod and Twer.

Manufactures and Trade.—The manufactures comprise coarse linen, soap, tallow candles, and great quantities of potash. The bog-iron found in the government is smelted and manufactured into small articles of iron-ware. There are some distilleries. Bells are made at Waldai. The export trade of the province is confined to its own productions, corn, hemp, flax, salt, some iron, a great quantity of timber, some furs, hides, leather, and forage, most of which goes to St. Petersburg. The principal place of trade is Novogorod, the capital. The exports are conveyed to the commercial towns in caravans of 50 to 100 carts, or in sledges drawn by one horse. Great numbers of geese are sent from this government to St. Petersburg.

Towns.—*Novogorod, Novgorod, or Novgorod Welike*, that is, the Great New City, is the capital of the government. It is situated in 58° 32' N. lat., 31° 20' E. long., 120 miles S.S.E. from St. Petersburg, in a fine country on the banks of the Wolchow, where it flows out of Lake Ilmen, and on the Novogorod Canal. The city consists of three parts: the Kremlin, or fortress, standing on a steep hill on the north side of the river, surrounded with thick walls and towers; and on the south of the river the commercial town and the Sophienstadt, which are connected with the fortress by a handsome stone bridge. This city is one of the most ancient in the Russian empire, having been founded in the 5th century. In the 9th century it had its own prince, and Ruric made it the seat of a government, but the court was soon afterwards removed to Kiev. Jaroslaw, his successor, gave the city considerable immunities in 1036. The governors however made them-

selves independent of the Russian grand-dukes. The citizens, having gradually acquired more extensive privileges, established a republic in the 12th century, under a chief magistrate, whose office was hereditary, but whose power was limited. In the 13th century the Hanseatic League established a factory here, which continued 200 years. The town it is said had in the 15th century 400,000 inhabitants, which gave rise to the saying, "Who can resist God and the Great Novogorod!" Jealous of its prosperity, Ivan Wassiliowitch I. completely reduced it under his power in 1477, and it soon after began to decline. The final blow was given to its prosperity by the foundation of St. Petersburg, which diverted the commerce of the Baltic into a new channel. Novogorod is now reduced to comparative insignificance. It consists principally of scattered groups of mean houses, separated by ruins or by fields formerly built upon, and its population does not exceed 7000. Yet, when viewed from a distance, it has a very striking appearance, owing to its fine situation and the gilded domes of its 63 churches, which remain as monuments of its ancient splendour. The principal church is the cathedral, dedicated to St. Sophia, which stands in the Kremlin, and contains the coffin of St. Ivan of Novogorod, and celebrated bronze doors, 11½ feet high and 3 feet wide, adorned with numerous figures and inscriptions. The other buildings are, three monasteries, of which that of St. Sergius is the principal, a fine bazaar, a new palace, a poor-house, and an orphan school. The city contains a considerable sail-cloth factory, tanneries and soap and candle manufactories.

Other towns are—*Staraja-Russa*, on the Polista, south of Lake Ilmen, with 5600 inhabitants, and considerable salt-works; *Waldai*, on the west shore of the Waldai Lake on the eastern declivity of the Waldai Hills, with 3200 inhabitants; *Tikhwin*, on the Tikhwina, in the north of the government, population 4100; *Kirilow*, in the east of the government, with 2500 inhabitants, remarkable for the new canal opened in 1827, which joins the Schekona with the Suchona; *Bjelo-Oserak* on the south shore of the Bjelo-Osero, population 3000; *Borovitschi* at the head of the navigation of the Msta, population 3000; and *Ustjushna*, or *Schelesopotskajo*, with 3000 inhabitants, who have considerable trade in iron and timber.

NOYERS. [ALPES, BASSES.]

NOYON. [OISE.]

NOZAY. [LOIRE-INFÉRIEURE.]

NU GAREEP. [NORTHERN SOVEREIGNTY.]

NUBIA, a general and rather vague denomination which is often used to designate a vast extent of territory stretching along the banks of the Nile from the southern borders of Egypt to the frontiers of Abyssinia and Sennaar. The natives however apply the name of Noubas, or Wady-el-Nouba, to a comparatively small tract lying between Derr and the borders of Dongola. The extent of information possessed by the ancients concerning these regions, and especially concerning the kingdom of Meroe, will be found stated under ETHIOPIA.

The Nubas, or Nubats, are mentioned as a nation bordering on Egypt in the time of Diocletian, who gave up to them a strip of land seven days' march in length, above the first cataract, on condition of their preventing the Ethiopians and Blemmyes from attacking Egypt. In subsequent centuries however a kingdom of the Noubas was formed, which is mentioned by the Arabian geographers as a powerful Christian country at the time of the invasion of Egypt by the Moslems. Dongola was the residence of the king of the Noubas. The country appears to have continued to profess Christianity, and to have retained its independence till the 13th century of our era. Makrizi, an Arabian writer, says Nubia was inhabited by two different races—the Noubas and the Mokras—both of which came originally from Yemen; and Burckhardt remarks that at the present time two different languages are spoken, both differing from the Arabic, namely, the Noubas and the Kenous. Both races are black or nearly so, but have not the negro features nor woolly hair. Many of them have the peculiar style of countenance which is often seen in sculptures of the Egyptian temples.

Soon after the invasion of Egypt by the generals of the kalif Omar, a Saracen army advanced to Dongola, and obliged Koleydozo, the king of the Noubas, to agree to pay an annual bakt, or tribute, of 860 head of slaves. This agreement was maintained with little interruption for more than five centuries, when the Noubas having attacked and destroyed Assouan, Salah-ed-Deen, the famous sultan of Egypt, sent an army against them and defeated them. In the following century Dhaher Baybar, the Mameluke sultan of Egypt, sent an army into the Noubas country, which took Dongola, ruined most of the churches, taking away the golden crosses and silver vessels, and carried away a vast number of captives. For many years these contests between the kings of Noubas and the sultans of Egypt were renewed; the Egyptians being uniformly successful in their inroads, but unable apparently to retain possession of the country. In one instance it is related by Makrizi ('History of the Sultans of Egypt,' written in the 14th century), that in the expedition against Samamoun, king of Noubas, Dongola was taken, priests and nobles abandoned the king, a banquet was held in the temple of Yeous (Jesus), and a new king appointed, who agreed to pay tribute. No sooner had the army left Noubas, than Samamoun returned in disguise to Dongola, and knocked at the door of all his officers, who, when they came out and saw him,

kissed the ground in sign of allegiance. On the next morning he assembled the army and proceeded to the mansion of the new king, sent the Moslem guard back to Egypt, and seizing his rival, dressed him in an ox-skin and tied him to a post, where he was left till he died. Samamoun then wrote to the sultan of Egypt, asking his pardon, and promising to forward the bakt regularly, and in the meantime sent slaves and other presents, which were accepted.

These events happened in the early part of the 14th century. After that time little is known of the history of Nubia, but it seems that the power of the kings of Dongola being broken, the country became divided into various petty states, while fresh immigrations of Beduin Arabs took place, and Christianity became gradually extinct in all the countries between Egypt and Abyssinia. The old kingdom of Nubia ceased to exist, and instead of it rose various petty Mohammedan states, such as Sukkot, Mahass, Dongola, Berber, and others, each governed by a melek, or chief. In 1820, Mehemet Ali, the pasha of Egypt, directed an expedition against Upper Nubia, which overcame the opposition of the principal states, took possession of Kandy, and ever since Nubia has remained in at least nominal subjection to the rulers of Egypt.

The appearance of part of the country of Lower Nubia is described under *BATH-EL-HAJAR*. The districts of Sukkot and Dar-el-Mahass, which lie farther south, are more favoured by nature. The inhabitants of Mahass speak the Nouba language, but appear to be a distinct race from the Noubas, having more of the negro character, though they pretend to be descendants of the Koreysh Arabs.

Shendy is the principal place in the country of Atbara, the ancient island of Meroe, so called because it is in a manner inclosed between the Nile on the west, the Atbara or Tacazze on the north and east, and the Dandar, Rahat, and other streams coming from the mountains of Abyssinia on the south. The interior of this vast country is little known; it is nominally divided between the states of Shendy and Halfay, which is to the south of the former, the two meleks or chiefs of which are said to be able to bring into the field 30,000 well-mounted horsemen. The town of Shendy, the capital of the country, about half a mile from the east bank of the river, is large, and perhaps contains 5000 or 6000 inhabitants; the streets are wide and airy; the houses are low, but well built of clay; there are regular market-places, where, besides meat, fowls, liquid butter, grain, and vegetables, spices from Jidda, gum Arabic, beads and other ornaments for the women are sold. Great numbers of slaves from Abyssinia, Sennaar, and Dar-fur are purchased at a moderate price: a handsome Abyssinian girl sells for 40 or 50 dollars.

There is another town on the opposite or western bank of the Nile, called *Shendy-el-Gharb* (Shendy on the West), which is also large and well built, and contains about 6000 inhabitants. It has three market-places, where the people of the country exchange dourra and dollars for other provisions and goods. The people of Shendy have a bad character: they are said to be fraudulent, debauched, and treacherous.

Many Arab tribes inhabit the territory of Shendy, the great part of whom still lead the Beduin life. The merchants of the town, and especially the brokers, are mostly foreign settlers from Dongola, Sennaar, Dar-fur, and Kordofan. A succession of Arab meleks, or kings, of whom Caillaud gives the series, had ruled Shendy for nearly two centuries and a half. The habits of the people are nearly the same as at Berber, but there is more wealth, in consequence of the great trade, and more well-dressed persons are seen than in the latter country.

Not far from eastern Shendy, to the northward, near a village called *Assour*, or *Hatchour*, are a number of tarabyls, or pyramids, the largest of which is about 60 feet high. There are also extensive fragments of walls, columns, square pillars, and the remains of a small temple 60 feet in length, near the borders of the desert, and those of a larger one, with its propylæum. At another place called *Naga*, a little above Shendy, on the river side, are the remains of a Typhonium and other ruins; and farther south, at some distance from the Nile, are the remains of other temples, and of an avenue of sphinxes, and several sculptures executed in a rude and heavy style. About 12 miles nearly due N. from *Naga*, in a valley bordering on the desert, are the ruins of *El-Meçacourat*, which consist of several temples of small dimensions, connected by galleries and terraces, with a number of small chambers, the whole surrounded by a double inclosure. It is supposed that this retired spot may have been the Hieropolis, or sacred college, of the priests of Meroe, and that the city itself was near *Assour*.

Halfay, which lies south of Shendy, and between it and Sennaar, is a less important state. The head town, of the same name, lies above the confluence of the White and Blue rivers, and on the east bank of the latter, in about 15° 40' N. lat.

The monuments of Lower Nubia have been described by Gau, Burckhardt, Belzoni, and others. The most remarkable are the temples of *Abousambul*, *Dandour*, and *Soleb*; though the last, lying above the second cataract, is considered by some writers as in Upper Nubia. The monuments of Upper Nubia and of Meroe have been described by Waddington, Caillaud, and Rüppel.

NUBLE. [CHILI.]

NUMANTIA, a celebrated town of the Celtiberi in Spain, was situated on the river *Durius* (*Duero*), at no great distance from its source. It was built on a steep hill of moderate size. According to *Florus* (ii. 18), it possessed no walls, but it was surrounded on three

sides by very thick woods, and could only be approached on one side, which was defended by ditches and palisades. (*Appian*, vi. 76, 91.) It was 24 stadia in circumference. (*Appian*, vi. 90.) Its position has been a subject of considerable dispute; but it appears most probable that it was situated 3 or 4 miles N. from the town of *Storia*, in *Castilla la Vieja*.

Numantia is memorable in history for the war which it carried on against the Romans for the space of fourteen years. (*Florus*, ii. 18.) The Numantines were originally induced to engage in this war through the influence of *Viriathus*. They were first opposed by *Quintus Pompeius*, the consul (B.C. 141), who was defeated with great slaughter (*Oros.*, v. 4), and afterwards by several other Roman commanders, who were all defeated; till at length the Roman people appointed *Scipio Africanus* consul (B.C. 134,) for the express purpose of the conquest of *Numantia*. After levying a large army, he invested the town; and, having in vain endeavoured to take it by storm, he turned the siege into a blockade, and obtained possession of the place (B.C. 133) at the end of a year and three months from the time of his first attack. The Numantines displayed the greatest courage and heroism during the whole of the siege; and when their provisions had entirely failed they set fire to the city, and perished amidst the flames.

(*Appian*, *Rom. Hist.*, vi.; *Florus*, ii. 17, 18; *Livy*, *Epitomes*; *Plutarch*, *Life of Marius*; *Eutrop.*, iv. 17; *Vell. Pat.*, ii. 4.)

NUMIDIA was originally bounded E. by the dominions of Carthage, W. by the *Mulucha* or *Molocath* (the modern *Mulwia*), N. by the Mediterranean, and S. by the *Gætuli*. The Roman province of *Numidia* was of much smaller extent, being bounded W. by the *Ampsagas* (*Wadi-al-Kebir*), and E. by the *Tusca* (*Zain*), and thus corresponded to the eastern part of *Algiers*.

The Numidians were originally a nomadic people; they were called by the Greeks *Nomades*, and their country *Nomadia*. (*Polyb.*, xxxvii. 3; *Sallust*, 'Jug.' 18; *Pliny*, 'Nat. Hist.' v. 2.) When the Greek and Roman writers speak of the Numidians the term is usually limited to the two great tribes of the *Massasylii* and *Massylii*, the former of whom extended along the northern part of Africa from the *Mulucha* on the west to the *Ampsagas* on the east, and the latter from the *Ampsagas* to the territories of Carthage.

When the Romans first became acquainted with the Numidians, which was during the course of the second Punic war, *Syphax* was king of the *Massasylii*, and *Gala* king of the *Massylii*. *Gala* had a son of the name of *Masinissa*, who possessed extraordinary powers both of mind and body, and who served under *Scipio* in the African campaign before the close of the second Punic war, and in many engagements rendered essential service to the Roman arms. The great services of *Masinissa* did not pass unrewarded by the Romans. At the conclusion of the second Punic war he obtained all the dominions of *Syphax*, and a considerable part of the Carthaginian territory, so that his kingdom extended from the *Mulucha* on the west to *Cyrenaica* on the east, and completely surrounded the small district which was left to the Carthaginians on the coast. (*Appian*, viii. 106.) *Masinissa* laid the foundations of a great and powerful state in *Numidia*. He introduced the arts of agriculture and civilised life, amassed considerable wealth, and supported a well-appointed army. He died at the age of 90, B.C. 149.

Masinissa left three sons, *Micipsa*, *Mastanabal*, and *Gulussa*. The two latter died soon after the death of their father, but *Micipsa* lived to B.C. 118, and bequeathed the kingdom to his two sons *Adherbal* and *Hiempsal*, and to his nephew *Jugurtha*, who was an illegitimate son of *Mastanabal*. *Jugurtha* however, not content with a divided sovereignty, murdered *Hiempsal*, and obliged *Adherbal* to fly to Rome, where he appealed to the senate against the usurpation of his cousin. Many of the senators however were bribed by *Jugurtha*, and a commission was sent to Africa in order to divide *Numidia* between *Adherbal* and *Jugurtha*. The commissioners awarded the better part of the country to *Jugurtha*; but scarcely had they left Africa before he again attacked *Adherbal*, defeated him in battle, besieged him in *Cirta*, and, having obliged him to surrender, put him to a cruel death. When this news reached Rome war was declared against *Jugurtha*, which, after being carried on with various success, was at length terminated by the capture and death of *Jugurtha* B.C. 106.

After the death of *Jugurtha* the kingdom of *Numidia* appears to have been given to *Hiempsal II.* (*Hirtius*, 'Bell. Afr.' 56), who was probably the nephew of *Hiempsal I.* the son of *Micipsa*. *Hiempsal II.* was succeeded, about B.C. 50, by his son *Juba I.*, who took an active part in the civil wars against *Cæsar*. On the death of *Juba I.* (B.C. 46), *Numidia* was reduced to the form of a Roman province by *Cæsar*, who entrusted the government of it to the historian *Sallust*. (*Dion Cassius*, xliii. 2.) In the settlement of the empire after the death of *Anthony* (B.C. 30), the kingdom of *Numidia* was given to *Juba II.*, son of *Juba I.*, but he retained it only till B.C. 25, when he received *Mauritania* in exchange, and *Numidia* was finally reduced to a province.

The chief town in *Numidia* was *Cirta* (the modern *Constantina*, or *Constantineh*), which was the principal residence of *Syphax*, *Masinissa*, *Micipsa*, and *Juba*. *Hippo Regius*, the second town in the province, was situated near the coast, about a mile and a half S. from *Bona*. It was founded by the Phœnicians (*Sallust*, 'Jug.' 19), and is well known as the see of *St. Augustine*. It was called *Hippo Regius* to distinguish it from *Hippo Zarytus* in the province of *Africa*. It was a favourite

place of residence with the Numidian kings. (Sil. Italia, iii. 259.) At the mouth of the Tusca was the small town of Tabraca, the name of which is still retained in the island of Tabarkah at the mouth of the river. South of Tabraca, probably on the Tusca, was the important town of Vaga, or Vacca, which is described by Sallust as the chief commercial town in Numidia. (Sallust, 'Jug.,' 47.) South-west from Vacca was Tagaste, a free state according to Pliny (v. 4), and celebrated as the birthplace of St. Augustine.

The position of Zama, near which the memorable battle was fought between Scipio and Hannibal (B.C. 201, is uncertain. Some writers have considered it the same as the modern Zamora, which is situated south-west of Setif; but others, with more probability, identify it with the modern Zainah, south-east of Setif. Zama was strongly fortified, and was occasionally the residence of the Numidian kings. (Sallust, 'Jug.,' 56, 60, 61.) Juba fled to this town after he had been defeated by Caesar at Thapsus, but the inhabitants refused to admit him within the walls. (Hirtius, 'Bell. Afr.,' 91.) Zama is mentioned by Pliny (v. 4) as one of the free towns of the province; and the name of the bishop of Zama occurs in the councils of the African Church. [ALGERIE; MAURITANIA.]

NUN, CAPE. [MAROCCO.]

NUNEATON, Warwickshire, a market-town and the seat of a Poor-Law Union, in the parish of Nuneaton, is situated on the river Anker, in 52° 31' N. lat., 1° 28' W. long., distant 20 miles N. by E. from Warwick, 100 miles N.W. from London by road, and 96½ miles by the North-Western railway. The population of the town of Nuneaton in 1851 was 4859. The living is a vicarage in the archdeaconry of Coventry, and diocese of Worcester. Nuneaton Poor-Law Union contains 7 parishes and townships, with an area of 20,428 acres, and a population in 1851 of 13,532. The parish church is a small gothic building. The Independents, Baptists, and Roman Catholics have places of worship. The Free Grammar school, founded in 1553 by Edward VI., has an income from endowment of about 300*l.* a year, and had 56 scholars in 1851. There is also a National school. The Coventry Canal passes the town on the west. The chief branch of industry in the town and neighbourhood is the riband manufacture. The market is on Saturday; and there are three yearly cattle-fairs.

NÜRNBERG (incorrectly called *Nuremberg*), an ancient city of Bavaria, in the province of Franconia, and formerly a flourishing member of the Hanseatic League, is situated in 49° 27' N. lat., 11° 4' 15" E. long., 145 miles by railway N. by W. from Munich, and has 45,000 inhabitants, the great majority of whom are Lutherans. It stands in an extensive highly cultivated plain, 1008 feet above the level of the sea, on both banks of the river Pegnitz, which divides the city into two unequal parts: the northern is called the St. Sebaldus side, and the southern and larger the St. Lawrence side. The Pegnitz forms three islands within the walls, which are connected with each other and with the city by seven stone and nine wooden bridges, and one suspension-bridge.

Nürnberg is surrounded by an old wall, which has eight gates and a great number of round and square towers, and is strengthened at intervals by ramparts and small bastions. A moat, 100 feet broad, 50 feet deep, and lined throughout with masonry, incloses the whole. The four principal arched gateways are flanked by massive cylindrical watch-towers. The circuit within the walls is 3¼ miles, within which space there are many squares, or markets, and gardens. The streets are in general broad and well paved, but crooked and irregular. The houses are very old-fashioned, retaining externally, with little alteration, the old gothic style, and their internal arrangements recalling to mind the mode of private life of past ages. The fronts of the houses are often adorned with paintings: they are narrow, but often very deep, with a back front in a parallel street. One of the most remarkable ancient buildings is the old fortress called the Reichsfeste, which was probably erected in the 10th century under the emperor Conrad I. This fortress stands on a pretty steep eminence, and is an excellent specimen of the ancient style. It contains a gallery of pictures in 10 apartments, and many paintings on glass. The town-hall, one of the finest in Germany, is 275 feet wide, and contains among other curiosities a number of paintings by Albert Dürer, Hirschvogel, and others. Almost all the churches are worthy of observation for their architecture and the works of art which they contain. That of St. Sebaldus contains the tomb of the saint adorned with fine statues of the twelve apostles, a noble altar, the celebrated crucifix by Veit Stoss, and painted-glass windows of extraordinary beauty. The church of

St. Lawrence is a fine gothic edifice, extremely rich in old German paintings, but it is particularly celebrated for its tabernacle (Sacraments Hauslein), a tapering gothic spire of the most minute and graceful stonework, 64 feet high, supported by three kneeling figures, portraits of the artificers of the work, Adam Kraft and his two apprentices. To each of these churches a Latin school is attached. The church of St. Egidius, which was built in the Italian style at the beginning of the 18th century (1711-18), has a fine altar-piece by Vandyck. Near this church is the gymnasium, in front of which the city erected in 1826 the statue of Melancthon, by whom that institution was opened in 1526. The church of St. Clara has paintings on glass of the year 1278. In the chief market-place are the Frauen-Kirche, or Church of Our Lady, remarkable for its richly-carved decorations and sculptures by early German artists; and the Schöner Brunnen, or Beautiful Fountain, an elegant gothic spire of open stone-work, adorned with numerous statues of Christian, Heathen, and Jewish worthies. Both of these works date from about 1360. The former Dominican church contains the city library of 20,000 volumes, with a collection of the works of Melancthon and of works written at the time of the Reformation. Nürnberg has a gymnasium, a polytechnic institution, a great number of schools for all classes; several free schools; a seminary for teachers; a society for the promotion of manufactures, and a great many collections, both public and private, of works of art, antiquities, &c.

Before Vasco de Gama had doubled the Cape of Good Hope, Nürnberg was one of the most important commercial cities in Europe. It forwarded to the North the rich productions of India, which it received from Italy. The residence of the burgraves (from the year 1060) and occasionally that of the emperors was a great advantage, and above all its manufactures brought a great influx of wealth. Nürnberg was celebrated 400 years ago for working in brass, iron, and other metals, and for the manufacture of a long list of articles comprised under the general denomination of Nürnberg wares, musical and mathematical instruments, hardware, and toys of all kinds, both of metal and wood. The fine arts also flourished, especially painting and engraving. Its trade is still considerable in articles of its own manufacture in iron, steel, and brass; and in hardware of all kinds, turnery, looking-glasses, musical instruments, paper, engravings, painters' colours and pencils, glass, porcelain, watches, calicoes, carpets, toys, &c. There is an annual fair, at which a great deal of business is done. A branch railway 5 miles in length connects Nürnberg with Fürth, a manufacturing town of 15,000 inhabitants.

Nürnberg is first mentioned in history in 1050, and obtained its first charter in 1219. The city was governed by an oligarchy, like that of Venice. The emperor appointed the burgrave, who was generally regarded with little favour by the citizens. The ancestors of the royal family of Prussia first appear in history as burgraves of Nürnberg, and they were constantly at feud with the citizens until the burgrave Frederick IV. sold his castle and a portion of his rights to the town, in order to raise money to purchase the Mark of Brandenburg. No sooner had the citizens concluded the purchase than they levelled the castle to the ground. Nürnberg retained its freedom among all the changes made in Germany till 1803. It had a territory, for the most part well cultivated, nearly 500 square miles in extent, with 40,000 inhabitants, and a revenue of 800,000 florins; but the public debt amounting in 1797 to nine millions of florins, the revenue was not sufficient to pay the interest. The differences with the king of Prussia, who took possession of part of its territory, necessarily increased its difficulties, till the Act of the Confederation of the Rhine assigned over its territory to the king of Bavaria.

Albert Dürer was a native of Nürnberg, and also Melchior Pfünzing and Hans Sachs, the poets, and Martin Behem, who made the first serviceable terrestrial globe. Among the numerous inventions for which the world is indebted to Nürnberg are watches (first called Nürnberg eggs), the pedal, the air-gun, the clarinet, brass, the lock for fire-arms, and many others.

NYASSI LAKE. [AFRICA.]

NYEBORG. [FÜNEN.]

NYEKIOBING. [AALBORG.]

NYIR EGYHAZA. [HUNGARY.]

NYITRA. [HUNGARY.]

NYKÖPING. [SWEDEN.]

NYONS. [DRÖME.]

OADBY. [LEICESTERSHIRE.]

OAKHAM, or OKEHAM, Rutlandshire, a market-town, and the seat of a Poor-Law Union, in the parish of Oakham, is situated in the vale of Catnos, in 52° 40' N. lat., 0° 44' W. long., distant 95 miles N.N.W. from London by road, and 102½ miles by the Great Northern and the Leicester and Peterborough railways. The population of the town in 1851 was 2800. The living is a vicarage in the archdeaconry of Northampton and diocese of Peterborough. Oakham Poor-Law

Union contains 80 parishes and townships, with an area of 55,080 acres, and a population in 1851 of 11,513.

Oakham had an ancient castle, of which the county-hall is a portion; the other parts are in ruins. The gate of the castle-yard and the interior of the county-hall are covered with horse-shoes; the lord of the manor being authorised by ancient grant or custom to demand of every peer, on first passing through the lordship, a shoe from one of his horses, or a sum of money to purchase one in lieu of it. The

town consists of neatly-built houses. The agricultural-hall, erected in the High-street in 1837, is a commodious building. The church is chiefly of perpendicular character. It has a fine tower and spire; the spire is said to have been erected by Roger Flore, who died in 1483. The Wesleyan Methodists, Independents, Baptists, and Quakers have chapels. The Free Grammar school, founded in 1581, had 81 scholars in 1853. There are also National schools, a clerical and general book club, and a dispensary. A county court is held. In an open spot near the castle is a jail and house of correction for the county.

The Oakham Canal affords facilities for supplying the town with coal, and for sending corn to the manufacturing districts. Malting is carried on. A market is held on Saturday for corn, and on Monday for butter. There are several cattle fairs in the course of the year. The assizes and quarter sessions are held in Oakham.

OAKHAMPTON. [OKEHAMPTON.]

OAKLEY, GREAT. [ESSEX.]

OAXACA. [MEXICO.]

OBAN, Argyleshire, Scotland, a parliamentary burgh and seaport, is situated on the west coast of Argyleshire, about 35 miles N.W. from Inverary, in 56° 27' N. lat., 5° 27' W. long. The population was 1742 in 1851. Oban unites with Ayr, Campbeltown, Inverary, and Irvine in returning one member to Parliament. Besides the parish church, there are chapels for the Free Church, the United Presbyterians, Independents, and Episcopalians. The harbour is completely sheltered by the island of Kerera. The port is frequented by numerous fishing-boats, a few sloops, and by several steamers in the summer, conveying tourists to Staffa, Iona, and the Caledonian Canal. In the neighbourhood are the ruins of Dunolly castle, the ancient seat of the Macdougalls of Lorn.

OBERSTEIN. [BIRKENFELD.]

OBIDOS. [ESTREMADURA, Portuguese.]

OBV, RIVER. [SIBERIA.]

OCANA, a town of Spain, in the ancient province of Castilla la Nueva, and modern province of Toledo, 35 miles S.E. from Madrid, and 30 miles E. from Toledo, is situated on the great road between Madrid and Andalucia, where another road branches off to the east, leading to Valencia. It is consequently a place of considerable traffic, and had in 1845 a population of 4789. It is surrounded by old walls, and contains four parish churches, an hospital, a cavalry barracks, and an aqueduct of Roman construction, which supplies the town with excellent water. It has some manufactures of coarse woollen and linen cloths, soap, and leather. The Spanish army of Andalucia under General Aricaza was here defeated by the French army under Marshal Soult, Nov. 19, 1809.

OCAÑA. [NEW GRANADA.]

OCEANIA, a name given by Balbi and other French geographers to a fifth division of the earth. They make it extend from about 98° E. to 105° W. long.; the northern boundary being the Indian Ocean, Malacca Strait, the Chinese Sea, and the Pacific along the parallel of 35° N.; the southern boundary being the 56th parallel of south latitude. The name is thus made to comprise the Andaman Isles, all the islands of the Indian Archipelago, Sumatra, Java, Borneo, Celebes, the Moluccas, the Philippines, Formosa, Australia, New Guinea, New Zealand, and the countless groups of islands in the Pacific within the limits above stated to the islets of Sala-y-Gomez, the most eastern of the whole.

OCHILL HILLS. [CLACKMANNANSHIRE; FIFESHIRE; KINROSS-SHIRE.]

OCKBROOK. [DERBYSHIRE.]

OCKENDON, SOUTH. [ESSEX.]

OCZAKOW, a town in the government of Kherson, in South Russia, is situated in about 46° 37' N. lat., 31° 30' E. long., on a small brook near the mouth of the river Dnieper, which is here about 4½ miles wide between Oczakow and Cape Kilborun. It was formerly one of the most important fortresses in this part of the country, and had a citadel, the walls of which were 25 feet high. The population was at that time 5000. It is chiefly remarkable for the importance that was attached to it in the wars between the Turks and the Russians in the last century, when it was frequently taken and occupied by both parties. After a six months' siege by the Russians under Suwarroff, it was taken by storm in 1788; and the Porte ceded the place, which was quite devastated, at the peace of 1791. The town has greatly declined since the rise of Odessa, and the population is now stated to be only about 3000.

ODENSE. [DENMARK.]

ODENWALD. [GERMANY.]

ODER. [AUSTRIA; BRANDENBURG.]

ODESSA, a seaport and important commercial town of South Russia, in the government of Kherson, stands in 46° 28' N. lat., 30° 44' E. long., at the north-western extremity of the Bay of Adschai, on the western shore of the Black Sea, and has a population of about 80,000, excluding the garrison. A miserable village called Kodschabeg, marked the site when the empress Catherine obtained possession of the country as far as the Dnieper in 1791. In 1794 the foundation of the town was laid, and public works were commenced. The site is well chosen. There is no river, but the bay has sufficient depth of water, almost to the shore, for the largest men-of-war. The bay is seldom frozen, and then only for a short time.

The emperor Alexander appointed the duke of Richelieu, a French emigrant nobleman, who had entered the Russian service, to the post of governor of the new town, and under his judicious administration its prosperity rapidly increased. In 1804 the population already amounted to 15,000. The town is regularly built in the form of an oblong parallelogram, on a limestone cliff sloping towards the sea. From the south-eastern extremity of the town runs a long fortified mole, called the Quarantine Mole, which terminates in a lighthouse, and shelters a great crowd of ships of all nations. The Imperial Mole at the northern extremity of the cliffs and of the town, is also fortified, and shelters the Russian ships, and large stores on the quays. The harbour is further defended by a battery at the foot of the cliffs, and nearly midway between the moles. The harbour, which is formed by these two large moles, and can contain some hundreds of ships, is defended by strong works. At the eastern extremity is the citadel, and at the other the lazaretto; on a projecting point of land on the south side of the bay there is a lighthouse. The roadstead is very spacious, and the anchorage safe, being protected against all winds except the south-east.

The town is well built; the streets, which are planted with acacia trees, are broad and straight, but only partially paved; in wet weather they are almost impassable for mud, in dry for dust. The houses are in general two stories high, and built of stone. There are many fine buildings; among them the church of St. Nicholas, which is the Russian cathedral, the Protestant church, the admiralty, the hospital, the custom-house, the exchange, and the theatre, where Russian pieces, Italian operas, and Greek tragedies are performed. There is a fine public garden in the middle of the town. Between the harbour and the town there is a line of barracks, consisting of sixteen detached edifices; there are in the town a very large number of corn-magazines, well built of stone, resembling palaces without windows; and a bazaar, which contains 550 shops. The shops are fine and well supplied with European goods. In the centre of the boulevard, which is the principal promenade, and which is connected with the quay by a magnificent staircase of 200 stone steps in ten flights, supported on arches, is a statue of the Duke of Richelieu. At each end of the boulevard is the exchange, and on the cliff at the other end stands the princely mansion of Count Woronzoff, and a majestic line of houses, built in the Grecian style, runs along the whole boulevard.

To the north of the town there are magazines of salt and meat, and to the west of them reservoirs of water. Odessa used often to suffer from want of water, but it is now supplied by means of an aqueduct. The chief establishment for education is the Richelieu lyceum; near it are the museum of antiquities, and the library. The museum contains remains from the site of ancient Greek colonies on the northern shores of the Black Sea. The town has also schools for jurisprudence, political economy and commerce, a training school, an academy of Oriental languages, several public baths, and a botanic garden. The inhabitants are composed of Russians, Jews, Poles, Greeks, Armenians, Germans, &c.

In the year 1817 Odessa was declared a free port for thirty years. The space allotted to the free port was inclosed with a circular wall to prevent smuggling into the interior. The most important exports are corn to Western Europe, and to the countries round the Mediterranean, including Constantinople; flax, timber, tallow, and hides. The imports are colonial produce, specie, and manufactures of all kinds. English, French, and Italian mercantile houses are established in the town; many Greeks, Jews, and Armenians are also largely engaged in trade. Odessa has considerable breweries and distilleries, and manufactories of woollens and silks, tobacco, soap, and candles. There are many gardens and large vineyards in the environs, beyond which the dreary steppe commences.

In 1845 Odessa exported 1,439,178 quarters of wheat: in 1847, a famine year in the west of Europe, the exports rose to 2,081,878 quarters; in 1852 the quantity exported was 1,464,818 quarters.

In 1846 the total value of the imports was 7,746,407 silver rubles; in 1847 11,113,298 silver rubles, including 4½ millions of specie. In 1849 the value of the goods imported rose to 10,373,360 silver rubles; this large increase in the imports was caused by merchants importing as largely as possible before the increased duties imposed in that year took effect.

The total value of the exports in 1846 amounted to 22,763,052 silver rubles; in 1847 to 34,764,962 silver rubles; and to 19,177,625 silver rubles in 1849.

In 1844 about 8½ per cent. of the wheat exported from Odessa went to Great Britain; 3½ per cent. to the north of Europe; and 88½ per cent. to the Mediterranean sea-board. In 1849 these ratios had changed as follows:—50 per cent. to Great Britain; 2½ per cent. to the north of Europe; and 47½ per cent. to countries round the Mediterranean.

The defences of Odessa were greatly injured in the attack of the French and English fleets upon the town, April 22, 1854.

ODIHAM, Hampshire, a market-town in the parish of Odiham, is pleasantly situated in 51° 15' N. lat., 0° 56' W. long., distant 25 miles N.E. from Winchester, and 40 miles S.W. by W. from London. The population of the parish of Odiham in 1851 was 2811. The living is a vicarage in the archdeaconry and diocese of Winchester.

Odiham was anciently a free borough, belonging to the bishop of Winchester. It possessed a royal residence and park; the remains of

the mansion have been converted into a farm-house. Besides the parish church there is a chapel for Independents. An Endowed school for boys, founded in 1750, has a yearly income from endowment of 38*l*., and had 43 scholars in 1852. There are also National schools. The Basingstoke Canal affords facilities for trade to the district. There are two tanneries and some extensive breweries in the town. The market-day is Tuesday. There are two yearly fairs. About a mile north-west from the town are the remains of an old castle, in which David Bruce, king of Scotland, was confined for eleven years after being taken at the battle of Neville's Cross.

OEDENBURG, the capital formerly of the palatinate, now of the district of Oedenburg in Hungary, is situated in a pleasant and fruitful country, amidst extensive vineyards and woods of chestnut-trees, about 2½ miles from the south-western part of the Neusiedler See, 57 miles by railway S.W. from Vienna, and has about 13,000 inhabitants, who have been celebrated from remote ages for the culture of the vine. The town is not large, but it is regular and well paved; the suburbs are extensive and well built. It has several fine churches and convents, a Calvinist church, a Catholic and a Protestant lyceum, a gymnasium, a military academy, and a theatre. The inhabitants manufacture considerable quantities of woollen cloths, calico, playing-cards, snuff and tobacco, potash, nitre, and sugar. Oedenburg is a great mart for the sale of cattle, pigs, and the agricultural produce of the surrounding country—wine, corn, wax, honey, and tobacco. In the vicinity there are very extensive coal-mines. Oedenburg was founded by the Romans, and was the station of the 15th legion, which was called *Sompronium*, whence *Soprony*, the Hungarian name of the town. Many Roman antiquities, inscriptions, coins, lamps, sarcophagi, &c., have been found in the neighbourhood.

OEHRINGEN. [JAXT.]

OELAND. [ALAND.]

OELS. [SILESIA.]

OESSEL, an island in the Baltic, situated between 58° and 58° 40' N. lat., 21° 40' and 23° 20' E. long., stretches across the entrance of the Gulf of Livonia, or Bay of Riga. It extends from south by west to north by east about 45 miles, with an average width of about 25 miles; a narrow peninsula extends from its south-western corner about 20 miles southward. The area of the island is about 1200 square miles. The surface is uneven and rocky, but it is covered with a layer of fertile vegetable mould. The winters are much less severe than on the adjacent continent. The island produces grain, of which a part is exported, flax, hemp, and a little tobacco. A considerable portion of the island is used as pasture-grounds. The fisheries round the coasts of the island afford occupation to many hands. The inhabitants amount to about 40,000. The island belongs to the government of Livonia, of which it constitutes the circle of Arensburg, so called from the principal town Arensburg. [LIVONIA.] Oesel was early taken possession of by the Danes, who ceded it to Sweden in 1645. In the beginning of the 18th century it was taken by Russia, to which power it was finally ceded in 1721, together with Livonia.

OETTINGEN, formerly an independent county in the north part of Suabia, now belongs partly to Bavaria and partly to Würtemberg. It is a very fertile country, watered by the rivers Wernitz and Eger, and produces corn, hemp, flax, and timber. It has a good breed of horned cattle and horses, and is particularly famous for its geese. It has likewise iron, saltpetre, and remarkably fine stone for building. The county is now divided between the two houses of Oettingen-Spielberg and Oettingen-Wallerstein. Oettingen-Spielberg is in Bavaria, and has an area of 84 square miles. The prince resides in the town of Oettingen on the Wernitz, in 48° 57' N. lat., 10° 38' E. long. It is a well-built town, with two palaces, a gymnasium, a Lutheran and a Roman Catholic church, some manufactures of cotton, linen, and worsted, and about 3500 inhabitants. Oettingen is a station on the railway from Augsburg to Nürnberg, and is 40 miles S. from the latter.

The prince of Oettingen-Wallerstein has a territory of 252 square miles, partly in Würtemberg and partly in Bavaria. *Wallerstein*, the capital and residence of the prince, is a well-built market-town, with 1500 inhabitants. The prince's palace is a handsome building, and contains a good library and a collection of paintings.

OFEN. [BUDA.]

OFFENBACH. [HESSE-DARMSTADT.]

OFFIDA. [FERMO.]

OGLIO, RIVER. [AUSTRIA.]

OHIO, one of the United States of North America, extends between 33° 24' and 42° N. lat., 80° 34' and 84° 42' W. long. It is bounded E. by the state of Pennsylvania; S.E. and S. by the Ohio River, which separates it from the states of Virginia and Kentucky; W. by Indiana; N.W. by Michigan; and N. by Lake Erie. The area is 39,964 square miles. The population (only 45,365 in 1800) in 1850 was 1,980,329 (of whom 25,279 were free-coloured persons), or 49.55 to a square mile. The inhabitants being all free, the federal representative population is the same as the total population in 1850; this, according to the present ratio of representation, entitles the state to send 21 representatives to Congress, being the largest number next to New York and Pennsylvania, and 8 more than Virginia, the state next in representative rank. To the Senate, like each of the other states, Ohio sends 2 representatives.

Surface and Soil.—The surface of this state may be divided into

two nearly equal portions, the Hilly and Prairie Regions; the Hilly Region comprehending the eastern and southern districts, the Prairie Region the northern and western districts.

The *Hilly Region* contains some level and low land extending about a mile and a half along the banks of the Ohio. It is very fertile, though in some parts swampy and subject to inundations. Behind this level tract the country rises suddenly into steep hills, called the River Mountains, which in general range between 300 and 500 feet above the level of the river. From these hills the country extends in an uneven hilly plain furrowed by valleys. Rocks rarely appear on the surface to any great extent. The general elevation of these uplands varies from 800 to 1000 feet above the sea-level. The bottoms along the principal rivers, which are frequently extensive, are exceedingly fertile, and produce very rich crops of grain. The declivities of the hills, when not too steep for cultivation, and the higher grounds between them, are less fertile, but by no means barren. The soil of both the bottoms and hills is almost uniformly an argillaceous loam: the soil of the valleys is very deep, and contains much lime and vegetable mould. In its natural state the whole region is covered with trees, but though timber is still abundant vast quantities have been cleared away. The uplands contain different kinds of oak, hickory, walnut, ash, poplar, dogwood, mulberry, sassafras, and some yellow pine. The levels along the Ohio and the other rivers were in their natural state overgrown with button-wood, white pine, hemlock, butternut, the tulip-tree, locust, honey-locust, black alder, beech, elm, cedar, and cypress. The maple-tree is common all over the state.

The *Prairie Region* is an extensive undulating plain, the general elevation of which hardly exceeds 1000 feet. A tract of slightly-elevated upland forms the watershed between the rivers which run southward to the Ohio and northward to Lake Erie. The surface of this plain presents an alternate succession of woodlands and prairies. In the eastern districts the woodlands prevail. The prairies are both wet and dry, but are all fit for cultivation. Along the south-western shores of Lake Erie is an extensive tract covered with a deep swamp called the Black Swamp, and swamps occur elsewhere also; but the whole extent of swamp-land in the state only amounts to 303,320 acres. A great part of the marshy and wet country is heavily wooded, especially with beech. The valleys by which this table-land is intersected, and in which the rivers flow, are less depressed below the surface of the plain than farther south; but they are broader and more regularly defined, being separated from the adjacent uplands by parallel ranges of bluffs, or mural banks. They are generally very fertile. Besides beech, which is most common on the swampy tracts, this region still contains large quantities of oak, ash, elm, hickory, sugar-maple, wild cherry, black walnut, poplar, and in some places cotton-wood and sycamore, most of which, especially the sycamore, attain a gigantic size.

Hydrography, Communications.—Ohio is in almost every part largely provided with rivers and smaller streams, furnishing considerable navigable facilities, and a vast amount of water-power for mechanical purposes. The Ohio River runs along the eastern and southern boundary-line of Ohio: it is described under *MISSISSIPPI RIVER*. The other rivers which drain this country, though comparatively small, are of great importance as affording the means of establishing a very extensive water-communication in the interior of the state, and between the countries bordering on Lake Erie and on both sides of the Ohio River. The most important of the rivers which fall into Lake Erie are—the Maumee, the Sandusky, and the Cuyahoga. The *Maumee* is formed by the union of the St. Mary's, the Little St. Joseph's, and the Auglaize rivers. The united river is about 100 miles long, and navigable for 18 miles, to Perrysburg, by steamers and schooners: in spring and fall it is navigable by river-boats to Fort Wayne in Indiana. It empties itself into the western corner of Lake Erie by a wide mouth called Maumee Bay. The *Sandusky* river originates in Richmond and Crawford counties, in two branches which flow westward, and after their union turn northward. Towards its mouth it declines to the north-east, and falls into Sandusky Bay, a shallow sheet of water united to Lake Erie by a narrow strait. Its length is about 100 miles, and it is navigable for small boats at high water. The *Cuyahoga* is the most important of the rivers which fall into Lake Erie, though its course does not exceed 60 miles. It rises west of 81° W. long., about 10 miles from the shores of Lake Erie. It flows first in a southern and south-western direction to 41° 8' N. lat., where it takes a north-north-western course to Lake Erie, where its mouth forms the harbour of Cleveland. In its natural state it was not navigable, but the waters are used to feed the Erie and Ohio Canal.

The most important rivers which fall into the Ohio are—the Muskingum, Scioto, and Miami rivers. The *Muskingum* rises near 41° N. lat., south of the southern bend of the Cuyahoga River, in two branches, of which the eastern is called Tuscarawas Creek and the western Chippewa Creek. By their union they form the Muskingum, which has a length of about 120 miles, and falls into the Ohio at Marietta. By means of locks and short cuttings it has been rendered navigable to Dresden, 96 miles. The *Scioto* River rises near 40° 30' N. lat., and flowing southward nearly through the middle of the state, falls into the Ohio at Portsmouth, after a course of about 250 miles. It is navigable for large boats nearly 200 miles upward. The *Miami* originates not far from the source of the Scioto River, and runs in a

general southern direction about 120 miles. It becomes navigable a few miles above Piqua for keel-boats during half the year. In the dry season it ceases to be navigable at Dayton, about 80 miles from its mouth. The navigation is always rendered difficult by numerous sand-bars.

Ohio in addition to its rivers possesses very extensive and complete artificial means of communication. Of canals there are about 830 miles in operation. The chief line is that known as the Ohio and Erie Canal, which commences at Cleveland, where the Cuyahoga falls into Lake Erie, and joins the Ohio at the mouth of the Muskingum River. The Ohio is here only 24 feet lower than the surface of Lake Erie, and the highest part of the intervening country is only 337 feet above Lake Erie. The canal which unites the Muskingum and Scioto rivers, was begun in 1825 and finished in 1832; it is 307 miles in length, and has several short branches. Other important canals are the Miami, 65 miles long, and the Miami Extension 131 miles long; the Muskingum Improvement, the Sandy and Beaver Canal, and various shorter but very valuable lines.

The ordinary carriage- and bye-roads are abundant, and in general well laid out and well kept. The railways of Ohio in length exceed those of any other state in the Union, and are among the first in completeness and value. The chief railway centres are Cincinnati on the Ohio; Cleveland and Sandusky on Lake Erie; and Columbus, Mansfield, Mount Vernon, Bellefontaine, Newark, Lanesville, Green-ville, Xenia, Sidney, Dayton, Hamilton, Springfield, and some other towns in the interior. In all, according to the 'American Railway Times,' there were in Ohio on the 1st of January, 1855, 47 lines of railway in operation, of the aggregate length of 2927 miles; and 1681 miles were in course of construction or projected.

Geology, Mineralogy, &c.—In no part of Ohio are there any eruptive or metamorphic rocks. The lithology of the state in fact belongs entirely to the Palæozoic series. Lower Silurian strata occupy a considerable area, of which Cincinnati is the centre; the rocks are mostly blue-limestone. Bounding the Lower Silurian on the north and east is a tolerably wide belt of Upper Silurian strata; chiefly consisting of what is here known as the cliff limestone. Outside these again occur strata of the Devonian system, comprising for the most part only a single group, which contains very fossiliferous limestone beds of a light gray, often whitish colour, and frequently much resembling the limestone of the Silurian series with which they are in connection. Devonian strata likewise occupy the whole northern border of the state, forming almost everywhere the shores of Lake Erie. Much of the centre of the state belongs to the Lower Carboniferous formation, which is throughout in contiguity with the Devonian. This formation is here represented by black argillaceous slate, very fine whitish sandstone, and limestone. The eastern side of the state is almost entirely occupied by Upper Carboniferous strata, or coal-measures, forming a part of the great coal-field of Ohio, Pennsylvania, and Virginia.

Ohio has very considerable mineral wealth, though it is as yet only partially developed. Iron-ore of much richness extends over an area above 100 miles long, and 10 or 12 miles wide; and for the most part in close connection with coal. The coal, which as mentioned above, prevails throughout the eastern side of the state, is bituminous, and of good quality: the coal-measures are said to be from 7000 to 8000 feet thick, the coal itself occurring in beds of from 3 to 30 feet in thickness. The number of mines is rapidly extending as wood increases in price, owing to the demolition of the forests. The principal coal-mining districts are Talmadge in Summit county, Pomeroy in Meigs county, and Nelsonville in Athens county; but mining is also carried on in the adjoining counties. Salt-springs of great value occur throughout the area occupied by the Lower Carboniferous strata; and rock-salt in the Devonian, at Athens, on the Muskingum, and elsewhere. Gypsum is found in many places. Limestone of various kinds, as seen above, forms the characteristic rock of most of the prevalent formations of Ohio. Much of it is valuable as a building stone, and much more for burning. Marble of good quality is obtained. At Yellow Springs, 64 miles N. from Cincinnati, are medicinal springs much resorted to by invalids. There are sulphur springs in Delaware county.

Climate.—The climate of Ohio is colder than that of England in winter, and warmer in summer. The mean annual temperature at Cincinnati on the Ohio, near the south-western corner of the state, which is sheltered on the north by high hills, is 53.56°, or about 8.86° higher than that of London. The mean temperature of the winter at Cincinnati is 36°; that of the summer at Cincinnati 72°. At Steubenville on the Ohio, near the centre of the eastern border of the state, the mean of the highest temperature during 21 years was 95°, of the lowest 12°. Vegetation does not begin before the first week of March. The first night-frosts occur at the end of September or beginning of October. Most of the rivers, including the Ohio, are covered with ice every winter. The south-west wind prevails for nine months in the year, from March to November included. In December, January, and February the wind generally blows from the north-west. The greatest quantity of rain falls in April and May; the mean annual quantity is nearly 40 inches.

Productions.—The wealth of Ohio chiefly consists in its agricultural productions. Maize is its staple, a larger quantity being grown than

in any other state, and about one-tenth of the entire crop raised in the Union. The wheat crop is about one-seventh of that raised in the Union, and greater than that of any other state except Pennsylvania. Rye, oats, barley, buckwheat, and tobacco are also extensively cultivated. Cotton arrives at maturity only in the districts along the Ohio River, and is liable to be injured by frost; but the cultivation of cotton, as well as of indigo, which was formerly grown to some extent, has been nearly or quite abandoned. Potatoes are raised in very large quantities; sweet potatoes and other vegetables are also largely grown. A good deal of attention is given to the cultivation of flax and hemp. Most of the fruit-trees of England succeed well, especially apples; and the orchard products form an important item in the agricultural returns. Maple-sugar is made in large quantities. The wild grape grows luxuriantly on the southern side of the hills; and vineyards have been very successfully planted—Ohio now ranking as the second wine-growing state of the Union. The cultivation of the grasses is not neglected.

Horned cattle are very abundant, a greater number being possessed by Ohio than any other state. Swine are also extremely numerous. Of both horses and sheep Ohio owns a greater number than any other state. The cattle and swine are driven in great numbers to the Atlantic states for sale, or sent down the Mississippi. Salt-pork also constitutes an important article of exportation. A larger quantity of wool is sent to market by Ohio than any other state. Butter and cheese are made very extensively.

Bears and deer are still found in the forests, and the flesh of both is dried and cured for sale. The woods abound with wild turkeys, geese, ducks, pheasants, and partridges. The rivers, especially the Ohio, are well stocked with fish, and some of them attain a great size. Turtles are also found in them.

Manufactures, Commerce, &c.—The manufactures of Ohio have not attained to very great importance. The total number of males above 15 years of age employed in commerce, trade, manufactures, mechanic arts, and mining, at the Census of 1850 was 142,687; the number employed in agriculture was 270,362. The principal manufacture is of iron, the various branches of which in 1850 employed nearly 6000 persons. There are very few cotton-mills; woollen-factories are more numerous, and the woollen manufacture appears to be growing in importance. Tanneries are also numerous. Distilleries are on an extensive scale, Ohio making a greater quantity of spirits than any other state. There are in the great towns large numbers of machine-shops, locomotive-works, railway-car and carriage factories, hardware and cutlery works, breweries; tobacco, oil, soap, and candle factories; glass-works, potteries; grist, flour, saw, and paper mills, &c.

The direct foreign commerce of Ohio is not very great, its exports and imports being chiefly made through New Orleans or one of the Atlantic ports. Almost the only direct foreign trade is that carried on with Canada by the ports of Lake Erie. The total value of the exports for the year ending June 30th 1853 was 158,418 dollars; of the imports, 847,760 dollars, of which goods to the value of 750,598 dollars were conveyed in American vessels. The domestic commerce has increased enormously during the last few years. In 1850 the exports from the lake ports alone amounted to 17,627,885 dollars, and the imports to 25,035,955 dollars; and both exports and imports have since much more than doubled—thus, the exports of Sandusky, which in 1850 amounted to about 3 million dollars, had increased in 1852 to above 20 million dollars, and the imports from 7 million to 45 million dollars, the other lake ports meanwhile increasing proportionably. The exports of Cincinnati are said to average 24 million dollars a year, and the imports 40 million dollars. The total shipping owned by the state in 1850 amounted to 64,463 tons, of which more than two-thirds belonged to the lake ports; 28,653 tons were propelled by steam-power. In 1863 there were 90 vessels built in the state, of which 4 were ships, 28 schooners, 28 sloops and canal-boats, and 35 steamers.

Divisions, Towns, &c.—Ohio is divided into 87 counties. Columbus is the political capital; but Cincinnati is the commercial centre, and by far the most populous city in the state. CINCINNATI is described in a separate article; the other more important towns we notice here; the population is that of 1850:—

Columbus, the capital, stands on rising ground on the left bank of the Scioto River, in 39° 57' N. lat., 83° 3' W. long., 896 miles W.N.W. from Washington: population, 17,882. The site of the city, when fixed on in 1812 as that of the future capital of the state, was in the wilderness. The city is regularly laid out, with broad streets crossing at right angles. The capitol, or state-house, is a costly new edifice, erected in place of a former one destroyed by fire in 1852: it is 304 feet long and 184 feet wide. The other principal public buildings are the state penitentiary; state asylums for the blind, deaf and dumb, and insane; and several churches, colleges, and schools. Since the formation of the extensive state railways, many of which centre in Columbus, the city has become a busy commercial and manufacturing place, and is rapidly growing in wealth and population.

Cleveland, a city and port of entry, on the right bank of the Cuyahoga River, at its outlet in Lake Erie, population 17,034, is the chief lake-port of the state, and the commercial capital of northern Ohio. Cleveland is the northern terminus of the Ohio and Erie Canal, and the centre of the lake, shore, and northern railways, which place it in communication with all the trading towns of this and the adjoining

states, while it has by the lake considerable commerce with Canada. The greater part of the city occupies a dry and healthy site. The streets are wide, and the houses generally well built. Besides the court-house, there are numerous churches and schools, a lyceum, three music-halls, &c. The harbour, which is one of the best in the West, has been improved by the carrying out of a pier on each side 425 yards into the lake, with a lighthouse at the head of each. There are extensive factories of locomotives, machinery, &c.; also flour-mills, &c. Ship-building is carried on to some extent. *Ohio City*, on the opposite bank of the Cuyahoga, population (including Brooklyn) 6375, though under a distinct incorporation, is really a suburb of Cleveland. The two places are connected by bridges.

Dayton, a city, and the capital of Montgomery county, on the Miami Canal, at the confluence of the Mad River, 66 miles W.S.W. from Columbus: population, 10,977. The city is regularly laid out, and neat in appearance. The court-house, which is built of white marble, is 127 feet long by 62 feet wide, and is described as in "style of architecture that of the Parthenon, with slight improvements." There are several churches and schools, a popular college, a literary association, three banks, two large market-houses, &c. Dayton possesses a vast amount of water-power, and is the principal manufacturing town in these parts. There are very extensive manufactories of railway-cars, stoves, hardware, paper, flour, linseed-oil, oil-cake, &c. The town is also a very important centre of canal and railway traffic.

Akron, at the junction of the Ohio and Pennsylvania and the Ohio and Erie canals, 125 miles N.E. from Columbus, population 3266, is a place of considerable trade, and has good railway accommodation. *Canton*, on the Ohio and Pennsylvania railway, 105 miles N.E. by E. from Columbus, population 2603, is one of the rising towns of the state. *Chillicothe*, on the right bank of the Scioto, 40 miles S. by E. from Columbus, population 7100, is a large and well-built place; contains a court-house, several churches, schools, market-houses, and other public buildings; holds a high rank as a commercial and manufacturing town; and possesses ample railway and canal communication. *Circleville* occupies the site of some ancient fortifications on the left bank of the Scioto, 28 miles S. by E. from Columbus: population, 3411. The town is laid out with great regularity; contains several good public buildings, and is rapidly growing in importance as a commercial and manufacturing village. *Hamilton*, on the left bank of the Miami River, 90 miles W.S.W. from Columbus, population 3210, is a leading centre of trade and commerce for the south western part of the state. The Miami Canal passes through the town, and several railways connect here. *Lancaster*, on the Hooking River and Canal, 27 miles S.E. from Columbus, population 3483, is a place of considerable trade, and has large flour-mills, machine-shops, &c. *Mansfield*, on the Sandusky, Mansfield, and Newark railway, 67 miles N. by E. from Columbus, is a busy town of 3557 inhabitants. *Marietta*, between the Great and Little Muskingum rivers, at their confluence with the Ohio, about 100 miles S.E. from Columbus, population 3175, is the oldest town in the state, having been founded in 1788. It is regularly laid out, contains the usual county buildings, churches, and schools, Marietta college (which has 6 professors and 68 students), possesses extensive iron-foundries, steam saw-mills, flour-mills, &c., and has regular communication by steam-boats with Cincinnati, Pittsburg, &c. *Massillon*, on the left bank of the Tuscarawas River, and on the Ohio Canal, 95 miles N.E. by E. from Columbus, population about 3500, is the capital of a rich agricultural district, and is locally known as 'the Wheat City,' from the great amount of business done in that grain. The town is pleasantly situated, well-built, contains several excellent public buildings, carries on a large trade, has considerable manufactures, abundant railway and canal accommodation, and is rapidly rising to be one of the leading towns of the interior. *West Massillon*, on the opposite side of the river, is partaking of its prosperity. *Newark*, at the junction of the upper branches of the Licking River, 83 miles E. by N. from Columbus, population 3654, is well situated for trade, being on the Ohio and Erie Canal, and the Central Ohio railway. *Piqua*, on the right bank of the Miami River and on the Miami Canal, 68 miles W. by N. from Columbus, population 3277, has considerable commerce, manufactures, and trade. *Portsmouth*, on the left bank of the Scioto, at its confluence with the Ohio, and at the southern termination of the Ohio and Erie Canal; 85 miles S. by E. from Columbus: population 4011. The town is regularly laid out, contains some handsome public buildings, and carries on a good trade. Coal and iron mines and stone quarries are worked in the vicinity. *Sandusky City*, a city and port of entry on the south side of Sandusky Bay, 3 miles from Lake Erie: population, 5087. The city is regularly laid out, and contains several handsome buildings. Sandusky is one of the chief lake ports. The wharfs and ship-yards are extensive and commodious, and their appearance, except during a short portion of winter, betokens an active commerce. The imports of Sandusky city in 1852 amounted to 40,396,085 dollars; the exports to 18,739,814 dollars. There are extensive manufactories of locomotives, &c. *Springfield*, on the left bank of the east-fork of Mad River, 45 miles W. by S. from Columbus, population 5103, is an important railway centre, and carries on extensive manufactures. Wittenberg college and theological seminary is situated here. *Stowenville*, on the Ohio, 125 miles E.N.E. from Columbus, population 6140, stands on rising ground, is regularly laid out, well-built, contains several good public buildings, and has exten-

sive woollen and cotton factories, machine-shops, iron- and brass-foundries, copper-works, rope-walks, boat-building yards, glass-works, &c., and is furnished with ample railway facilities. *Toledo*, a city and port of entry, on the right bank of the Maumee, 5 miles above its opening into Maumee Bay, Lake Erie; population, 3829. Toledo was founded in 1831 and is rapidly growing into importance owing to its convenient situation in connection with Lake Erie, the northern termination of the Wabash and Erie Canal, and the several lines of railway which now unite here. The imports at Toledo in 1852 amounted to 37,565,029 dollars; the exports to 19,738,923 dollars. Very large quantities of railway iron, grain, flour, and pork, with lard, &c., are brought here from the interior for exportation. *Xenia*, 48 miles W.S.W. from Columbus, population 3024, is a place of considerable trade, and the centre of an extensive railway traffic. *Zanesville*, on the left bank of the Muskingum, 50 miles E. from Columbus: population, 7929. The town is well-built, lighted with gas, and well supplied with water. It contains the county buildings, 14 churches, an atheneum, primary and high schools, &c. There is a great amount of water-power, which has been rendered largely available for manufacturing purposes, and bituminous coal is obtained in abundance in the vicinity. There is also ample canal and railway accommodation, and Zanesville is rapidly becoming one of the leading towns of the state. It is united by bridges with South Zanesville, West Zanesville, and Putnam, which are closely connected with it in business arrangements.

Government, History, &c.—The present constitution was framed and adopted in 1851. By it the right of voting is vested in every white male citizen of the United States, 21 years of age, who has resided in the state for one year. All elections are by ballot. The legislature, styled the General Assembly, is elected for two years, and consists of a Senate of 35 members, and a House of Representatives of 100 members. The governor is also elected for two years. The judges are elected by the people for 5 years. The revenue for the year ending November 15, 1853, was 2,865,907 dollars; the expenditure was 2,696,118 dollars. The debt of the state January 1, 1854, was 17,165,428 dollars. Great attention is paid to education in the state; there being several colleges, and numerous academies and upper schools, while the constitution provides that "there shall be a thorough and efficient system of common schools established throughout the state."

This country was first visited by the French from Canada in the 17th century, by the route of the lakes of Ontario and Erie, but no settlements were formed until the following century, when the British from Pennsylvania and Virginia began to occupy the country. The French tried to prevent this by establishing small forts from Presqu'île on Lake Erie to the Ohio along the channel of the Alleghany River. This however was considered by the British government as an encroachment, and it led to the war of 1755, by which the French lost Canada and were expelled from North America. Some settlements which were attempted after that time were destroyed by the Indian tribes then in possession of the country. Ohio was comprehended in the cession made by Virginia in the year 1787, after which the country, including the states of Michigan, Indiana, and Illinois, was formed into a territory. The first permanent settlement in Ohio was formed at Marietta about 1783, but its progress, as well as that of some others farther west, was slow, until the Indians, in 1795, ceded a great portion of country to the general government by the treaty of Greenville. The population now increased rapidly, and in 1803 Ohio was admitted into the Union as a sovereign state.

(*Statistical Gazetteer of the United States; Seventh Census of the United States; Official Report; American Almanac, 1855; Mather, Geological Survey of the State of Ohio; Marcou, Geological Map of the United States, &c.*)

OISE, a department in the north of France, lying between 49° 4' and 49° 46' N. lat., 1° 42' and 3° 8' E. long., is bounded N. by the department of Somme, E. by that of Aisne, S. by Seine-et-Marne and Siene-et-Oise, and W. by Eure and Seine-Inférieure. Its form approximates to that of a parallelogram, measuring about 65 miles from east to west, and 40 miles from north to south. The area of the department is 2260 square miles. The population in 1841 was 398,868; in 1851 it amounted to 403,857, which gives 178.68 inhabitants to a square mile, being 4.07 above the average population for the whole of France.

The department is formed out of part of the old province of Île-de-France, and a small portion of Picardie. It lies almost entirely in the basin of the Oise, which has a general inclination to the south-west, with the exception of a narrow zone along the northern boundary, which slopes northward towards the Somme. A broken hilly country, which forms the western part of the arrondissement of Beauvais, and separates the valley of the Thérain from the Norman district of Bray, is drained by the Epte, a feeder of the Eure. A small portion of the south-east of the department is traversed by the Ourcq. The general surface presents extensive plains, with here and there masses of isolated hills. Along the left bank of the Oise there is a chain of hills; and another runs close along the northern boundary, forming part of the watershed between the basins of the Somme and the Seine.

The department is named from its chief river—the Oise, the ancient *Isara*, which rises in the forest of Thierache, near Chimay, in the Belgian province of Hainault, within 3 miles of the French frontier. Having entered France, its general course is south-west across the

department of Aisne, wherein it becomes navigable at Chaunay; continuing in the same direction across the department of Oise, in which it passes Noyon, Compiègne, and Creil, it enters Seine-et-Oise, and throws itself into the Seine at Conflans-Sainte-Honorine, a few miles below Pontoise. Its whole course is 137 miles in length, 75 of which are navigable. The canals that unite the basins of the Somme and the Escaut with the basin of the Seine, enter the Oise. The principal feeders of the Oise from the left bank are—the Ton, the Serre, the Lette, the Aisne [AISNE], the Autonne, and the Nonette; from the right bank—the Noirieu, the Brèche, and the Thérain.

The soil of the plains is in general good, consisting of a strong calcareous clay, mixed in some places with flints and gravel. There is also a good deal of light sandy soil and some arid sandy flats, which are either totally barren, or covered with stunted underwood; the hills, on which the soil is thin and light, are in many parts overgrown with forest trees. There are extensive marshes and alluvial deposits in the valleys of the Oise and the Thérain. The formation of the department is calcareous.

The climate is healthy, but rather damp, the winters being commonly long and rainy; snow sometimes lies for a month in the north of the department.

The staple agricultural products are wheat, oats, and beetroot; mixed grain, rye, barley, pulse, potatoes, and some buckwheat are also grown. The system of cultivation consists of a plain fallow, or green crop, followed first by wheat and then by oats. The produce of wheat averages about 20 bushels, oats 40 bushels an acre. A surplus over the home consumption is exported. Other objects of culture are hemp, flax, chicory, onions, artichokes, turnips, carrots, and a vast quantity of other pot-herbs for the supply of Paris. Rape, poppy, and other oleaginous plants are grown. The vine is cultivated in several districts of the south and east; but the wine of the department is bad, and the breadth of land under vines is diminishing yearly. Cider and eating apples, and prodigious quantities of black and red cherries are grown. Apple-trees are planted in rows along all the highways, and in the fields they are often grown in quincunxes. Cider is the common beverage of the country people.

Saddle and draught horses are reared, being a cross between the native breed and English blood-horses or the Arab horse. Cattle are comparatively few in number; sheep are the principal stock. Indeed owing to the scarcity of water the country is ill adapted for cattle; the wells are in many instances 200 feet deep. A great number of calves however and some fat cattle are supplied to the Paris markets; in the hilly country west of the valley of the Thérain, cattle-feeding is the common occupation of the people, and a good deal of cheese and butter is made. The common breed of sheep is not good; but in some districts a cross with Spanish merinos has produced an improved stock, with a good carcass and a heavy fine fleece. They are always folded by night, and fed by day under the guardianship of shepherds and dogs; in winter they are housed, and fed on lucerne and sainfoin hay. Poultry is very abundant. The black eagle, a rare bird, inhabits the forests of Compiègne. Farms vary in size from 600 to 700 acres, except in the neighbourhood of towns, where subdivision of the land is carried to great extremes. The farm buildings are large, commodiously built of stone, and roofed with tiles or slates. At harvest time Belgian reapers assist in cutting the wheat, which is stacked on the land, and thrashed by a machine worked by horses. The farmers are generally wealthy, and many of them farm their own lands.

The manufactures of the department are various; the principal of them are broadcloth, tapestry, carpets, blankets, and other woollen textures for which Beauvais has been long famous. Linen, printed cottons, duck, lace, small wares, mirrors, spectacle glasses, toys, fancy cabinet work and turnery, porcelain, pottery, beet-root sugar (for the manufacture of which there are several factories in the department), paper, beer, ropes, tiles, bricks, leather, &c., are among the other industrial products. The various agricultural and industrial products of the department find ready outlets by the Oise, the Ourcq, and the canals connected with them. About 200 fairs are held in the year.

Building-stone, millstone-grit, paving-granite, chalk, marl, potter's and porcelain earths, and fossil marble are found.

The department is crossed by 13 state, 28 departmental, and 29 parish roads; and by the Paris-Amiens railroad, which traverses it from south to north, sending off a branch to the north-east from Creil up the valley of the Oise through Compiègne to St. Quentin.

The department is divided into 4 arrondissements, which with their subdivisions and population are as follows:—

Arrondissements.	Cantons.	Communes.	Population in 1851.
1. Beauvais . . .	12	244	101,983
2. Clermont . . .	8	178	90,515
3. Compiègne . . .	8	165	98,190
4. Senlis . . .	7	129	83,169
Total . . .	35	716	373,857

1. Of the first arrondissement and of the whole department the capital is BEAUVAIS. *Grandvilliers*, 17 miles N. by W. from Beauvais,

at the intersection of the great roads to Rouen, Calais, Amiens, and Paris, though a small place of only 2000 inhabitants, has important manufactures of woollen cloth, serge, hosiery, soap, oil, &c.; and a considerable trade in corn, brandy, cider, charcoal, horses, and cattle. *Mers*, 15 miles S. from Beauvais, is the centre of a large manufacture of fancy goods, such as fans, billiard-balls, pearl-buttons, dominoes, button-moulds, chessmen, fancy work-boxes, dice, metal-clasps, toys, &c.; it has 2237 inhabitants in the commune.

2. The second arrondissement is named from its chief town *Clermont*, or *Clermont-Oise*, which is prettily situated on the summit and slopes of a hill 16 miles E. by S. from Beauvais, 51 miles by railway from Paris, and has a population of 3271 in the commune. The site of the old fortifications is now covered with modern buildings and alleys of trees; of its defences there remains only the ancient castle of the Prince of Condé, which stands on the top of the hill and commands a magnificent view over one of the richest parts of Picardie. This castle has been since 1826 a central prison for female convicts. The town has a college, a tribunal of first instance, linen and cotton manufactures, saltpetre-works, breweries, tan-yards, bleach-works, besides a considerable trade in corn, fruit, and cattle. *Breteuil*, 18 miles by railway N. from Clermont, is an ill-built town, with 2399 inhabitants, who manufacture soldiers' shoes, shawls, serge, woollen-stockings, paper, leather, and pottery. The vast buildings of the abbey of Sainte-Marie, rebuilt in 1028 and still entire, form the only remarkable object in the town. A piece of ground, about half a mile south-east from Breteuil, on which the remains of ancient walls, besides Celtic and Roman coins, have been found, is said to be the site of the *Bratuspanium* of Julius Cæsar ("Bell. Gall." ii. 13). *Crévecoeur*, a few miles W. from Breteuil, is a small manufacturing town, with a population of 2394. *Mouy*, prettily situated between two hills in a valley watered by the Thérain, is a bustling little town with 2700 inhabitants, who manufacture woollen-cloth for soldiers' uniforms, serge, merinos, woollen-yarn, &c.

3. The third arrondissement takes its name from its chief town *COMPIÈGNE*. *Noyon*, said to be the ancient *Noviodunum*, and under the Roman empire *Noviomagus*, is a well-built town situated on the slope of a hill surrounded by gardens, and on the Vorse, a feeder of the Oise, 12 miles by railway N.E. from Compiègne, and has 5950 inhabitants. The town, which is entered by four principal gates, has a fine cathedral church, built by Pepin-le-Bref, and a large town-hall, which dates from 1499. It has some trade in corn, linen, canvass, and leather. Noyon is the birth-place of Calvin, and a station on the St. Quentin railway.

4. In the fourth arrondissement the chief town *Senlis* is situated on the slope of a hill, 29 miles S.E. from Beauvais, and has a tribunal of first instance and 5320 inhabitants. The town, which stands near the junction of the Nonette and the Aunette, two small streams that form a feeder of the Oise, consists of an ancient part or city and three suburbs. The city occupies the site, and contains some remains, of a Roman town, also a castle built in the time of St. Louis, and a handsome cathedral church. The houses of the town are well built, but the streets are mostly narrow and crooked. There are cotton-spinning factories, tan-yards, printing offices, linen-bleaching-works, and chicory-mills in the town. *Creil*, 6 miles N.W. from Senlis, at the junction of the railroads from St. Quentin and Amiens to Paris, stands on the left bank of the Oise, and has about 2000 inhabitants, many of whom are engaged at the extensive potteries and porcelain-works near the town. About 5 miles S. from Creil, and about a mile E. of the Paris-Amiens railroad is *Chantilly*, a pretty little town with 2446 inhabitants, situated on the Nonette, near an extensive forest, to which it gives name. Chantilly is one of the principal centres of the lace manufacture in France; both the common flaxen lace, and that made of silk, and called 'blonde,' are extensively manufactured. The royal park, palaces, and waterworks of Chantilly, were formerly famous all over Europe. During the first revolution the palace built by the great Condé was sold and demolished, its contents having been first removed to Paris. After the Restoration the ruins were concealed from view by plantations, the smaller palace repaired, and great improvements made; so that the palace, with the magnificent gardens, grounds, and sheets of water that surround it, still constitute a domain worthy of the admiration of foreigners. The hospital of Chantilly, founded by the princes of Condé, is a beautiful mass of building, and one of the best-regulated establishments of the kind in France. *Crépy*, or *Crépy-en-Valois*, 14 miles N.E. from Senlis, formerly the capital of Valois and a royal residence, is remarkable only for the ruins of its former structures and fortifications. It has 2873 inhabitants, who trade in corn, household linen, and thread. *Nanteuil-le-Haudouin*, a small town of about 1600 inhabitants, at the head of the valley of the Nanette, is the chief place of a canton. It had formerly a large castle, which was entirely destroyed in the first French revolution. In the canton of Nanteuil is the pretty village of *Ermenonville*, famous for its handsome church and castle. The castle and estates of Ermenonville were held by the Bouteiller family of Senlis, who were descended from Charlemagne, till 1350, when it was sold to the count of Lorris. In 1590 the property passed to the Devise, one of whom (archbishop of Auch) was buried in the church. The estate was again sold in 1754 to René Hatté, maternal uncle of the Marquis de Girardin, who became afterwards possessor of Ermenonville. The marquis, whose descendants

still hold the property, rebuilt the château and improved the grounds with admirable taste. Jean Jacques Rousseau died in the château of Ermenonville July 2, 1778, and was buried in the Île-des-Peupliers, in one of the pieces of water in the park, whence they were removed by decree of the National Convention to the Pantheon Oct. 11, 1794. *Pont-St-Maxence*, 7 miles N.E. from Creil, on the St-Quentin railroad, is a well-built market-town, with clean well-paved streets and 2455 inhabitants. It stands on the Oise, which is here crossed by a fine stone bridge.

The department forms the see of the Bishop of Beauvais: is included in the jurisdiction of the High Court of Amiens, within the limits of the University-Academy of Paris, and belongs to the 1st Military Division, of which Paris is head-quarters. It returns 3 members to the Legislative Assembly of the French empire.

(*Dictionnaire de la France; Annuaire pour l'An 1853.*)

OKEHAMPTON, or OAKHAMPTON, Devonshire, a market-town, municipal borough, and the seat of a Poor-Law Union, in the parish of Okehampton, is situated at the junction of the East and West Okement rivers, in 50° 44' N. lat., 4° 1' W. long., distant 22 miles W. from Exeter, and 195 miles W.S.W. from London. The population of the parish of Okehampton was 2165 in 1851; that of the borough was 1556. The borough is governed by a mayor, justice, and burgesses. The living is a vicarage in the archdeaconry of Totnes and diocese of Exeter. Okehampton Poor-Law Union contains 28 parishes and townships, with an area of 126,797 acres, and a population in 1851 of 20,401.

The town of Okehampton consists of several streets irregularly laid out. In the market-place is an old chapel of ease, which was originally founded as a chantry. The tower, of granite, is of perpendicular character. The parish church, which is situated on high ground, was rebuilt within the last twelve years. The Wesleyan Methodists and Independents have places of worship. There are National and Infant schools; a literary society, with a library; and a branch savings bank. The market-day is Saturday; cattle-fairs are held in March, May, July, and August. Okehampton formerly sent members to parliament, but was disfranchised by the Reform Act. In the river Okement small trout of excellent quality are taken. Okehampton Castle, formerly belonging to the Courtenays, is now a ruin.

OKHOTSK, a town on the northern shore of the Sea of Okhotsk, which separates the peninsula of Kamtchatka from the continent of Asia, is situated in 58° 40' N. lat., 148° 18' E. long. The town is built on a hill on the right bank of the Ochota, and about 3 miles from its mouth. It is small, consisting only of a few hundred houses, and the inhabitants, formerly about 2000, are now estimated at only 800. It was formerly, and perhaps still is, the port by which the Russian American Company brought their furs from America; they were then transported by land through Yakutsk to Irkutsk, and thence to Kiachta, to be exchanged for articles of Chinese production. The houses are built of wood; but there is a government-house, an hospital, and large storehouses in the town. The neighbouring country is barren, yielding nothing but furs. The mouth of the Ochota has only 9 feet of water, and is only accessible from June to September, being blocked up with ice and snow the remainder of the year. The Russian government some years ago resolved to select some other site with a better harbour whereon to build a new town; and the mouth of the river Uda, in the Sea of Okhotsk (55° N. lat., 136° E. long.), was favourably mentioned as having a fine harbour sheltered by the Shantar Islands. The nature of the country or district of Siberia named Okhotsk, after the town, is described in ALTAI MOUNTAINS, KAMTCHATKA, and SIBERIA.

OKHRIDA, a town of Albania, in European Turkey, situated on the north-eastern shore of the Lake of Okhrida, in about 41° 8' N. lat., 21° 5' E. long., is the see of a Greek bishop, and has about 6000 inhabitants. It is built on or near the site of the ancient Lynchidus, which in ancient times gave its name to the lake. The town lies at the foot of an eminence, the summit of which is crowned by a castle, in which the Turkish governor of the surrounding province resides. Silver-ore and sulphur are procured from mines near the town. The Lake of Okhrida is about 18 miles long, and is 8 miles across in the widest part. It is in the valley watered by the Black Drin, which flows through the lake. It abounds with fish. The pashalic or district of Okhrida is mountainous and well wooded; it is watered by the Black Drin and the Soombi. It is tolerably productive in corn, maize, rice, tobacco, cotton, hemp, fruit, and wine. Cattle and bees are reared, and game is tolerably abundant. The inhabitants are reputed to make the best soldiers among the Albanians.

OLD MELDRUM. [ABERDEENSHIRE.]

OLDBURY, Worcestershire, a town in the parish of Hales Owen, is situated near the junction of Staffordshire, Shropshire, and Worcestershire, in 52° 30' N. lat., 2° W. long., distant 29 miles N.N.E. from Worcester, and 120 miles N.W. from London. The population of the town of Oldbury is given in the Returns of the Census of 1851 as 5114, but this does not include the whole of the town. The entire population in 1851 was 11,641.

The town of Oldbury has very much increased of late years, owing to the extension of the iron trade. The parochial chapel of Christ-church is a commodious brick edifice with a square tower. There are chapels for Wesleyan, Primitive, and New Connexion Methodists, Baptists, Independents, Christian Brethren, Roman Catholics, and

Unitarians; and National, Free, and other schools. Besides numerous iron- and coal-mines in the vicinity, there are manufactures of iron and steel, of locomotive engines, malt-mills, edge-tools, hollow iron ware, bricks, earthen draining tubes, and of alkali. Boat-building is carried on, and there are corn-mills and breweries. Oldbury is nearly surrounded by the Birmingham Canal; the river Tame runs through the town, turning several mills in its course; and the Stour Valley railway passes close to it. A customary market is held weekly on Saturday. A county court is held in the town.

OLDBURY-ON-SEVERN. [GLOUCESTERSHIRE.]

OLDCASTLE, county Meath, Ireland, a market-town and the seat of a Poor-Law Union, is situated on the Dublin, Trim, and Enniskillen road, in 53° 46' N. lat., 7° 7' W. long., 24 miles N.W. from Trim, 51 miles N.W. from Dublin. The population in 1851 was 1072. Oldcastle Poor-Law Union comprises 15 electoral divisions, with an area of 85,912 acres, and a population in 1841 of 41,305; in 1851 of 29,282. The town contains a parish church, chapels for Roman Catholics and Methodists, a National school, and a Free school—a handsome edifice, capable of accommodating 1000 children, and supported by an endowment of 750*l.*, bequeathed by Lawrence Gibson, Esq. In the town are a neat market-place and court-house, and a dispensary and Union workhouse. Near the town are extensive corn-mills. The market is on Monday, for yarns and provisions. Petty sessions are held monthly.

OLDENBURG, a grand-duchy in the north of Germany, consists of three distinct portions. 1. The Duchy of Oldenburg, properly so called, which lies between 52° 54' and 53° 44' N. lat., 7° 40' and 8° 45' E. long., contains 2083 square miles. It is bounded N. by the North Sea; E. by the Hanoverian province of Bremen, the territory of the city of Bremen, and the Hanoverian province of Hoya; S. by Osnabrück; and W. by the Hanoverian province of Meppen and East Friesland. 2. The Principality of Lübeck, which is surrounded by the duchy of Holstein, contains 137 square miles. One large portion is compact and unbroken; the remainder is scattered on the banks of the Schwartau and the Trave. 3. The Principality of Birkenfeld (area, 194 square miles), which is noticed in a separate article. [BIRKENFELD.] These territories form the grand-duchy of Oldenburg, and together with the lordship of Knipphausen, which has peculiar relations with Oldenburg, have a total area of 2431 square miles, with a total population of 285,149, according to the census of 1852.

The duchy of Oldenburg proper is a part of the great plain of Northern Germany, without mountains or hills, and without forests. Heaths and moors alternate with cultivated spots. The most extensive of the moors is the Great Saterland Moor, which is traversed by the Söste and the Leda, or Saterems, and covers a large part of Oldenburg and Hanover, extending from the Hunte to the Ems. The coasts are low, and protected against the inroads of the sea partly by dunes and partly by dykes, like those in Holland. The mouths of the Weser and the Jahde are lined with dykes. The soil of the interior of the country is poor, but there is rich marsh-land on the banks of the Weser and at the mouth of the Jahde. The principal rivers are the Weser (which forms the boundary between Oldenburg and the province of Bremen), the Jahde (which enters and gives name to the large Bay of Jahde, an inlet of the North Sea), the Hunte (a feeder of the Weser), and the Hase and the Leda, tributaries of the Ems. There are no large lakes; the most considerable, the Zwischenahner Meer, is 6 miles in circumference, and its banks are surrounded by picturesque well-wooded eminences.

The Bay of Jahde is entered from the North Sea, to the south of Wangeroog Island (which belongs to Oldenburg), by a strait about 4 miles wide, which separates the territory of Knipphausen on the west from a projection of the duchy to the west of the mouth of the Weser. Inside this strait the bay widens out to about 12 miles from east to west, and about 10 miles in its greatest length from north to south. The depth of water in the bay (it is said) is nowhere less than 6 fathoms, and the river Jahde itself is deep enough for the largest merchant ships to enter. Prussia, with the view of forming a naval port and arsenal on the North Sea, purchased the sovereignty of the bay and 5000 morgen (3154 acres) of land, near the mouth of the river Jahde, in 1853, from the grand-duke of Oldenburg, and entered into possession of the territory thus ceded in December 1854.

The climate is damp and subject to frequent fogs. The natural productions are corn of all kinds, flax, hemp, some hops, culinary vegetables, timber for building, and wood for fuel. There are the usual domestic animals, especially very good horses, poultry, game, fish, and bees. Turf is dug for fuel; pipe- and brick-clay are found, and also building-stone. The principality of Lübeck is flat, and resembles Oldenburg in its soil and climate, but it contains some beautiful lakes, especially those of Ploen and Eutin. The Schwartau and the Trave are the chief rivers.

The chief occupations of the inhabitants are agriculture and the breeding of cattle. There are very few villages; the farm-houses lie quite isolated in the centre of the farms. There are no great manufactures; but the people make considerable quantities of coarse linen, worsted stockings, and thread. Oldenburg is extremely well situated for commerce, but the trade is chiefly a coasting-trade, which is carried on in vessels with one or two masts, from 20 to 40 tons burden, calculated for navigating the shallows ('watten') that occur between the Ems and the Eider. Ships are built at several places on the Weser

and along the coast. The exports include horses, oxen, linen, leather, raw hides, rags, &c., principally to Holland and the Hanseatic cities. The revenue, according to the budget for 1854, was, from the duchy of Oldenburg, 891,000 thalers; from the principality of Lübeck, 137,400 thalers; and from Birkenfeld, 116,700 thalers. The expenditure for these three divisions in the same year was estimated at 979,000, 148,800, and 127,800 thalers respectively. The public debt in 1853 amounted to 1,400,000 thalers. The armed force maintained amounts to 3673 men. Of the inhabitants, who are all Germans (with the exception of about 1500 Jews), 72,546 are Catholics, and all the rest Protestants, chiefly of the Lutheran Church. The Lutheran is the established religion.

With respect to education, Oldenburg is rather backward. The rarity of villages renders it difficult to establish schools. The various branches of a learned education are now taught in the Protestant gymnasium at Oldenburg, the Roman Catholic gymnasium at Veohtha, and the Latin schools at Jever and Eutin.

As a member of the German confederation, in conjunction with Anhalt and Schwarzburg, Oldenburg has the 15th place, or vote in the select council of the Diet, and one vote of its own in conjunction with Kniphausen in the full council. The contingent to the army of the confederation is 2207 men. The constitution is monarchical. The government is hereditary in the male line.

History.—The house of Oldenburg is one of the most illustrious in Europe; the emperor of Russia, the kings of Denmark, and the late royal family of Sweden are descended from it. Oldenburg is the original seat of the family. Christian I. founded the town of Oldenburg in 1155, and assumed the title of count. Joseph II. gave to the two counties, Oldenburg and Delmenhorst, the rank of a duchy in 1773, and assigned it to that family as an hereditary principality to the house of Holstein-Gottorp. In 1803 the duchy joined the Rhenish confederation; but Napoleon, in 1810, incorporated the duchy with the French empire. After the fall of Napoleon, the duke recovered his own dominions; the congress of Vienna also assigned to him the principality of Birkenfeld; he obtained from Russia the lordship of Jever, and likewise obtained some claim to the lordships of Varel and Kniphausen, which was disputed by Count Bentinck, the proprietor of both.

The lordship of *Kniphausen*, which lies between the lordship of Jever and the Jahde, was acknowledged an independent power by the Diet of the Germanic confederation in 1826. It is the smallest of the states of the confederation, its territory measuring only 17 square miles. The sovereignty vests in Count Bentinck, who has his own flag, and enjoys all the rights accorded to the state under the old German empire, but he furnishes his contingent to the army of the confederation indirectly through the grand-duke of Oldenburg. The capital of the state is *Kniphausen*, a small village with a fortified castle; the count resides chiefly at Varel.

Oldenburg, the capital, in 53° 20' N. lat., 8° 11' E. long., is a well-built town on the navigable river Huute; the ramparts have been converted into public walks and gardens. The population is 8000, including that of the two suburbs. The palace is a very handsome building with a fine park. There are some tanneries, distilleries, and soap manufactories in the town. The public institutions are—a gymnasium, a seminary for schoolmasters, a military school, an observatory, and a collection of antiquities. The grand ducal library contains 60,000 volumes.

Varel, on a canal which joins the Jahde, and forms a harbour which merchantmen can enter at high-water, has 3200 inhabitants. *Jever*, in a fertile country to the north of Kniphausen, on a navigable canal, is a walled town with 3400 inhabitants, who manufacture tobacco, leather, and spirits, and trade largely in cattle. *Eutin*, which is the only town in the principality of Lübeck, is on the bank of a lake, has a palace of the grand-duke with a beautiful park, and 2800 inhabitants.

OLDHAM, Lancashire a parliamentary borough, manufacturing

and market-town, and the seat of a Poor-Law Union, in the parish of Prestwich-cum-Oldham, is situated on an eminence near the right bank of the river Medlock, in 53° 33' N. lat., 2° 7' W. long., distant 50 miles S.E. by S. from Lancaster, 191 miles N.W. by N. from London by road, and 195½ miles by the North-Western and Lancashire railways. The population of the municipal borough in 1851 was 52,820; that of the parliamentary borough 72,367. The town is governed by commissioners appointed under the Police Act of 1828. The borough returns two members to the Imperial Parliament. The living is a perpetual curacy in the archdeaconry and diocese of Manchester. Oldham Poor-Law Union contains seven townships and one chapelry, with an area of 16,872 acres, and a population in 1851 of 86,788.

The rapid rise of Oldham is mainly attributable to its situation near extensive coal-mines, which give employment to many of the population, and to the great increase of cotton manufactures. The number of steam-engines employed in the manufacture of fustians, cotton, and woollen and silk goods is said to be upwards of 100. Hat-making is a very important branch of the industry of Oldham. There are several extensive iron- and brass-foundries, machine-making factories, gas-meter manufactories, tanneries, rope-works, and other establishments. The town is well supplied with water, and is lighted with gas. The town-hall is a handsome structure, containing various rooms for public business. Besides the parish church, which was rebuilt about 1830, Oldham possesses a chapel of ease, chapels for Wesleyan, Primitive, New Connexion, and Association Methodists, Independents, Baptists, Unitarians, and Roman Catholics. The Blue-Coat school was founded at Oldham-Edge, from bequests of Thomas Henshaw, Esq., which, with interest, amounted in 1829 to more than 100,000*l.* The Grammar school, founded in 1611, has an income from endowment of 30*l.* a year, and had 54 scholars in 1853. There are also National, British, and Infant schools, and schools supported by the Primitive and the New Connexion Methodists; a lyceum, a subscription library, a working man's hall, and a savings bank. A county court is held. Saturday is the market-day. Fairs are held in February, May, July, and October.

OLEAROS. [ANTIPABOS.]

OLEGGIO. [NOVARA.]

OLÉRON. [CHARENTE-INFÉRIEURE.]

OLITE. [NAVARRA.]

OLIVENZA. [ESTREMADURA, Spanish.]

OLLERTON. [NOTTINGHAMSHIRE.]

OLMEDO, a town of Spain, in the ancient province of Leon and modern province of Valladolid, 28 miles S. from the city of Valladolid, is situated on an eminence in a fertile plain, between the Eresma and the Adaja, two small rivers, which afterwards unite, and enter the Duero by the southern bank. It is surrounded by ruined walls, and contains a population of 1860. It was formerly a place of importance and strength, but is now in a state of decay. Two great battles were fought here in 1445 and 1467, during the reigns of Juan II. and Enrique IV., kings of Castilla.

OLMÜTZ. [MORAVIA.]

OLNEY, Buckinghamshire, a market-town in the parish of Olney, is situated on the left bank of the river Ouse, in 52° 9' N. lat., 0° 41' W. long., distant 19 miles N.E. from Buckingham, and 55 miles N.N.W. from London. The population of the parish in 1851 was 2329. The living is a vicarage in the archdeaconry of Buckingham and diocese of Oxford. The church, an early English edifice, is a spacious building, with a tower and stone spire, 185 feet high. The Baptists and Independents have chapels. There are National, British, and Infant schools, and some almshouses. Over the Ouse is a bridge of four arches, with several small arches extending over the meadows, which in winter are frequently flooded. Lace-making is the chief employment. The market-day is Thursday; three fairs are held in the year. Olney was the residence of the poet Cowper, and the Rev. John Newton was curate here during the residence of Cowper.

END OF VOLUME III.

